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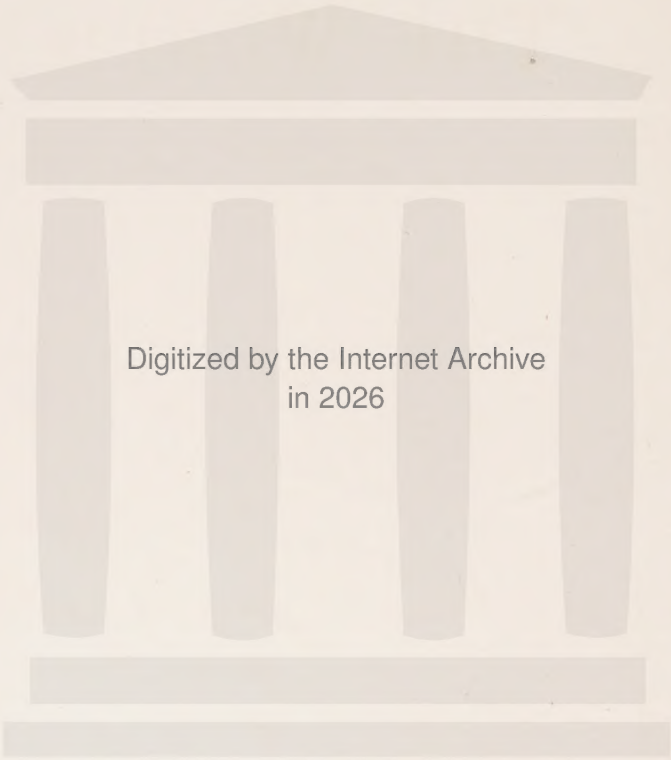
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CHAMBERS'S

CONCISE GAZETTEER

OF

THE WORLD

TOPOGRAPHICAL
STATISTICAL
HISTORICAL
PRONOUNCING

EDITED BY
DAVID PATRICK, LL.D.

REVISED EDITION

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PREFACE.

THE first question that naturally comes into one's mind when a place is mentioned is: 'Where is it?' 'What is to be known about it?' is as naturally the second. One cannot open a newspaper without lighting on some reference to the railway bridge over the Zambesi, the battle of Tsushima, difficulties at Koweit, the naval base at Rosyth, or, it may be, to Masampho, Skagway, Tchernavoda, Tuskegee, Zeebrugge; or there will be an allusion to the 'prisoner of Chillon,' the 'rector of Lutterworth,' the 'martyr of Erromango,' the 'sage of Chelsea,' the 'Mantuan,' the 'Corsican,' the 'curé of Meudon,' the 'victor of Barossa,' the 'hero of Khartoum,' the 'Chiltern Hundreds,' the 'monks of Medmenham,' or the 'Little Gidding community.'

Not even Macaulay's schoolboy could carry the whereabouts of all these places in his head, or could explain every one of the allusions. The present work aims to supply the want indicated. It is largely based on the geographical matter of *Chambers's Encyclopædia*, but many of the articles are new, and there are numerous additions to the list. It is a Gazetteer of the World, comprehensive yet handy, containing the latest and most reliable information about nameworthy places at home and abroad: the last census of civilised countries, and the most authentic official figures, have, it need hardly be said, been taken advantage of in every available case. The etymology of the names, where it is significant and interesting, has not been neglected, and an attempt has been made to do justice, however briefly, to history and literary associations. This is probably the only Gazetteer of the World that explains the interest of Craigenputtock and Somersby, Morwenstow and Chalfont St Giles, Ramsbottom, Wem, and Tong. Yet, full though it is, it does not profess to be exhaustive; to give, for instance, every one of (at least) 275 cities, counties, towns, townships, villages, hamlets, and post-offices of the name of Washington in the United States, or every one of the 90 Newtons on both sides of the Atlantic. To have attempted this would, by the curtailment of the longer articles, have involved the sacrifice of much space now put to a better use. Instead, the aim of the work has been to tell everything that may be reasonably wanted about every place likely to be looked for, and to tell it with the utmost conciseness consistent with clearness and readableness. References to standard books have been added to the articles on the more important and interesting countries, towns, and even villages.

The pronunciation has been indicated in all cases where doubt could arise—by accent when this suffices, or by re-spelling in full, in the way most likely to be intelligible to the average reader; although it must be remembered that in many cases the pronunciation can only be approximately suggested in English spelling. The *g* in the re-spellings is always hard, as in *get; ay* or *ā* is the English *a* in *fate; ī* is the sound in *mine; ow* is always the sound in *how, now; uh* is the obscure sound between *eh* and *ah; hh* here represents the guttural *ch* of German and Scotch words; and recourse had sometimes to be had to *ö* to represent the German *ö* and the French *oeu*, and to *ü* to indicate the German *ü* and the ordinary French *u*. Many readers will be glad to know that the instinctive English way of accenting Altona, Potomac, Potosi, and Cordilleras is not that customary in those parts; that English people do not pronounce Godmanchester, Belvoir, or Hughenden as the spelling suggests; that Scotsmen do not defer to Southron expectations in such names as Culloden and Oban, Kirkcudbright and Milngavie; that the Welsh do not say Mer'ioneth, and that Amlwch is easier to utter than it looks at first sight; that British sailors who have been on the spot are not safe guides for the true pronunciation of names like Callao and Iquique, Monte Video and Buenos Ayres, Setubal and Santander.

In this revised reissue facts, figures, and statistics have as far as possible been brought down to the early years of the new century; many articles have been entirely rewritten, and hundreds have been inserted for the first time. Since the first issue Rhodesia and Nigeria have changed beyond recognition; the Commonwealth of Australia has been constituted; Canada has made unparalleled progress; British South Africa has gone through more than one crisis; Indian provinces have been reconstituted, divided, renamed; the republic of the United States has increased vastly in population and wealth at home, and entered on a significant policy of expansion abroad; the sister kingdoms of Norway and Sweden no longer live under the same roof; Spain has lost its colonies, and Panama become a nation; Port Arthur and Dalny, Korea and Manchuria, Russia and Japan, have 'made history;' Vesuvius has been in disastrous eruption, and San Francisco been destroyed. These are but instances of thousands of new landmarks of the world's progress and of the changes time brings with it. In the revision of this work a strenuous effort has been made to take account of all new developments and to make the Gazetteer a still more valuable companion to the general reader.

CHAMBERS'S

CONCISE

GAZETTEER OF THE WORLD

A (pron. *Ah*), the name of several European rivers—in Westphalia, Switzerland, and North France—all small.

Aachen (*Ah'hen*), the German name of Aix-la-Chapelle.

Aalborg (*Awl-borg;* 'Eel-town'), a seaport of Jutland and seat of a bishopric, on the Limfiord. Pop. (1890) 19,503; (1901) 31,462.

Aalen (*Ah'len*), a town of Würtemberg, on the Kocher, 46 miles E. of Stuttgart. Pop. 8805.

Aalesund (*Awl-e-soond*), a Norwegian town, with an excellent harbour, built on three small islands of the province of Romsdal. Pop. 11,700.

Aalst. See Alost.

Aalten, a Netherlands town, on the Aa, 30 miles E. of Arnhem. Pop. 7000.

A'an, or **Avon**, a small Banffshire lake, lying 2250 feet above sea-level among the Cairngorms, which sends off the Avon, 29 miles, to the Spey.

Aar (*Ahr*), next to the Rhine and Rhone the largest river in Switzerland, rises in the Bernese Oberland, flows through Lakes Brienz and Thun, and passing Interlaken, Thun, Berne, Soleure, and Aarau, joins the Rhine above Waldshut after a course of nearly 200 miles.

Aarau (*Ahr'ow*). See Aargau.

Aargau (*Ahr'gow;* Fr. *Argovie*), the least mountainous canton of Switzerland, on the lower course of the Aar, with the Rhine for its north boundary. Area, 548 sq. m.; pop. (1900) 206,500, mainly Protestant and German-speaking. The chief town is Aarau, on the Aar. Pop. 7500.

Aarhuus (*Awr-hoos*), a seaport on the east coast of Jutland, the second of Danish cities, with a fine Gothic cathedral of the 13th century. Pop. (1870) 15,025; (1890) 33,306; (1901) 51,850.

Ab'aco. See Bahamas.

Abakansk, a fortified Siberian town, near the Abakan's junction with the Yenisei. Pop. 3000.

Ab'ana and **Pharpar** are identified generally, the former with the Barada, flowing through Damascus; the latter with the Awaj, which rises on the SE. slopes of Hermon, passes 8 miles from Damascus, and falls into a lake to the south.

Abancay (*Aban'kī*), chief town of the Peruvian province of Apurimac, 65 miles WSW. of Cuzco. Pop. 5000.

Abbazia (*Abbatzee'a*), a health-resort on the bay of Fiume, at the head of the Quarnero gulf of the Adriatic, 5 miles NW. of Fiume by rail. The 'Nice of the Adriatic' has since about 1880 become famous for its fine climate, beautiful situation, and luxuriant vegetation. Pop. 3000.

Abbeoku'ta, an African city, or rather collection of small towns or villages, capital of the territory of Egba, in the Yoruba country, 80 miles N. of Lagos. Pop. 150,000.

Abbeville (*Abb-veel'*), a prosperous manufacturing town in the French dep. of Somme, on the river Somme, 12 miles from its mouth, and 49 miles S. of Boulogne. The west front of the church of St Wolfram, commenced in the reign of Louis XII., is a splendid example of Flamboyant, with noble portals and rich tracery. The chief manufactures are woollen cloths, carpets, linens, sacking, and sugar. Near Abbeville were found, in 1841, many prehistoric flint implements. Pop. (1872) 18,108; (1901) 21,100.

Abbey Craig, an abrupt eminence (362 feet), 1½ mile ENE. of Stirling. It is crowned by the Wallace monument (1869), a baronial tower 220 feet high.

Abbeydorney, a Kerry village, 5½ miles N. of Tralee, with a ruined abbey (1154).

Abbeyfeale, a market-town, 37 miles SW. of Limerick. Pop. 896.

Abbeyleix (*Abbey-leece'*), a town of Queen's County, 61 miles SW. of Dublin. Pop. 987.

Abbiate-Grasso (*Abbiah'tay*), a town of Italy, 14 miles WSW. of Milan. Pop. 7025.

Abbotabad, in the NW. Frontier Province of India, 180 miles NNW. of Lahore. Pop. 5000.

Abbotsbury, a Dorset village, at the head of the Fleet tidal inlet, 8 miles NW. of Weymouth.

Abbotsford, built in 1811–24 by Sir Walter Scott, on the Tweed's south bank, 2 miles W. of Melrose.

Aber, a Carnarvonshire coast-village, at the

mouth of a lovely little glen, 4¾ miles E. of Bangor.

Aberavon, or PORT TALBOT, a seaport of Glamorganshire, on the Avon, near its mouth in Swansea Bay, 32 miles W. of Cardiff. The valley of the Avon is shut in by lofty hills, while every available space is occupied by tinplate, copper, and iron works. It is one of the 'Swansea boroughs.' Pop. (1861) 2916; (1901) 7560.

Aberayron, a Cardiganshire watering-place, 14 miles SSW. of Aberystwith. Pop. 1340.

Aberbrothock. See ARBROATH.

Abercarn, a coal-mining municipality, prosperous and progressive, of Monmouthshire, 8 miles NW. of Newport. Pop. 12,600.

Abercorn, a Linlithgowshire hamlet, near the Firth of Forth, 3¾ miles W. of South Queensferry. From 681 to 685 it was the seat of a bishopric.

Aberdare, a town of Glamorganshire, 4 miles SW. of Merthyr-Tydvil, and within its parliamentary boundary. Coal and iron are found in abundance in the vicinity, and Aberdare is a flourishing centre of iron and tin works. Pop. (1841) 6471; (1861) 32,299; (1901) 43,400.

Aberdeen, the chief city and seaport in the north of Scotland, lies in the SE. angle of Aberdeenshire, at the mouth and on the north side of the Dee, 111 miles N. of Edinburgh. William the Lion confirmed its privileges in 1179; the English burned it in 1336, but it was soon rebuilt, and called New Aberdeen. Old Aberdeen, within the same parliamentary boundary, is a small town a mile to the N., near the mouth of the Don, and is the seat of St Machar's Cathedral (1357–1527), now represented by the granite nave. King's College and University, founded by Bishop Elphinstone in Old Aberdeen in 1494, and Marischal College and University, founded by the Earl Marischal in New Aberdeen in 1593, were in 1860 united into one institution, the University of Aberdeen. It has 25 professors and from 800 to 900 students in its four faculties of arts, divinity, law, and medicine; with Glasgow University it sends one member to parliament. Marischal College was rebuilt in 1841, and greatly enlarged in 1892–95; whilst King's College is a stately fabric, dating from 1500, its chapel adorned with exquisite wood carvings. Aberdeen has a flourishing trade and thriving manufactures; and having been largely rebuilt and extended since the formation of Union Street in 1800, the 'Granite City' now offers a handsome and regular aspect. Among the chief public edifices are the County Buildings (1867–73), the Post-office (1876), the Market-hall (1842; rebuilt after the fire of 1882), the Trades-hall (1847), the Royal Infirmary (1740; rebuilt 1840), the Lunatic Asylum (1819), the Grammar-school (1863), the Art Gallery and Art School (1882–83), and Gordon's College (1739–1834). The last has been much extended as a technical school, the foundationers being no longer resident; whilst the Infirmary was reconstructed and modernised to celebrate the Queen's Jubilee (1887). St Nicholas, now divided into the East and West churches, has a fine new spire (1880), 190 feet high. A carillon of 37 bells was placed here in 1887. One may also notice the market-cross (1686); the Wallace, Gordon Pasha, and three other statues; and the Duthie Public Park of 47 acres (1883). Since 1810, when the debt upon the harbour was £29,614, the expenditure on harbour improvements has exceeded £1,000,000, the works having included the formation of the Victoria Dock (1848), a breakwater, the southward diversion of the Dee (1872), and a graving-dock (1886). The trade of the port has largely increased since 1850; and the aggregate tonnage of vessels entering in good years exceeds 600,000 tons. Railway communication has also been fully established since 1848–54. The chief exports are woollens, linens, cotton-yarns, paper, combs, granite (hewn and polished), cattle, grain, preserved provisions, and fish. Aberdeen has the largest comb and granite-polishing works in the kingdom. There are several large paper-works within a short distance of the town; and soap, chemicals, whisky, and agricultural implements are amongst the manufactures. Wooden shipbuilding was formerly a prosperous industry, the Aberdeen clippers being celebrated as fast sailers. Connected with Aberdeen, which has always been a celebrated seat of learning, have been the names of Barbour, Boece, Jameson, Gregory, Reid, Beattie, Campbell, Byron, Skinner, Hill Burton, W. Dyce, J. Phillip, and Sir A. Anderson, to whose provostship (1859–66) belong the introduction of a fine water-supply, and many other improvements. Pop. of the parliamentary burgh, which since 1885 has returned two members, (1801) 26,992; (1841) 63,288; (1881) 105,003; (1891) 121,623; (1901) 153,500.

Aberdeenshire, a large maritime county in the extreme NE. of Scotland. The fifth in size of the Scottish counties, it has a maximum length of 85 and breadth of 47 miles, with 62 miles of sea-coast, and an area of 1971 sq. m. It has long been popularly divided into five districts (proceeding from south-west to north-east)—Mar, Strathbogie, Garioch, Formartine, and Buchan. Aberdeenshire is generally hilly, and in the south-west (Braemar) entirely mountainous, the loftiest summits here being Ben Muich-Dhui (second only to Ben Nevis), 4296 feet; Cairntoul, 4241; Cairngorm, 4084; Benabourd, 3924; Lochnagar, 3786; whilst northward rise Bennachie, 1698; the Buck of Cabrach, 2368; and Mormond Hill, 769. The predominant rocks are granite and gneiss. The granite is very durable, and is much used for building and polishing. The chief rivers are the Dee (87 miles long), Don (82), and Ythan (35), which run eastward into the North Sea; and the Deveron (61 miles), which runs north-east into the North Sea. The Ythan yields the pearl-mussel, but rarely pearls of any value. The most fertile parts lie between the Don and Ythan, and in the north-east angle of the county. About 37 per cent. of the area of the county is cultivated, the chief crops being oats, barley, and turnips; whilst nearly 8 per cent. is under wood. Aberdeenshire is unsurpassed in breeding and feeding stock. Its principal breed is the Polled Angus. The fisheries on the coast are very productive, and Peterhead is the East Coast centre of this industry. Balmoral (q.v.) is the principal mansion; and amongst the antiquities are the ruins of Kildrummie Castle and the Abbey of Deer. The chief towns and villages are Aberdeen, Peterhead, Fraserburgh, Huntly, Kintore, Inverurie, Turriff, Ballater, and Castleton. The county returns two members to parliament; the city of Aberdeen, two; and the burghs of Peterhead, Kintore, and Inverurie, with Elgin, Cullen, and Banff, one. Pop. (1801) 121,065; (1841) 192,387; (1891) 284,036; (1901) 304,440. See the history by A. Smith (1875), the Spalding Club publications, and Watt's *Aberdeen and Banff* (1900).

Aberdour, (1) a Fife village, on the Firth of

Forth, 3 miles W. of Burntisland, with a ruined castle of the Earls of Morton. Pop. 748. (2) An Aberdeenshire village, 8 miles W. by S. of Fraserburgh. Richard Chancellor was lost in Aberdour Bay (1556).

Aberdovey, a watering-place of Merionethshire, on the Dovey estuary, 10 miles N of Aberystwith.

Aberfeldy, a pleasant Perthshire village, near the Tay's south bank, 32½ miles NW. of Perth by rail. The neighbouring Falls of Moness are celebrated in Burns's *Birks of Aberfeldy*. A monument (1887) commemorates the embodiment of the Black Watch here in 1740. Pop. 1569.

Aberffraw, a seaport of Anglesey, 12 miles SE. of Holyhead. Pop. 959.

Aberfoyle, a Perthshire hamlet, immortalised through Scott's *Rob Roy*, 23 miles W. of Stirling by rail.

Abergavenny (*Abergen'ny*; Rom. *Gobannium*), a market-town of Monmouthshire, at the Gavenny's influx to the Usk, 13 miles W. of Monmouth. It has remains of an old castle and of a priory, with collieries and ironworks near. Pop. of municipal borough (1901) 7800.

Abergeldie Castle, the Aberdeenshire seat of the Prince of Wales, on the Dee's right bank, 6 miles W. of Ballater, and 2 ENE. of Balmoral.

Abergele, a Denbighshire market-town, 34 miles W. of Chester. The burning here in 1868 of the Irish limited mail cost 33 lives. Pop. 1981.

Aberlady, a Haddingtonshire coast village, 3 miles NE. of Longniddry. Pop. 505.

Abernethy, a small police-burgh of Perthshire, near the Earn's influx to the Tay, 8½ miles SE. of Perth. The ancient capital of the Picts, and from 865 till 903 the seat of the sole Scottish bishopric, it retains one of the two Round Towers in Scotland, 73 feet high. Pop. 852.

Abersychan, an iron and coal mining town of Monmouthshire, 11 miles N. of Newport. Pop. (1901) 17,770.

Abertillery, a town of Monmouthshire, 16 miles NNW. of Newport. Pop. 21,945.

Aberystwith, a watering-place and municipal borough of Cardiganshire, on the Ystwith, at its mouth in Cardigan Bay, 242 miles NW. of London by rail. It is the seat of the University College of Wales (1872). There are remains of a castle (1109). Till 1885 it was one of the Cardigan parliamentary boroughs. Pop. (1851) 5231; (1891) 6725; (1901) 8015.

Abingdon, a municipal borough of Berkshire, situated at the junction of the Ock and the Thames, 6 miles S. of Oxford, and 60 WNW. of London. 'Abbaddun' (Abbot's town) was an important place in the 8th century, and its Benedictine abbey, rebuilt in 955, was very rich. Its school, founded in 1563, was rebuilt in 1870. A large clothing manufactory employs many hands. Till 1885 Abingdon returned a member to parliament. Pop. (1851) 5954; (1901) 6480.

Abington, a Lanarkshire village, on the Clyde, 14 miles SSE. of Lanark.

Abkhasia, or Abasia, a district of Asiatic Russia, between the Caucasus and the Black Sea. The inhabitants, who numbered at the outbreak of the Turkish war of 1878 about 30,000, are now, by emigration, less than half as numerous. Russia gained possession of the fortresses of Abkhasia in 1824, but finally subdued the people only in 1864. See Caucasus.

Abo (pronounced *Obo*), the chief town of a government in Finland, on the river Aurajoki, near its embouchure in the Gulf of Bothnia, 170 miles WNW. of Helsingfors by rail. It has an active trade, and exports timber, and bar and cast iron. Its university was transferred to Helsingfors after the great fire of 1827. A peace between Sweden and Russia was signed here in 1743. Pop. (1890) 31,671; (1900) 37,700.

Abomey. See Dahomey.

Aboukir', a coast-village of Egypt, 13 miles NE. of Alexandria. In Aboukir Bay Nelson won the great 'Battle of the Nile' over the French fleet, August 1, 1798. Here Napoleon in 1799 defeated a Turkish army; and here Sir Ralph Abercromby's expedition landed in 1801.

Abousambul. See Abu-Simbel.

Aboyne', a Deeside village, 32½ miles W. by S. of Aberdeen. Aboyne Castle is the seat of the Marquis of Huntly. See his *Records of Aboyne* (1894).

Abraham, Plains or Heights of, close to the city of Quebec, the scene of Wolfe's victory, 13th September 1759. They were so called from a pilot, Abraham Martin.

Abrantes (*A-bran'tes*), a town of Portugal, on the Tagus, 84 miles NE. of Lisbon. Pop. 6380.

Abruzzo (*Abroot'so*), or Abruzzi, a district of Central Italy, was formerly the north-east corner of the Kingdom of Naples, in the loftiest portion of the Apennines. The jagged mountain groups reach in the Gran Sasso d'Italia 9600 feet.

Abu, a mountain (5650 feet) of India, in the territory of Serohee, Rajputana, a detached granite mass rising like an island from the plain of Marwar, near the Aravalli ridge. It is a celebrated place of pilgrimage, especially for the Jains, who have five temples at Delwara, about the middle of the mountain, two of which are the most superb of all Jain temples. Both are built of white marble, finely carved, and date from 1031 and 1197 A.D. The mountain contains a beautiful lake 4000 feet above the sea; and the region is a summer-resort for Europeans.

Abu Klea, on the route across country between Korti and Metammeh, both on the great bend of the Nile below Khartoum. Here, on 17th January 1885, Sir Herbert Stewart defeated the Mahdi.

Abushehr. See Bushire.

Abu-Simbel (also *Abousambul* or *Ipsambul*), a place on the left bank of the Nile, in Lower Nubia, the site of two very remarkable rock-cut temples, amongst the most perfect and noble specimens of Egyptian architecture.

Aby'dos, (1) a town in Asia Minor, situated at the narrowest part of the Hellespont, opposite Sestos, was the place whence Xerxes and his vast army passed into Europe in 480 B.C.; and in poetry is famous for the loves of Hero and Leander.—(2) A city of Upper Egypt, on the left bank of the Nile, once second only to Thebes, but even in Strabo's time a mere ruin. Here the remains of the Memnonium and of a temple of Osiris are still remarkable.

Ab'yla. See Ceuta.

Abyssinia (from the Arabic name *Habesh*, 'mixture,' given on account of the mixed population), is a highland state of Eastern Africa, jealous in defence of its independence, and lies between the flats at the south end of the Red Sea and the Blue Nile on the west, and extends from Nubia southward to the Galla country.

Divisions are Tigré in the north, Amhara in the centre, and Shoa in the south, besides outlying territories in the S. and SE. (Harar, q.v.). Abyssinia, with an area of 180,000 sq. m., mainly consists of a huge tableland with a mean elevation of 7000 feet. The declivity to the bordering tract on the Red Sea is abrupt; towards the Nile basin it is more gradual. The main mass has been cut into a number of island-like sections by the streams, which have worn their channels into ravines of vast depth—as much sometimes as 4000 feet. The principal are the head-streams of the Blue Nile, issuing from the great Lake Tzana, Tana, or Dembea, and the Atbara, also a tributary of the Nile; less important are the Mareb and the Hawash. Isolated mountains, with naked perpendicular sides, present the most singular forms. The Samen Mountains have summits rising to the height of 15,000 feet. The climate, notwithstanding its tropical position, is on the whole moderate and pleasant owing to its elevation, though in the river valleys and swamps the heat and moisture are suffocating and pestilential. As a whole, the country is exceedingly fruitful; and its productions are of the most varied nature, from the pines, heaths, and lichens of North Europe to the choicest tropical plants. Two, and in some places three, crops can be raised in one year.

The population numbers some four millions, and consists of various elements, the chief being the Abyssinians proper—a brown, well-formed people, belonging to the Semitic stock. The basis of the language is the ancient Ethiopic (see ETHIOPIA) or Ge'ez, a Semitic tongue which is now the sacred language. The modern dialect of Amhara is the prevalent language of the country. There are Gallas and Somalis in the south and south-east. The Falashas are of Jewish origin, and still retain many of their racial peculiarities. The towns are small—Adis Ababa, capital of Shoa and of Abyssinia; Gondar, in Amhara; Adowa, or Adua, in Tigré; Axum (q.v.), the old capital—not to speak of Harar (q.v.), lately annexed. Any foreign trade comes mainly through Massowah. The religion of the Abyssinians proper is a debased Christianity; but the Gallas and other alien tribes are mostly Mohammedan, and partly also pagan. Abyssinia is a part of what was anciently called Ethiopia; Ityopya is still the Abyssinian name of the country. The first king, according to the native tradition, was Menilehek or Menelek, the son of Solomon and the Queen of Sheba. Christianity was introduced in the 4th century by Frumentius; the kingdom of Axum, named from the capital, was the nucleus of the state, and attained its greatest extent in the 6th century. From the commencement the church of Abyssinia has adhered to the mother-church of Egypt, and with her adopted the Monophysite doctrine; and the metropolitan bishop or abuna continues to be nominated by the Coptic Patriarch. The modern history of Abyssinia has been mainly struggles between the princes of various districts for supreme power. About 1850 an Amharic adventurer obtained dominion over successive provinces, and in 1855 had himself crowned, under the name of Theodore, as Negus of Abyssinia. His maltreatment of European political agents and missionaries led to the British expedition under Lord Napier, which stormed Magdala, Theodore's royal fortress, whereupon Theodore died by his own hand. Johannes, king of Tigré, was the next Negus, and on his death in 1889, Menelek of Shoa succeeded to the 'empire.' Meanwhile Italy had occupied the flats on the coast, now the Italian dependency of Eritrea (with Massowah as headquarters). By a convention of 1889 Abyssinia became almost an Italian protectorate; but after the battle of Adowa (1896), disastrous to the Italians, Italy fully recognised Abyssinian independence.

Acadia (*Acadie*) was the name given by the French settlers to Nova Scotia (q.v.), on its first settlement in 1604.

Acajutla (*Acahoot-la*), a small seaport on the W. coast of San Salvador, with considerable trade.

Acapulco (*Acapool'co*), the best Mexican harbour on the Pacific, 180 m. SW. of capital. Pop. 5000.

Acarnania, with Ætolia, a north-western province of Greece (q.v.).

Accra, since 1875 capital of the (British) Gold Coast Colony, and after Cape Coast Castle, the most important town on the coast, lies slightly to the W. of the long. of Greenwich. It is a healthy place, and has considerable export trade in palm-oil, ivory, gold dust, india-rubber, monkey skins, gum copal, and camwood. There is telegraphic communication with England, the Niger, and the French and Portuguese settlements to the south. Pop. 20,000.

Accrington, a manufacturing town of Lancashire, incorporated as a municipal borough in 1878. It lies in a deep valley, surrounded by hills, 22 miles N. of Manchester, and 5½ miles E. of Blackburn. The town-hall (1857) is a handsome building, and there is a neat market-hall. The industries are mainly calico-printing, Turkey-red dyeing, iron-founding, with coal-mining in the neighbourhood, and chemical works. Pop. (1841) 8719; (1901) 43,120.

Acerra (*A-ser'ra*), a city of southern Italy, 9 miles NE. of Naples by rail. Pop. 14,121.

Achaia, a small Greek district lying along the north coast of the Peloponnesus.

Achalganj, a town of India, in the south part of Oude, near the Ganges. Pop. 5000.

Acheen. See ATCHEEN.

Achelo'us, now called *Aspropot'amo*, the largest river in Northern Greece, rises in Mount Pindus, flows south and south-west, and falls into the Ionian Sea opposite Cephalonia.

Achill (*Ahh'ill*), 'Eagle' Isle, off the west coast of Ireland, belonging to County Mayo, is 15 miles long by 12 miles broad, and has a very irregular coast-line. It is wild and boggy, not 500 of its 51,521 acres being cultivated. There are three villages, and a number of hovels scattered over its barren moors, sometimes in small clusters, forming hamlets, but so wretched as hardly to be fit for beasts. Achill rises towards the north and west coast, where one of the mountains, Achill Head, composed, like the rest of the island, wholly of mica-slate, presents towards the sea a sheer precipice, 2192 feet high. Pop. now below 4500.

Aci Reale (*A-see Re-á'le*), a town of Sicily, 50 miles SW. of Messina by rail. Lying at the foot of Mount Etna, where the small river Aci enters the sea, it is famed for its mineral waters, and for the cave of Polyphemus and the grotto of Galatea in its vicinity. Pop. 26,431.

Aconcagua, the highest peak of the Andes (q.v.), rising to a height of 22,867 feet, according to Gussfeldt's measurements in 1883. The mountain, which is an extinct volcano (though this has been disputed), is 100 miles ENE. of Val-

paraiso, on the frontier of Chili and the Argentine Republic.

Acquaviva, a town of South Italy, at the foot of the Apennines, 28 miles SSE. of Bari by rail. Pop. 9986.

Acqui (Lat. *Aquæ Statiellæ*), a town of Northern Italy, 21 miles SSW. of Alessandria by rail. It derives its name from its hot sulphur springs, and contains an old castle, a Gothic cathedral (12th century), and remains of a Roman aqueduct. Pop. 9411.

Acre, St Jean d'Acre, or Acca, the Biblical *Accho*, is a seaport on the coast of Syria, not far from the base of Mount Carmel, and contains about 10,000 inhabitants. It is 80 miles NNW. of Jerusalem, and 27 S. of Tyre. The harbour is partly choked with sand, yet is one of the best on this coast. In 1892 a railway was commenced from Acre to Damascus; and omnibuses run regularly from Haifa to Acre. Taken by the Crusaders in 1110, Acre was recovered in 1187 by the Sultan Saladin; but retaken in 1191 by Richard I. of England and Philip at a cost of 100,000 men. The town was now given to the Knights of the Order of St John, who kept it by constant fighting for a hundred years. In 1517 it was captured by the Turks; in 1799 besieged by the French for sixty-one days, but successfully defended by the garrison, aided by English sailors and marines under Sir Sidney Smith. In 1832 it was stormed by Ibrahim Pasha, son of the viceroy of Egypt, and held by him till in 1840 it was bombarded and taken by a combined English, Austrian, and Turkish fleet.

Acri, a town of South Italy, 13 miles NE. of Cosenza. Pop. 3944.

Acroceraunia. See Albania.

Acton, a town of Middlesex, 4 miles W. of Hyde Park. Pop. (1901) 37,744.

Acton Burnell, a Shropshire parish, 8 miles SSE. of Shrewsbury, at whose ruined castle was passed in 1283 the 'Statute of Merchants.'

Ada, a town of Northern Hungary, on the river Theiss, an important station for steamers. Pop. 9993.

Adal is the name of the flat and barren country lying between the Abyssinian plateaux and the Red Sea, from Massowa to the Bay of Tajurra, its greatest width being 300 miles.

Adalia (anc. *Attalia*), a seaport on the S. coast of Asia Minor, on the Gulf of Adalia. Pop. 30,000.

Adamawa, an African state or territory between the Cameroons and Lake Chad, most of which (excluding Yola) by Anglo-German agreement lies within the German sphere—Yola being in Nigeria. In the S. are mountains, amid which rise numerous streams, the most important being the Benuë (q.v.), which waters the entire province. The people, who profess Mohammedanism, are active, industrious, and intelligent. The chief town is Yola (15,000 inhabitants).

Adams, a township of Massachusetts, adjoining North Adams, with busy manufactories, and embracing Mount Greylock (3505 feet), the highest point in the state. Pop. 12,000.

Adam's Bridge, a chain of sand shoals 30 miles long, extending from a small island off the Indian coast to one just off Ceylon. It greatly obstructs the navigation of the channel.

Adam's Peak, the name given by Mohammedans, and after them by Europeans, to a mountain summit in the south of Ceylon, 7420 feet high (not, however, the highest of the group). The native name is Samanella. The cone forming the summit is a naked mass of granite, terminating in a narrow platform, in the middle of which is a hollow, five feet long, having a resemblance (increased by human agency) to a human footstep. Mohammedan tradition makes this the scene of Adam's penitence, after his expulsion from Paradise; he stood 1000 years on one foot, and hence the mark. To the Buddhists, the impression is the *Sri-pada*, or sacred footmark, left by Buddha on his departure from Ceylon; and the Hindus recognise Buddha as an avatar of Vishnu. Multitudes of devotees visit the mountain.

Adana (*Á'dana*), a province in the SE. of Asia Minor, is named from its chief city Adana, containing 50,000 inhabitants. The city, on the Sihun, 30 miles from the sea, commands the pass of the Taurus Mountains.

Adare, a market-town on the Maig, in the county, and 11 miles SW. of the town, of Limerick. Pop. 516.

Adda, a river of Lombardy, rising in the Alps, flowing through Lake Como, and falling into the Po after a course of 180 miles.

Addiewell, a mineral village of Midlothian, 1½ mile WSW. of West Calder. Pop. 2000.

Addis Abeba (*Adis Ababa*), capital of Abyssinia, lies in the south of the province of Shoa, 8000 feet above the sea. Pop. 50,000.

Addiscombe, a place in Surrey, near Croydon. A mansion here was, in 1812, converted by the East India Company into a college for their cadets, but sold in 1861.

Adelaide, the capital of South Australia, on the Torrens, 7 miles by rail SE. of Port Adelaide, on St Vincent Gulf. It stands on a large plain, and is walled in on the eastern and southern sides by the Mount Lofty range; the town proper is enclosed by a wide belt of garden and shrubbery. The first settlement was made in 1836, and named after the queen of William IV. The Torrens divides the town into North and South Adelaide, the former being occupied chiefly with residences, and the latter forming the business portion of the town. Four substantial iron bridges span the Torrens, which has been formed by a dam into a lake 1½ mile long. The streets are broad and regularly laid out, especially in Adelaide proper, to the south of the river, where they cross each other at right angles, and are planted with trees. Among the public buildings are the new parliament houses, erected at a cost of about £100,000; government offices, post-office, and town-hall; South Australian Institute, with museum, library, and art-galleries; and hospital. The botanical garden, with the botanical garden park, covers more than 120 acres of ground. The chief manufactures are woollen, leather, iron, and earthenware goods; but the chief importance of Adelaide depends on its being the great emporium for South Australia. Wool, wine, wheat, flour, and copper ore are the staple articles of export. Among educational institutions the most important are the Adelaide University; St Peter's (Episcopal) College; St Barnabas Theological College, opened in 1881; and Prince Alfred (Wesleyan) College. It is the seat of an Anglican and of a Roman Catholic bishop. Glenelg on the sea, 5 miles away, is a favourite watering-place. Pop. (1871) 27,208; (1881) 38,479; (1901) 39,250, or, with suburbs, 163,450.—Port Adelaide, its haven, dates from 1840, is situated on an estuary

of the Gulf of St Vincent, has a safe and commodious harbour, and an ocean dock capable of admitting ships of the largest size. It is a principal port of call for vessels arriving from Europe either round the Cape or by the Suez Canal; and since 1887 railway communication has been established between Adelaide, Melbourne, Sydney, and Brisbane. Two forts have been erected for the defence of the port. Tramways were introduced in 1878. Municipal pop. 6000.

Adelsberg, a market-town in Carniola, 22 miles NE. of Trieste, with a pop. of 1800. Near it are numerous caves, the most famous being a large stalactite cavern, the *Adelsberg Grotto*. This cavern, the largest in Europe, between 2 and 3 miles long, is divided into the old and the new grotto, the latter discovered in 1816; a third very fine one came to light in 1889. The various chambers, called by names such as the Dome, the Dancing-hall, the Belvedere, contain stalactites and stalagmites of great size and grotesque forms. The river Poik runs through a part of the grotto, and then disappears below the ground.

Aden, a peninsula and town belonging to Britain, on the SW. coast of Arabia, 105 miles E. of the strait of Bab-el-Mandeb, the entrance to the Red Sea. The peninsula is a mass of volcanic rocks, 5 miles long from E. to W., and rising to 1776 feet. It is joined to the mainland by a narrow, level, and sandy isthmus. The town is on the eastern shore of the peninsula, stands in the crater of an extinct volcano, and is surrounded by indescribably barren, cinder-like rocks. The main crater is known as the Devil's Punch-bowl. Frequently the heat is intense; but the very dry hot climate, though depressing, is unusually healthy for the tropics. The Romans occupied it in the 1st century A.D. Till the discovery of the Cape route to India (1498), it was the chief mart of Asiatic produce for the Western nations; but in 1838 it had sunk to be a village of 600 inhabitants. The increasing importance of the Red Sea route gave Aden great value as a station for England to hold; and in 1839, after a few hours' contest, Aden fell into the hands of the British. It is of high importance both in a mercantile and naval point of view, especially as a great coaling station; it has a garrison and strong fortifications. The population and resources of the place have rapidly increased since 1838, and the opening of the Suez Canal in 1869 gave it a great impetus. The annual value of its imports sometimes exceeds two millions, while that of its exports (coffee, gums, spices) amounts to a million and a half. It is a telegraphic station on the cable between Suez and Bombay, and on the line to Zanzibar and the Cape. To provide for its growing population, a considerable territory on the mainland has been acquired and added to the peninsula, the total area (including the island of Perim, q.v.) being 75 sq. m.; and the settlement, which is politically connected with Bombay (seven days' sailing distant), had in 1901 a population of 41,250. The bulk of the natives are Arabs and Somalis from Africa, all speaking Arabic. In the settlement there are, besides Aden proper, called the Camp, or the Crater, two other centres of population—Steamer Point, which is cooler than the Crater; and the outlying town of Shaikh Othman, with a Presbyterian mission, 10 miles towards the interior.

Aderbijan. See AZERBIJAN.

Aderno (anc. *Adranum*), a town of Sicily, at the base of Mount Etna, 17 miles NW. of Catania. Pop. 19,180.

Adiabe'ne, a district of Assyria, E. of the Upper Tigris, between the greater and the lesser Zab rivers.

Adige (*Ad'ijay*; Ger. *Etsch*; anc. *Athesis*), a river of Italy, rising in the Rhætian Alps, and formed by various streamlets which descend from these mountains and unite at Glarus. Thence it flows east into Tyrol, then, after a slight south-eastward détour, due south past Trent and Roveredo into Lombardy, and, passing Verona, takes a south-eastern sweep, and enters the Adriatic not far north of the Po. It is 250 miles long, 650 feet broad in the plain of Lombardy, and 10 to 16 feet deep.

Adirondack Mountains, the chief range in New York State, lie between Lakes Champlain and Ontario. Rising from an elevated plateau about 2000 feet above sea-level, they are remarkable for grand and picturesque scenery; the highest summit, Mount Marcy, is 5402 feet high. Small lakes are numerous; the head-streams of the Hudson are here; and there is much fine timber in the region. The whole northern wilderness of New York State is popularly known as the Adirondacks, and is a very favourite resort of sportsmen and pleasure-seekers.

Adjygurh. See AJAIGARH.

Adlington, a Lancashire township, 3½ miles SE. of Chorley. Pop. 4590.

Admiralty Island lies off the coast of Southern Alaska, in 57° 30′ N. lat., and 134° 15′ W. long. It is about 90 miles long, well wooded and watered; and contains coal and copper. It is inhabited, and belongs to the United States.

Admiralty Islands, a group of 40 islands, to the NE. of New Guinea, about 2° S. lat., and 147° E. long. They were discovered by the Dutch in 1616. The largest is above 50 miles long, and is mountainous but fruitful; their total area is 878 sq. m. Some are volcanic, others are coral islands. They abound in cocoa-nut trees, and are inhabited by a race of tawny frizzle-headed savages, of the Papuan stock, about 800 in number. Together with New Britain and some adjoining groups, they were annexed by Germany in 1885, and now form part of the Bismarck Archipelago.

Adoni, a town of Madras, 64 miles NE. of Bellary. Pop. 32,441.

Adour, a French river, rising in the dep. of Hautes Pyrénées, and flowing 180 miles through Gers and Landes, till it enters the Atlantic below Bayonne. It is navigable for 80 miles.

Adowa, a town of Abyssinia, the capital of Tigré, stands 6270 feet above sea-level, and 145 miles NE. of Gondar. Adowa is the chief entrepôt of trade between the interior of Tigré and the coast. Here on 1st March 1896 an Italian army was routed by the Abyssinians. Pop. 4000.

Adpar, a town of Cardigan and Carmarthen shires, on the Teifi, opposite Newcastle-Emlyn. Till 1885 it was one of the Cardigan boroughs.

Adra (anc. *Abdera*), a Mediterranean seaport of Spain, 49 miles SE. of Granada, near great lead-mines. Pop. 9039.

Adramyti (anc. *Adramyttium*; Turkish *Edremid*), a town on the west coast of Asia Minor, opposite Mitylene. Pop. 6000.

Adrar, a region of 30,000 sq. m. in the west of the Sahara, bordering on the Spanish territory of Rio de Oro, but now recognised as—wholly or mostly—French.

Adria, a town of Northern Italy, between the Po and Adige, is one of the oldest cities in Europe, having been founded by the Etruscans. So late as the 12th century A.D., it was a flourishing harbour on the Adriatic Sea, to which it gave name; but it has been gradually separated from the sea, from which it is now 14 miles distant. It still retains several interesting remains of Etruscan and Roman antiquity, with a fine cathedral. Pop. 11,320.

Adrian, a city of Michigan, U.S., situated on the Raisin River. It is well furnished with water-power, commands the trade of a large grain-growing region, has several factories, and a Methodist college founded in 1859. Pop. (1870) 8438; (1890) 8756; (1900) 9654.

Adrianople (Turkish *Edirné;* Bulgarian *Odrin*), the third city of European Turkey, stands on the navigable Maritza (the ancient *Hebrus*), 198 miles WNW. of Constantinople by rail. The splendid mosque of Selim II., the palace, and the immense bazaar of Ali Pasha, may be named as its principal features. Founded or greatly improved by the Emperor Hadrian, Adrianople was the seat of the Ottoman sultanate from 1366 to 1453. The Russo-Turkish war was here concluded, September 14, 1829, by the Peace of Adrianople. After the capture of the Turkish army defending the Shipka Pass in January 1878, the Russians entered Adrianople unopposed; and an armistice was concluded here on the 31st. Pop. 80,886.

Adrian's Wall. See HADRIAN'S WALL.

Adriatic Sea, a large arm of the Mediterranean Sea, extending 450 miles north-westward between Italy and the Balkan Peninsula, and terminated to the south by the strait of Otranto, 45 miles wide. The west coast is comparatively low and has few inlets, and the north is marshy and edged with lagoons. On the other side, the coasts of Illyria, Croatia, Dalmatia, and Albania are steep, rocky, and barren, with many inlets, and begirt with a chain of almost innumerable small rocky islands. The total area of the sea, including islands, is calculated at 52,220 sq. m.—the area of the islands being 1290; the mean depth is 110 fathoms, the greatest depth 565 fathoms. The chief rivers flowing into it are the Adige and the Po, which are continually depositing soil on the coast, so that places once on the shore are now inland. The extreme saltness of the Adriatic is probably owing to the comparatively small quantity of fresh water poured into it by rivers. Venice, Trieste, Fiume, Ancona, Bari, and Brindisi are the chief ports. The fisheries are rich, and industriously worked.

Adur, a Sussex river, flowing 20 miles southward to the English Channel at Shoreham.

Ægean Sea, the old name of the gulf between Asia Minor and Greece, now usually called Archipelago (q.v.).

Ægi'na, a mountainous Greek island, 33 sq. m. in area, in the Gulf of Ægina (the ancient *Saronicus Sinus*). The town of Ægina stands at the NW. end of the island. There are considerable remains still left of the ancient city, and the ruins of solidly built walls and harbour moles still attest its size and importance. The island contains about 9000 inhabitants.

Æolian Islands. See LIPARI.

Ætna. See ETNA.

Afghanistan' is the country lying to the north-west of India. Its boundaries are, on the north, the Oxus or Amu Daria, from its source to Khoja Saleh, and thence (since 1885–87) a line drawn across the Turkoman desert (Russian territory) south-westward to the Murghab, passing south of Penjdeh, and touching the Hari-Rud at Zulfikar. On the east, the frontier runs along the eastern foot of the Suliman Mountains; but here again some of the tribes are almost independent, and the Indian government controls the more important passes. On the south, a line passing north of Quetta in about the 30th parallel of N. lat., divides Afghanistan from the territory of the khan of Kelát and Beluchistan; while on the west, the meridian of 61° E. long. approximately defines the boundary with Persia. Within these limits, Afghanistan extends 400 miles from north to south, and 600 miles from east to west, and contains an area which may be roughly estimated at 240,000 sq. m., or about twice the size of Great Britain and Ireland. This includes Badakhshan and Wakhan in the north-east, and Afghan Turkestan in the north, comprising the Uzbeg States of Balkh, Kunduz, Maimana, Shibarghan, Khulm, Akchá, and Andkhoi, owning allegiance and paying tribute to the Ameer. Afghanistan may be divided into the three great river-basins of the Oxus, the Indus, and the Helmand. Afghanistan is for the most part an arid, mountainous country, and cultivation is only met with in some of its valleys. The principal mountain systems are the Hindu Kush, with its westerly continuations, the Koh-i-Baba, Paghman, Safed-Koh, and Siah-Koh. The climate is as diversified as the physical configuration. At Ghazni (7279 feet) the winter is extremely rigorous; the climate of Seistan, in the south-west, is hot and trying; while other parts are temperate.

The population of Afghanistan is composed of a variety of nationalities, and is estimated at about 4,900,000. The Afghans proper, or Pathans, number about 3,000,000, and are divided into tribes or clans—Duránis, Ghilzáis, Yúsufzáis, and others. The Duránis are the dominant tribe; the Ghilzáis, the strongest and most warlike; the Yúsufzáis, the most turbulent. Of the non-Afghans, the Tajiks are the agricultural and industrious portion of the population; the Hindkis and Játs chiefly live in the towns, and are traders; the Kizilbashes are Turko-Persians, and form the more educated and superior class; while the Hazáras, a race of Mongol origin, are nomads. The language of the Afghans—the Pakhtu or Pushtu—belongs to the Aryan family. In religion they are Sunni-Mohammedans. In character they are proud, vain, cruel, perfidious, extremely avaricious, revengeful, selfish, merciless, and idle. 'Nothing is finer than their physique, or worse than their morale.' The Afghans do not as a rule inhabit towns, except in the case of those attached to the court and heads of tribes. The townsmen are mostly Hindkis and other non-Afghan races, who practise various trades and handicrafts considered derogatory by men of rank. The principal towns are Kabul (population 140,000), the seat of government and centre of a fertile district; Ghazni, a strong fortress; Kandahar, the chief city of Southern Afghanistan, with 50,000 inhabitants; and Herat, formerly considered the key of India.

Among the natural productions of Afghanistan is the plant yielding the asafœtida. The castor-oil plant is everywhere common, and good tobacco is grown in the district of Kandahar. The cultivated area round Herat produces magnificent crops of wheat, barley, cotton, grapes, melons, and the mulberry-tree. In special localities are

forests of pistachio. The general appearance of the country during winter is barren and arid in the extreme, owing to the absence of trees and woody shrubs; but in spring a mass of vegetation springs up, giving a grand colouring to the landscape. The industrial products are silk, chiefly for domestic use, and carpets, those of Herat being of admirable quality. The manufacture of *postins*, or sheepskins, is one of the most important occupations. Merchandise is all transported on camel or pony back. Commerce suffers much from frequent wars and bad government.

The history of Afghanistan as an independent state only dates from the middle of the 18th century. For two centuries before, Herat and Kandahar had been in the possession of Persia; while Kabul was included in the Mogul empire of Delhi. Upon the death of Nadir Shah in 1747, Ahmed Shah Durâni subjugated the different provinces, and when he died in 1773, left an empire to his son, Timur Shah. For Englishmen, the chief events in the history of Afghanistan are the expedition in 1839 which established Shah Soojah on the throne; the rebellion of 1841, in which the residents Burnes and Macnaghten were killed, and the Anglo-Indian troops perished in the retreat; the punitive expedition in 1842; the defeat of Dost Mohammed in 1849; the war with Shere Ali in 1878–79, and instalment of Yakub Khan; the rising at Kabul and murder of Cavagnari the English resident; the punitive expedition under Roberts; the establishment in 1881 by British assistance of Abdurrahman, succeeded in 1901 by his son Habibullah; and alarms as to Russian encroachments.

See Elphinstone's *Cabul* (1815); Kaye's *History of the War in Afghanistan* (1851, 4th ed. 1878); Bellew, *Afghanistan and the Afghans* (1879); Reports by Lumsden and Macgregor.

Afium-Kara-Hissar ('Opium Black Castle'), a city of Asia Minor, 170 miles ENE. of Smyrna. The chief trade is in opium, and there are manufactures of felts, carpets, arms, and saddlery. Pop. 20,000.

Africa, a continent of the eastern hemisphere, forming a south-western extension of Asia, to which it is attached by the narrow isthmus of Suez, now pierced by a canal 90 miles long. Africa is thus constituted an insular mass of irregular triangular shape, with base on the Mediterranean, and apex at the junction of the Indian and Atlantic Oceans, which bathe its eastern and western shores respectively. From Cape Blanco in Tunis, to Cape Agulhas in Cape Colony, it stretches southward across about 5000 miles, disposed almost equally on both sides of the equator. The extreme eastern and western points are Capes Guardafui on the Indian Ocean, and Verd on the Atlantic, a distance of about 4500 miles. But owing to the sudden contraction of the land at the Gulf of Guinea, whence, like both Americas, India, and other peninsular masses, it tapers continuously southwards, the total area is considerably less than would seem to be indicated by these extreme distances. Including Madagascar and all adjacent insular groups, it cannot be estimated at much more than 11,500,000 sq. m., or some 5,000,000 less than either Asia or America. Of all the continents except Australia, Africa is the most uniform and monotonous in its general outlines, unrelieved by broad estuaries, bights, or inlets of any kind penetrating far inland. Hence, although about three times larger than Europe, its coast-line scarcely exceeds 15,000 miles, as compared with the 19,000 of that more highly favoured continent.

Geologically, Africa is nearly destitute of insular groups, almost the only islands that belong physically to the mainland being Ierba and one or two islets in the Mediterranean, and a few on the east side, such as Socotra, and farther south, Pemba, Zanzibar, and Mafia, almost forming parts of the adjacent coast. Perim, Dahlak, and a few others in the Red Sea, are mere coral reefs, dominated here and there by volcanic crests. The Comoro group between Madagascar and Mozambique is also volcanic; while Madagascar itself and the outlying Mascarenhas (Mauritius, Reunion, and Rodriguez) appear to be surviving fragments of a Miocene continent, now flooded by the waters of the Indian Ocean. On the west side, the little Bissagos group alone forms a geological dependency of the mainland. Annabon, St Thomas, Prince, and Fernando Po, in the Gulf of Guinea, as well as Madeira, the Canary, and Cape Verd archipelagoes, are all of volcanic origin, the latter being separated by profound abysses of over 3000 feet from the continent. Lastly, St Helena and Ascension are mere rocks lost amid the Atlantic waters.

Corresponding with the uniform continental contour, is the generally monotonous character of the interior, which is relieved by no great central highlands or conspicuous water-partings at all comparable to those of the other great continental regions. The somewhat premature generalisation, which compared it to 'an inverted basin,' gives a misleading idea of its true conformation. The outer rim of mountain-ranges is not nearly so continuous and uniform as this comparison would imply; while the interior is disposed, not in one vast elevated plain, but in two well-marked physical regions—a great southern tableland with a mean altitude of over 3500 feet, falling northwards to a much lower but still elevated plain with a mean altitude of about 1300 feet. Owing to this generally high altitude, and to the almost total absence of extensive low-lying plains, Africa, notwithstanding the lack of vast alpine regions like the European Alps and Pyrenees, has nevertheless a greater mean elevation (1900 to 2000 feet) than Europe (1000).

The southern plateau is intersected by several mountain-ranges, very little or not at all explored. The chief mountain systems of the north are the Atlas and the Abyssinian highlands. The culminating points of the continent are near the equator: Ruwenzori (19,000), Kenia (19,000), and Kilima-njaro (19,680 feet).

Hydrographically, the two great southern basins of the Congo and Zambesi balance those of the Nile and Niger of the northern plain, while the secondary Orange and Limpopo in the extreme south find their counterparts in the Senegal and Draa of the NW. The Zambesi and Limpopo, together with the Rovuma, Juba, and a few other coast streams, flow to the Indian Ocean; all the others, together with the Cunene, Koanza, Ogoway, Volta, Gambia, Tensift, Muluya, and Mejerdah, to the Atlantic, either directly or through the Mediterranean. The Makua-Welle is a tributary of the Congo; the Shari flows into Lake Tsad or Chad.

Africa possesses a magnificent equatorial lake system, elsewhere unrivalled except by the great North American lacustrine basins. They are grouped towards the east side of the continent between 15° S. and 4° N. lat., and all stand on the southern tableland, draining seaward through

the Zambesi (Nyassa, with outflow Shiré), the Congo (Tanganyika, with intermittent outflow Lukuga), and the Nile (Alexandra Nyanza, Victoria Nyanza, Albert-Edward Nyanza, and Albert Nyanza, with outflow Somerset Nile). The Alexandra (Akanyaru) drains north-eastwards through the Alexandra Nile (Kagera) to the Victoria, queen of African lakes, and, next to Superior (31,200 sq. m.), the largest fresh-water basin (over 30,000 sq. m.) on the globe. Lakes Tsad (Chad) and Ngami have no seaward outflow; the Abyssinian Lake Tana, Tzana, or Dembea, 6100 feet, is a true alpine lake.

Above all the great divisions of the globe, Africa is distinguished by the general uniformity of its climatic phenomena, a circumstance due to its massive form and intertropical position. In the region approaching nearest to the northern or southern equinoctial lines, rain falls throughout the year, thanks to the opposing trade-winds. In the northern hemisphere a zone of two wet seasons stretches from the equator to the 15° lat. In summer, copious showers are caused by the moisture-bearing SW. winds; in winter, the NW. currents become in their turn the bearers of heavy rain-charged clouds to the southern plateau. But on both sides of the torrid zone, comprising about seven-tenths of the whole continent, the difference in the disposition of the winds causes a corresponding contrast in the rainfall. Here the trade-winds maintain their normal direction constantly, or with but slight temporary deviations. Blowing from the NE. in the northern, from the SE. in the southern hemisphere, they divert to the equator most of the vapours crossing their path, leaving elsewhere clear skies and arid lands. Thus it happens that Africa has two almost completely barren zones of rocks, gravels, marls, clay, and sand—the Sahara and Libyan desert in the north, Kalahari and other wastes in the south. This regular disposition of the climates is completed by the regular alternation of winds and rains in the zones of Mauritania and the Cape, both belonging to the region of subtropical rains, which fall in the respective winters of each hemisphere. Africa is thus disposed from north to south in successive gray and more or less intensely green belts, whose limits coincide in several places with the isothermals, or lines of equal temperature. The lines indicating mean annual temperatures of 68° and 75° F., traverse, in the north, the Mediterranean seaboard and the Sahara respectively; in the south, the Orange basin and a zone stretching obliquely from Mozambique to the Cameroons; while the area of greatest mean heat (82° F.) is comprised within an irregular curve enclosing the Upper Nile basin between Khartoum and the Albert Nyanza north and south, Lake Tsad and Massowah (Massawah) west and east. The climate, except on the Mediterranean, Saharan, Red Sea, and extreme south coasts, is nearly everywhere malarious on the low-lying and generally marshy coast-lands between the outer rim and the sea. It is the same in the Chambeze, Malagarazi Unyamwesi), Shari, and other inland districts, which are either constantly or periodically under water. But elsewhere, with due precautions, the continent cannot be regarded as insalubrious; and the Sahara, for instance, is distinctly a healthy region, although, owing to rapid radiation, the hot days are here succeeded by cool and occasionally even frosty nights.

About 41 per cent. of the surface is said to be either desert, or under scrub, or otherwise absolutely waste, and 35 per cent. steppe, or nearly treeless grass-grown savannah, leaving only 24 per cent. for forest and arable lands. The continuous forest growths are confined mainly to the vast equatorial region between the Upper Zambesi and Soudan, and to some isolated tracts about the Abyssinian plateau, in the Moroccan Atlas, all along the Guinea coast, about the Middle Limpopo and Zambesi, and in parts of Masai Land and the Upper Nile basin.

Fauna.—Africa is the peculiar home of the large fauna—such as the lion, the panther and leopard, the hyena, fox, and jackal. The great herbivora are represented by the elephant, the rhinoceros, the buffalo, the giraffe, the hippopotamus, and the crocodile. Africa is also the special home of the gnu, and several other species of antelopes. The monkey family is also spread over the whole continent. Peculiar also are such equidæ as the zebra and quagga. Of land mammals there are altogether enumerated about 480 species peculiar to this continent, amongst which are 95 of the simian and 50 of the antelope family. The avi-fauna includes the ostrich, the secretary, ibis, guinea-fowl, weaver-bird, roller-bird, lovebird, waxbill, whydah, sun-bird, parrots, quail, and several other indigenous species. Reptiles and insects also abound—the tsetse fly being one of the great impediments to the progress of culture.

Recent authorities roughly estimate the population of Africa at about 210,000,000, or 18 to the square mile, a density five times less than that of Europe. According to the nature of soil and climate, the population is distributed very unevenly over the surface, being massed somewhat densely in the Nile delta, in the Upper Nile Valley, and generally throughout Soudan, less thickly over the southern plateau, and very thinly in Mauritania and Tripolitana; while large tracts, especially in the Western Sahara, the Libyan and Kalahari wastes, are absolutely uninhabited. Of the whole number, probably less than 1,000,000 are recent immigrants from Europe, settled chiefly in the extreme north (Egypt and Algeria) and in the extreme south (Cape Colony, Natal, and the former Boer States). About 34,000,000, all of *Semitic* stock, are intruders from Asia, some in remote or prehistoric times (3,000,000 Himyarites in Abyssinia and Harar from South Arabia), some since the spread of Islam (over 30,000,000 nomad and other Arabs, chiefly along the Mediterranean seaboard, in West Sahara, and Central and East Soudan). All the rest, numbering about 175,000,000 altogether, may be regarded as the true aboriginal element, and may be regarded as falling into two main groups—the Negro and Negroid peoples, and the Hamitic. The Negroes proper, including the Fanti, Ashanti, Mandingo, Haussa, Bari, and Monbuttu stocks, are mainly in Upper Guinea, Senegambia, and the Soudan. The Bantus to the south of them include Kaffirs, Zulus, Bechuanas, Matabele, Wagandas; and the other Negroids are the Hottentots and the Bushmen, Batwas, and Akkas. To the Hamitic stock are referred the Berbers, Gallas, and Somalis, as also the Fans, Fulahs, and the Egyptian Fellahs. Speaking generally, the northern Hamites and Semites are Mohammedans and stock-breeders, the southern Bantus nature-worshippers and agriculturists; all these factors intermingling in the intervening zone of Soudan. The chief exceptions to this broad statement are the Christian Abyssinians (Monophysite sect); the Hottentots, who are mainly cattle-breeders; and the Algerian

Berbers, who prefer tillage to pasturage. Nearly the whole of Africa is under the direct or indirect control of seven European states—Great Britain, France, Germany, Portugal, Spain, Italy, and Turkey—or within their recognised spheres of influence. The only independent states remaining are Morocco, Abyssinia, and Liberia.

Of African soil, Great Britain holds (1) in South Africa, the Cape Colony, Natal, Transvaal, Orange River Colony, Basutoland, Bechuanaland (as a protectorate), Rhodesia, British Central Africa Protectorate; (2) in East Africa, Zanzibar (as a protectorate) and dependencies, British East Africa Protectorate, Uganda, British Somaliland; (3) in West Africa, Gambia, Sierra Leone, Gold Coast, Lagos, and Northern and Southern Nigeria; (4) Mauritius, Ascension, St Helena, &c.; (5) Egypt (temporarily occupied); (6) Anglo-Egyptian Soudan, held by Britain and Egypt jointly. France holds Algeria, Tunis, Senegal, French Guinea, the Ivory Coast, Dahomey, the Western Soudan, the Sahara, French Congo, Obok or French Somaliland, Madagascar, Réunion, and the Mayottes and the Comoros.

German Africa includes Togoland, the Cameroons, German South-west Africa (Damaraland, Namaqualand), and German East Africa. Portuguese Africa: Angola, Portuguese East Africa, Madeira, Cape Verde Islands. Spanish Africa: Ceuta, Spanish Sahara (Rio de Oro and Adran); the Canaries, Fernando Po, and other Islands. Italian Africa: Eritrea, Italian Somaliland. Belgian Africa is the Congo Free State.

According to estimates based on the latest available data, British Africa in all (without Egypt, but including the Egyptian Soudan) includes about 3,510,000 sq. m., with about 84,000,000 inhabitants; French Africa, 2,970,000 sq. m., 27,500,000 inhabitants; German Africa, 742,000 sq. m., 6,750,000 inhabitants; Portuguese Africa, 804,000 sq. m., 7,750,000 inhabitants; Spanish Africa, 250,000 sq. m., population not known; Italian Africa, 186,000 sq. m., 1,000,000 inhabitants; Belgian Africa (Congo Free State), 900,000 sq. m., pop. 30,000,000; Turkish Africa (Egypt and Tripoli), 8,000,000 sq. m., pop. 11,300,000; Abyssinia, 150,000 sq. m., pop. 3,500,000; Morocco, 219,000 sq. m., pop. 5,000,000; Liberia, 14,000 sq. m., pop. 1,000,000.

See works on Africa by Keith Johnston, Réclus, Hartmann, and others; the works and the lives of Bruce, Mungo Park, Livingstone, Baker, Burton, Speke and Grant, Barth, Schweinfurth, Cameron, Stanley, Johnston, Thomson, and other travellers; Jones's *History of African Exploration* (New York, 1875); books on the partition of Africa by Silva White (1892) and Scott Keltie (1893); and Sir H. H. Johnston's *Colonization of Africa* (1899).

Afton, an Ayrshire stream, joining the Nith at New Cumnock.

Agades (*A-gā-des*), once a very important city of Africa, and still a great meeting-place of trading caravans, is the capital of the state Aïr or Asben, south of the Sahara, and is built upon the eastern edge of a great tableland, at an elevation of not less than 2500 feet. In the 16th century it probably contained 60,000 inhabitants; now it has some 7000.

Agadir, the southernmost seaport town in Morocco, at the mouth of the Sûs, 23 miles SE. of Cape Ghir. It was once a place of importance; but a revolt in 1773, and the consequent rise of Mogador, have lessened its value, and its pop. now does not exceed 1500.

Agar, a town of India, in the state of Gwalior, 41 miles NE. of Ujain. It stands in an open plain, 1598 feet above the sea. Pop. 30,000.

Agde (anc. *Agatha Narbonensis*), a town in the French dep. of Hérault, 3 miles from the Mediterranean Sea, on the left bank of a navigable stream, the mouth of which forms a harbour. Pop. 7705.

Agen (*Â-zhon*^{g}), chief town of the French dep. of Lot-et-Garonne, on the right bank of the Garonne, 84 miles SE. of Bordeaux. It carries on an active trade in woollen and linen fabrics, leather, coloured paper, colours, cordage, and sailcloth; and is an important railway centre. Joseph Scaliger and the barber-poet Jasmin were natives. Pop. 18,500.

Aghrim, or Aughrim (*Auhh'rim*), a hill in Galway, Ireland, 30 miles SW. of Athlone. Here, on 12th July 1691, Ginckell defeated the French and Irish adherents of James II. under St Ruth.

Agincourt (*Â'zhan*^{g}*koor*), now Azincourt, a small village in the centre of the French dep. of Pas-de-Calais, celebrated for Henry V.'s great victory over the French, October 25, 1415.

Agnano, till 1870 a small lake 3 miles west of Naples, about 60 feet in depth, and without visible outlet. As it caused malaria, it has been drained. On the right lies the Grotta del Cane (q.v.), and on the left are the sulphurous vapour-baths of San Germano.

Agno'ne, a town of South Italy, 22 miles NW. of Campobasso, noted for its copper and steel manufactures. Pop. 6179.

Agra, a city in the United Provinces of Agra and Oudh, on the Jumna, 139 miles SE. of Delhi by rail, and 841 NW. of Calcutta. The ancient walls embraced an area of 11 sq. m., of which about one-half is now occupied. The houses are mostly built of red sandstone, and, on the whole, Agra is the handsomest city in Upper India. Some of the public buildings, monuments of the house of Timur, are on a scale of striking magnificence. Among these are the fortress built by Akbar, within the walls of which are the palace and audience-hall of Shah Jehan, the Moti Masjid or Pearl Mosque, and the Jama Masjid or Great Mosque. Still more celebrated is the white marble Taj Mahal, situated without the city, about a mile to the east of the fort. This extraordinary and beautiful mausoleum was built by the Emperor Shah Jehan for himself and his favourite wife, who died in 1629; and is remarkable alike for the complexity and grace of the general design, and the elaborate perfection of the workmanship. In the centre, on a raised platform, is the mausoleum, surmounted by a beautiful dome, with smaller domes at each corner, and four graceful minarets (133 feet high). Of British edifices the principal are the Government House, the Government College, three missionary colleges, the English church, and the barracks. The climate, during the hot and rainy seasons (April to September), is very injurious to Europeans; but the average health of the city is equal to that of any other station in the North-western Provinces. The principal articles of trade are cotton, tobacco, salt, grain, and sugar. There are manufactures of shoes, pipe stems, and gold lace, and of inlaid mosaic work, for which Agra is famous. It is a very important railway centre, and has many claims to be regarded as the commercial capital of the North-west. Pop. (1901) 188,022. Agra first rose to importance in the beginning of the 16th century,

and was the capital of the Mogul sovereigns till 1658, when Aurungzebe removed to Delhi. It was taken in 1784 by Sindhia, and surrendered in 1803 to Lord Lake. From 1835 till 1862, it was the seat of government for the North-west Provinces. During the mutiny the Europeans had, in June 1857, to retire to the Fort or Residency. Heroic sallies were occasionally made; and Agra was relieved early in October by the rapid and brilliant march of Colonel Greathed.

Agram (Croatian *Zagreb*), capital of the Austrian province of Croatia and Slavonia, lies at the foot of a richly wooded range of mountains, 2 miles from the Save, and 142 NE. of Fiume by rail. The cathedral, dating partly from the 11th century, with new towers and an ornate western façade added in 1890–93, is one of the finest Gothic buildings in Austria. The manufactures include tobacco, leather, and linen. An earthquake in November 1880 destroyed most of the public buildings, and overthrew 200 houses. Agram possesses a university founded in 1874, with 40 lecturers and 400 students. Pop. (1890) 37,529; (1900) 57,800.

Agrigentum. See GIRGENTI.

Agtelek, a Hungarian village to the NE. of Pesth, near one of the largest and most remarkable series of stalactitic caverns in Europe, some of them nearly 100 feet high.

Aguas Calientes, a town of Mexico, capital of a central state, with an area of 2900 sq. m., stands on a plain 6000 feet above sea-level, 270 miles NW. of the city of Mexico by rail. The environs abound in hot springs, hence the name. Pop. 32,500.

Aguilar de la Fronte'ra, a Spanish town of Andalusia, 26 miles SSE. of Cordova. Pop. 12,398.

Aguilas, a fortified port in the Spanish province of Murcia, with large smelting-houses, and an export trade in lead, iron ore, sulphur, esparto, and figs. Pop. 12,500.

Agul'has, CAPE, the most southern point of Africa, lies about 100 miles ESE. of the Cape of Good Hope, in lat. 34° 49′ S., long. 20° 0′ 40″ E. In 1849, a lighthouse was erected on the point, which is very dangerous for ships. The *Agulhas Bank*, about 40 miles broad, extends along the whole southern coast of Africa, from near Natal to Saldanha Bay.

Ahmedabad', chief town of a district in Guzerat, second amongst the cities of the province of Bombay, is 50 miles NE. of the head of the Gulf of Cambay. It was built in 1412 by Ahmed Shah, and finally came to the British in 1818. In the 18th century it was one of the largest and most magnificent cities in the East, with a population of 900,000. Its architectural relics are gorgeous, even in the midst of decay, and illustrate the combination of Saracenic with Hindu forms mainly of the Jain type. The Jama Masjid, or Great Mosque, rises from the centre of the city, and is adorned by two superb minarets. There are some twelve other mosques (one lined with ivory) and six famous tombs. The modern Jain temple is of singular beauty. The prosperity of the place was almost wholly destroyed by the rapacity of the Mahrattas, but it has largely recovered, and is still famous for its rich fabrics of silk and cotton, brocades, pottery, paper made of jute, and articles of gold, silver, steel, and enamel. Pop. 185,900.

Ahmednagar (*Ahmadnagar*), a town of the province of Bombay, 122 miles E. of Bombay, is the third city of the Deccan. It was founded in 1494 by Ahmed Nizam Shah. In 1797 it fell into the hands of the Mahrattas, and in 1817 became British. It became a municipality in 1855; and possesses a good supply of water by means of aqueducts. Strong carpets, cotton and silk cloths, and copper and brass pots, are manufactured here. Pop. 42,492.

Ahmedpur', a town of India, 25 miles SW. of Bahawalpur; pop. 30,000.

Ahwas, a small village of Persia, in the province of Khuzistan, 70 miles NE. of Bassora. The neighbourhood is covered with the ruins of the capital of Artabanus, the last of the Parthian kings.

Aïdin (*Guzel-Hissar*), a town of western Asia Minor, on the Meander, 60 miles SE. of Smyrna by rail, is the capital of a province, and was built out of the ruins of the ancient Tralles. The trade is important in morocco leather, cotton, and fruit. Pop. 37,000.

Aigues-Mortes (*Aig Mort*), a town (pop. 4787) in the French dep. of Gard, in an extensive salt-marsh, 3 miles from the Mediterranean by a canal. In the middle ages, when the sea came much nearer the town, it was a very important Mediterranean harbour.

Ailsa Craig, a rocky islet of Ayrshire, 10 miles W. by N. of Girvan. Rising abruptly out of the sea to a height of 1114 feet, it is about 2 miles in circumference, and is accessible only at one point. The rock is a mass of trap, assuming in some places a distinctly columnar form. On the NW., perpendicular cliffs rise to a height of from 200 to 300 feet; on the other sides, the Craig descends to the sea with a steep slope. Till the erection of a lighthouse (1883–86), the only inhabitants were goats, rabbits, and wild-fowl; solan geese, in particular, breeding in the cliffs in countless numbers. About 200 feet from the summit are some springs, and on the ledge of a crag on the eastern front, are the remains of an ancient stronghold. In 1831, the Earl of Cassillis, the proprietor of Ailsa Craig, was raised to the dignity of Marquis of Ailsa. Pop. about 30 in all.

Ain, a French river flowing 118 miles southwestward, through the deps. of Jura and Ain, to the Rhone, 18 miles above Lyons.

Ain, an eastern dep. of France, separated from Savoy by the Rhone. The eastern part is mountainous, with summits 5000 to 6500 feet high. Bourg is the capital. Area, 2239 sq. m.; pop. (1891) 356,907; (1901) 350,416.

Ain-Tab, a town of Syria, on an affluent of the Euphrates, 64 miles NNE. of Aleppo; pop. 40,000.

Aïr, or ASBEN, an oasis-kingdom in the north of the Soudan. Agades (q.v.) is the capital.

Aira Force, a waterfall, 80 feet high, near the west shore of Ullswater.

Airdrie, a flourishing municipal burgh in NE. Lanarkshire, 2 miles E. by N. of Coatbridge, and 11 E. of Glasgow. Standing on the high-road between Edinburgh and Glasgow, near the Monkland Canal and the North British Railway, it owes its prosperity to the abundance of coal and ironstone in the vicinity. The weaving of cotton goods is carried on, as are also iron-founding, silk-weaving, and paper-making. Since 1832 it has united with Falkirk, &c. to send a member to parliament. Pop. (1831) 6594; (1861) 12,918; (1891) 15,133, or, with suburbs, 19,135.

Airds Moss, a moorish tract in Ayrshire to

the NE. of Auchinleck, the scene of a Covenanting skirmish (1680).

Aire, a river in the West Riding of Yorkshire, flowing 70 miles to the Ouse.

Aire (anc. *Vicus Julii*), a French town in the dep. of Landes, on the Adour, 112 miles S. of Bordeaux, with an ancient cathedral; pop. 3892.

Aire-sur-Lys, a fortified town in the French dep. of Pas-de-Calais, on the Lys, 37 miles W. of Lille by rail; pop. 8165.

Airlie, in Forfarshire, 8 miles WSW. of Forfar, the seat of the Earl of Airlie, famous in song.

Airolo, an Italian-Swiss village, in the upper valley of the Ticino, and 150 yards from the southern mouth of the great St Gothard Tunnel; pop. 2000.

Airthrey, a place with mineral springs near Bridge of Allan.

Aisne (*Ain*), a French river, flowing 150 miles north-westward and westward through the deps. of Marne, Ardennes, Aisne, and Oise, till it falls into the river Oise, above Compiègne.

Aisne, a dep. in the north of France, comprising parts of Picardy, Brie, and the Isle of France. Hilly in the south, level in the north, it belongs to the basin of the Seine, and is watered by the rivers Aisne, Marne, and Oise. Laon is the capital. Area, 2839 sq. m.; pop. (1891) 545,493; (1901) 535,583.

Aiwalyk, a seaport in the north-west of Asia Minor, on the Gulf of Edremid (Adramyti). Pop. 35,000.

Aix (*Aiks*), a French town, formerly capital of Provence, in the dep. of Bouches-du-Rhone, 20 miles N. of Marseilles. It is believed to have been founded by the Roman consul, C. Sextius (120 B.C.), on account of the mineral springs in the neighbourhood, and thence to have got the name *Aquæ Sextiæ*. Aix is the seat of an archbishop; and possesses a college with a public library of 150,000 volumes and 1100 MSS. The baptistery of the cathedral is believed to have been originally a temple of Apollo. There is also an old clock-tower with a quaint mechanical clock. The industry consists chiefly in cotton-spinning, leather-dressing, and trade in olive-oil, wine, almonds, &c. The warm springs are slightly sulphurous, with a temperature from 90° to 100° F. The field on which Marius defeated the Teutones lies in the plain between Aix and Arles. Pop. 25,000.

Aix-la-Chapelle (*Aiks-la-shapel'*; Ger. *Aachen*), a town of Rhenish Prussia, is situated in a fertile hollow, surrounded by heights, and watered by the Wurm, 39 miles W. by S. of Cologne. Pop. (1867) 67,923; (1900) 135,245, of whom not 7 per cent. are Protestants. Aix is the centre of a valuable coal district, and of numerous thriving manufactories, especially for spinning and weaving woollen fabrics, for needle and pin making, and for machinery, bells, glass buttons, chemicals, and cigars. Charlemagne founded its world-wide celebrity; in 814 it became his grave, the spot being marked with a stone. In 796 he had rebuilt the imperial palace, on whose site the present town-house was built in 1353, as well as the chapel which forms the nucleus of the cathedral. This ancient cathedral is in the form of an octagon, which, with various additions round it, forms on the outside a sixteen-sided figure. The so-called 'great relics,' shown once in seven years, attract thousands of strangers. Much has of late years been done to restore this venerable pile. The columns brought by Charlemagne from the palace of the Exarch at Ravenna, had been carried off by the French; but most of them were restored at the Peace of Paris. The town-house, on the market-place, is flanked by two towers older than itself. In its coronation-hall, thirty-five German emperors and eleven empresses have celebrated their coronation banquet, and the walls have been decorated with frescoes of scenes from the life of Charlemagne. Before the town-house stands a beautiful fountain, with a bronze statue of Charlemagne. Aix-la-Chapelle now possesses broad streets, many fine public buildings, tasteful churches, and luxurious hotels; and from being a quiet old city of historical interest, has become a busy centre of manufacturing industry.

The mineral springs, of which six are hot and two cold, were known in the time of Charlemagne. The temperature of the hot springs varies from 111° to 136° F.; they are efficacious in cases of gout, rheumatism, cutaneous diseases, &c. The cold springs are chalybeate.

The name of the place is derived from the springs, for which it has been always famous. Charlemagne granted extraordinary privileges to this city, which in the middle ages contained more than 100,000 inhabitants. Seventeen imperial diets and eleven provincial councils were held within its walls. The removal of the coronations to Frankfort (1531), the religious contests of the 16th and 17th centuries, a great fire which in 1656 consumed 4000 houses, combined with other causes to bring into decay this once flourishing community. In 1793 and 1794, Aix-la-Chapelle was occupied by the French; and by the treaties concluded at Campo Formio and Lunéville it was formally ceded to France, until in 1815 it fell to Prussia.

Aix-les-Bains (*Aiks-le-Ban*), a small town in the French dep. of Savoy, in a delightful valley near Lake Bourget, 8 miles N. of Chambéry. It was a much-frequented bathing-place in the time of the Roman empire (*Aquæ Gratianæ*), and among its many ancient remains are the arch of Campanus, the ruins of a temple, and of a vapour-bath. The two sulphurous hot springs are used both for drinking and as baths, and attract annually 5000 visitors. Pop. 4799.

Ajaccio (*Ayat'cho*), capital of Corsica, on the west side of the island, at the head of the Gulf of Ajaccio. It has a fine cathedral, completed in 1585, and a spacious harbour, protected by a citadel; and was the birthplace of Napoleon. There is a statue of him as First Consul (1850), and an equestrian monument of him as emperor surrounded by his four brothers (1865). The house of the Bonapartes, the 'Casa Bonaparte,' is now national property. The chief employments are the anchovy and pearl fisheries, and the trade in wine and olive-oil. Ajaccio has become a winter-resort for consumptive patients. Pop. 21,200.

Ajaigarh, a hill-fort of India, in the United Provinces, about 130 miles WSW. of Allahabad. Within its walls are two great masses of ruined Jain temples.

Ajalon, the modern *Yâlo*, a town of the Levites belonging to the tribe of Dan in ancient Palestine. In a valley near it Joshua defeated five Canaanitish kings, the sun and moon standing still in order to make his victory more complete.

Ajmere (*Ajmir*), an ancient city of Rajputana, the capital of a district, 228 miles W. by S. of Agra by rail. It is situated in a picturesque and

rocky valley, and is surrounded by a stone wall with five gateways. The Dargah or tomb of the Mussulman saint, Kwaja, within the town, is held in great veneration. Trade has revived since the opening of the railway (1875), the principal export being cotton. Pop. 75,500.

Ajodhya, an ancient city of Oudh, on the right bank of the Gogra, adjacent to Fyzabad (q.v.). Its site is marked by heaps of ruins, overgrown with jungle; there is also a modern town of the same name with 7500 inhabitants, nearly 100 temples, 36 mosques, and a fair which yearly attracts half a million of pilgrims.

Ak'abah (the Biblical *Elath*), a haven at the head of the Gulf of Akabah, the north-eastern horn of the Red Sea.

Akerman. See AKJERMAN.

Akhalzikh, a town of Russian Transcaucasia, 110 miles W. of Tiflis, on an affluent of the Kur; pop. 13,757.

Ak-Hissar (anc. *Thyatira*), a town of Asia Minor, 52 miles NE. of Smyrna; pop. 12,000.

Akhlat, or ARDISH, a town of Asiatic Turkey, on the NW. shore of Lake Van; pop. 4000.

Akhtyrka, a town of Russia, 58 miles NW. of Kharkoff, on a small affluent of the Dnieper; pop. 23,400.

Akita, a town in Hondo Island, Japan; pop. 29,500.

Akjerman (*Ak-yer-man*), or AKERMAN, a town of Russia, in Bessarabia, on the Black Sea, at the mouth of the Dniester; pop. 28,300.

Akmollinsk, capital of a province of Western Siberia, 300 miles SW. of Omsk; pop. 5700.

Akola, a town of Berar, India, 60 miles SW. of Ellichpur; pop. 29,300.

Akot, a town of Berar, 35 miles SW. of Ellichpur; pop. 16,000.

Akron, in Summit county, Ohio, U.S., is 36 miles south of Cleveland. It has woollen factories, flour-mills, a steam-engine factory, a stove factory, a mineral-paint mill, &c. Pop. (1870) 10,006; (1890) 21,601; (1900) 42,730.

Ak-shehr ('White City'), a city of Asia Minor, near the salt lake of Ak-shehr, and 60 miles SE. of Konieh; pop. 6000.

Ak-su, a town of Chinese Turkestan, 260 miles NE. from Yarkand, on an affluent of the Tarim, and at the southern base of the Thian-shan Mountains. It was formerly the capital of a separate khanate; in 1867 it became a part of the state of Eastern Turkestan, under Yakoob Beg, but was reconquered by China in 1877. It is celebrated for its manufactures of cotton cloth and saddlery, and is an entrepôt of commerce between Russia, Tartary, and China. Pop. 20,000, besides a large Chinese garrison.

Akyab, a town of Burma, the chief seaport of Arakan, is situated on the eastern side of the island of Akyab, at the mouth of the Kuladan River, 190 miles SE. of Calcutta. In 1826, being then a mere fishing-village, it was chosen for the chief station of the province, and now is a great rice port; pop. 43,989.

Alabama, one of the United States, touching the Gulf of Mexico, and lying between Georgia and Mississippi. In the south are the Piny Woods; next the fertile Cane-brake or Black Belt; next the mineral region; to the north, part of the fertile valley of the Tennessee. The Alabama and Tombigbee are navigable rivers. Cotton, maize, oats, wheat, and sweet potatoes are produced; the minerals, including coal and iron, are important; and manufactures are developing. The climate is warm but equable, and save in the Black Belt and near the swamps, healthful. Montgomery is the capital, Mobile the chief port of the state. Area, 51,540 sq. m. —more than England without Wales; pop. (1840) 590,756; (1890) 1,513,017; (1900) 1,828,697, of whom 827,000 were coloured.

Ala Dagh, a range (11,000 feet) in the great tableland of Erzerum, in Turkish Armenia, to the north of Lake Van.

Alago'as, a maritime province of Brazil, bounded on the N. and W. by Pernambuco. Pop. about 520,000. The town of Alagoas, once the capital, has 5000 inhabitants. The present capital is the port of Maceio.

Alais, a town of the French dep. of Gard, on a plain at the base of the Cevennes Mountains, 31 miles NW. of Nimes by rail. It embraced the Protestant cause in the religious wars of France, and was besieged and taken in 1629. Alais owes its prosperity chiefly to the mineral wealth of the surrounding district, which produces coal, iron, lead, zinc, and asphalt; there are large iron-foundries here, and manufactures of silk and ribbons. Pop. 18,500.

Alajuela (*A-la-hoo-ay'la*), a city of Costa Rica, Central America, 23 miles WNW. of Cartago, with which it is connected by rail; pop. 10,000.

Alameda (*A-la-mai'da*), a watering-place of California, on the Bay, 3 miles by steam-ferry E. of San Francisco. Pop. 17,500.

Al'amos, Los ('the poplars'), a town of Mexico, in the state of Sonora, 45 miles E. of the Gulf of California, is famous for its copper and silver mines; pop. 10,000.

Åland Islands (*Ō'land*), a group of 300 small islands and rocks at the entrance of the Gulf of Bothnia, opposite Abo, the largest being situated about 25 miles from the Swedish coast. Only 80 of them are inhabited. The inhabitants are of Swedish origin, skilful sailors and fishermen. Pop. 24,000, of whom two-thirds inhabit the largest island, called Aland, which is 18 miles in length, and contains Bomarsund. These islands, formerly Swedish, were taken possession of by Russia in 1809.

Ala-shehr ('the exalted city,' anc. *Philadelphia*), a city of Asia Minor, 75 miles E. of Smyrna. It was founded about 200 B.C., and is famous as the seat of one of the Seven Churches of Asia. It is still a place of considerable importance, and carries on a thriving trade with Smyrna, to which it is now joined by a railway. There are many interesting remains of antiquity. Pop. 15,000, including 3000 Greeks.

Alaska, a territory of the United States, occupying the NW. portion of the North American continent, together with a great number of islands, mostly in the Pacific Ocean. It is bounded N. by the Arctic Ocean, E. by the North-west Territories of Canada and by British Columbia; SW. by the Pacific Ocean, and W. by Behring Sea and the Arctic Ocean. Its land area is estimated at 581,400 sq. m., or about as large as Great Britain, Ireland, France, and Spain combined. The northern portion of Alaska, containing five-sixths of its area, consists essentially of a vast expanse of moor or tundra, broken here and there by mountain-spurs (an especially marked feature in the south), and varied by countless lakes, water-courses, and swamps. About

one-third of this region lies within the Arctic Circle. The winter climate is here terribly severe, and the short summers are rendered almost unendurable by clouds of mosquitoes or gnats. This region is traversed by the great river Yukon, about 2000 miles long, the Kuskoquim, and other large streams. Its population is Innuit or Eskimo, in the north and on the coast, but Athabascan or Tinneh (Red Indian) elsewhere. The fisheries and the fur-trade afford subsistence to the scanty population. A second section comprises the Aleutian Islands (q.v.), and a great part of the peninsula of Aliaska. This division is mountainous, and actively volcanic. It is very thinly peopled by the Aleuts. The Pribylof Islands, in Behring Sea, are the main seat of the capture of the fur-seal. South-eastern Alaska consists of a narrow strip of continental land, together with the Alexander Archipelago, lying near the mainland. This region is extremely mountainous, and has many great glaciers nearly reaching the sea. The climate on the tide-level is singularly mild for the latitude, but almost incessant rains prevail. The country is well timbered, and the waters abound in valuable fish. The natives are Indians of the Haida and Thlinket races. Alaska has a very small English-speaking white population, and a few semi-Russian natives. Gold is mined in the Yukon valley, at Cape Nome, and elsewhere. Coal, mostly of poor quality, is common.

A few cattle are kept near the settlements, but the climate is so wet that sheep cannot do well. Some potatoes and a few garden vegetables are grown. The native animals include the reindeer, the moose, the Rocky Mountain sheep, bears, wolves, and foxes; the muskrat, ermine, mink, sable, lynx, beaver, wolverene, squirrel, hare, porcupine, and marmot; the sea and river otter; fur, hair, and other seals, and the walrus. The fisheries are very important. Among the valuable food fishes are the cod, herring, halibut, and salmon of several species. The principal towns of the territory are all small, and most of them are on the coast. Among them are Sitka, the capital; Fort Wrangel; and Belkofsky, the chief depôt of the trade in seal-otter furs; Juneau is a gold-mining town; and Skagway is the port for the access to Klondike by the White Pass. Illoolook is on Oonalashka Island. Alaska, formerly called Russian America, was first visited by the Russians under Vitus Behring in 1741. In 1799 the whole country passed under control of the Russian American Company. In 1867 the United States purchased the entire territory from Russia for $7,200,000 in gold. Pop. (1900) 30,600 whites, and 30,000 Eskimos and Indians.

See Wardman, *A Trip to Alaska* (1885); Elliott, *Our Arctic Province* (1886); H. W. Seton Karr, *The Shores and Alps of Alaska* (1887); Halleck, *Our New Alaska* (1886); *The Alaska Coast Pilot;* Woolman, *Picturesque Alaska* (1890); Emmons, *Alaska and its Mineral Resources* (1898); reports of the geological survey (1900, &c.) and of the Harriman Expedition (1901–4).

Ala-tau ('mottled'), a range of lofty mountains forming the boundary between Turkestan and Mongolia, and the northern limit of the great tableland of Central Asia. It is made up of five sierra-like sub-ranges, all grouped round Lake Issik-Kul, which range in elevation from 10,000 to 15,000 feet. The loftiest peak, Khan Tengri, is 24,000 feet above the sea.

Alatyr, a Russian town, on the Sura, 103 miles NW. of Simbirsk; pop. 15,000.

Alausi, a town of Ecuador, 70 miles E. of Guayaquil, 7980 feet above the sea; pop. 6000.

Al'ava, the southern and largest, but most sparsely populated, of the three Basque provinces of Spain. Mountains are scattered through the whole province, and yield various minerals, stone, and timber in abundance. Area, 1205 sq. m. The inhabitants, who are chiefly Basques, number a little over 96,000. The soil is generally fertile, and along the Ebro fruits and wine are produced. The capital is Vittoria.

Alba (anc. *Alba Pompeia*), a very ancient city of North Italy, on the Tanaro, 41 miles SW. of Alessandria by rail. Its cathedral was founded in 1486. Pop. 6961.

Albacete (*Al-ba-thay'teh*), capital of a Spanish province, 140 miles SE. of Madrid by rail, in a fertile but treeless plain. It has great cattle-fairs. Pop. 20,671.—The province is partly formed from the former kingdom of Murcia, and partly from New Castile. It is generally hilly, in some parts attaining 5000 feet. The mineral wealth is considerable. Area, 5972 sq. m.; pop. 233,000.

Albania forms the south-western portion of the remaining immediate possessions of European Turkey, and extends along the western shore of the Balkan Peninsula, from the river Bojana to the Gulf of Arta. To the north it is bounded, since 1878–80, by the newly-won Montenegrin territory, and by Bosnia; on the south it is separated, since 1881, from Greece by the river Arta. The eastern boundary is a mountain-range, which to the north attains an altitude of 7990 feet. Westward of this range lie parallel chains, enclosing long elevated valleys, sinking to level strips along the coast, which mostly consist of unhealthy swamps and lagoons. The highlands advance to the sea, forming steep rocky coasts. One promontory, the Acroceraunian, projecting in Cape Linguetta far into the sea, reaches a height of 6642 feet.

A fine climate and a favourable soil would seem to invite the inhabitants to agriculture, but for the most part in vain. In the north, little is cultivated but maize, with some rice and barley, in the valleys; whilst the mountain terraces are used as pastures for numerous herds of cattle and sheep. In the south the slopes of the lower valleys are covered with olives, fruit, and mulberry trees, intermixed with patches of vines and maize, while the densely wooded mountain-ridges furnish valuable supplies of timber. The plateau of Janina yields abundance of grain; and in the valleys opening to the south, the finer fruits are produced, along with maize, rice, and wheat.

Upper or Northern Albania formed part of the Illyria of the Romans; Lower or Southern Albania corresponds to ancient Epirus. The inhabitants form a peculiar people, the Albanians, called by the Turks Arnauts, and by themselves Skipetars. According to Lord Strangford, 'the true Albanian part of their language, after precipitation of the foreign elements, is distinctly Indo-European, and is more closely connected with Greek than with any other Indo-European language existing or recorded (*Letters on Philological Subjects*, 1878). The Albanians are half-civilised mountaineers, frank to a friend, vindictive to an enemy. They are constantly under arms, and are more devoted to robbery than to cattle-rearing and agriculture. They live in perpetual anarchy, every village being at war with its neighbour. Many of them serve as mercenaries in other countries, and they form the best soldiers of the Turkish army. At one time the

Albanians were all Christians; but after the death of their last chief, the hero Scanderbeg, in 1467, and their subjugation by the Turks, a large part became Mohammedans. The Albanians are by most writers divided tribally into Gheghs, Tosks, Ljaps, &c.; but again, to quote Lord Strangford, 'the true and intelligible division is that of religious denomination. The typical region of the Mussulmans is in the centre; that of the Latins is in the northern district; and that of the Albanians in communion with the Greek Church, corresponding fairly to Epirus, is in the south, with Janina for its capital.' Of the 1,400,000 Albanians of the Ottoman empire, it is estimated that 1,000,000 are Mohammedans, 280,000 members of the Greek Church, and 120,000 Roman Catholics. There are, besides, some 250,000 Albanians in Greece; and 100,000 in Italy (Sicily mostly), whither they emigrated towards the close of the 15th century. By the treaty concluded then, in 1478, between the Turks and the Venetians, Albania became a Turkish province, which almost gained independence under Ali Pasha, but which, during the insurrection of Greece (1821–8), returned to at least nominal allegiance to the Porte. Ten rebellions have since broken out—one in 1883.

See Von Hahn's *Albanesische Studien* (1854), and his *Reise im Jahr 1863* (1870); Herguard's *Haute Albanie* (1858); Knight's *Travel in Albania* (1880); and other works cited in the full bibliography of Meyer's *Albanische Studien* (1883).

Alba'no, a town of Italy, 13 miles SSE. of Rome, on the declivity of the lava-walls which encompass Lake Albano, and opposite the site of Alba Longa. It is the seat of a bishop, and is surrounded by the mansions of wealthy Romans. There are numerous remains of ancient buildings. Good wine is made here. Pop. 8560.

The ALBAN LAKE, or Lago di Castello, is formed in the basin of an extinct volcano, and has a circumference of 6 miles, with a depth of 530 feet. Its surface is 961 feet above the sea-level. While the Romans were at war with Veii (390 B.C.), they opened a tunnel through the lava-wall which bounds it. The tunnel, which still fulfils its ancient office, is a mile in length, with a height of 7 feet, and a width of 4 feet.

Albany is a division of the eastern province of Cape Colony, in which Grahamstown (q.v.) stands.

Albany, capital of the state of New York, and seat of justice of Albany county, stands on the west bank of Hudson River, 142 miles N. of the city of New York. The river is an important channel of commerce, which is further facilitated by the Erie and Champlain canals; and six important railway lines centre here. The city has a copious water-supply, and excellent drainage and sewerage systems, and is lighted by electricity and gas. Albany has a fine city hall, a high school, one large and several small public parks, a theatre, an opera-house and a music-hall, a celebrated county prison; Roman Catholic and Episcopalian cathedrals; a noted state normal school, a law school, a medical college; an observatory, a large United States government building, and a very costly and splendid state capitol, considered the finest building of its class in the whole republic. Three bridges and several ferries cross the river to the suburban towns of East Albany, Greenbush, and Bath. Albany has a large trade in timber, grain (especially barley), and cattle. Leading articles of manufacture are cast-iron stoves and heating apparatus, farming implements, boots and shoes, bricks, wagons, clothing, flour, stoves, castings and hollow-ware, furniture, ales and beer, malt, tobacco, cigars, musical instruments, and stationers' goods. The winter climate of Albany is severe for its latitude. The extensive cattle-markets are situated at West Albany. Near the site of Albany the Dutch founded a fur-trading station in 1614. The Dutch colony was ceded to Great Britain in 1664, and the town took its present name in honour of the Duke of York and Albany, afterwards James II. of England, who received a grant of the colony. In 1686 a city charter was granted to Albany, which is thus the oldest chartered city in the United States. In 1807 Albany became the capital of the state. Till the 19th-century period the city had many of the quaint characteristics of a Dutch town. Pop. (1800) 5349; (1830) 24,209; (1860) 62,367; (1890) 94,923; (1900) 94,151.

Albany, in Western Australia, is on King George's Sound, 256 miles SSE. of Perth, by a line of railway projected in 1885. It is a place of call for P. & O. steamers. Pop. 3665.

Albay, a town in the south end of the Philippine island of Luzon, 2 miles from the Bay of Albay; pop. 13,000.

Albemarle Sound, a shallowish inlet in the north coast of North Carolina, U.S., running 60 miles inland, with a breadth of 4 to 15 miles.

Alberta, from 1882 one of the four provisional districts of the North-west Territory of Canada, made a province of the Dominion in February 1905. It includes, besides the former district, about one-half of the former district of Athabasca and small parts of Saskatchewan and Assiniboia. The area is 275,000 sq. m. The SW. portion of the province contains the great cattle-ranches of Canada, and has good grass and water. Fort MacLeod and Calgary, both thriving towns, are the two great centres for the ranchmen. The latter stands in a valley between the Bow and Elbow rivers, and is the trading centre for a large district. Coal is abundant on the Bow and Belly rivers; timber is plentiful; there are also petroleum deposits, and the Rocky Mountains and their foot-hills are rich in minerals. The capital is Edmonton. Pop. estimated at 250,000.

Albert Lea, a post-village in Freeborn county, Minnesota, on a lake of the same name, 100 miles S. of St Paul. It contains flour-mills, grain elevators, and machine-shops. Three railways centre here. Pop. 1966.

Albert-Edward Nyanza (Muta Nzige, Southern Luta Nzige), a lake of Equatorial Africa, discovered by Stanley in 1876, and again visited by him in 1889. It occupies the southern end of a vast natural depression, of which the Albert Nyanza fills the northern extremity; is due south of the mountain mass of Ruwenzori; and is surrounded by wide grassy plains, over which it once seems to have extended. It is 3307 feet above sea-level; and beyond the depression in which it lies is a tableland from 5500 to 6500 feet high. The water of the lake flows into the Albert Nyanza by the Semliki River.

Albert Nyanza (Mwutan Nzige, Luta Nzige), a large lake of East Central Africa, is situated in a deep rock-basin, 80 miles NW. of the Victoria Nyanza. It is of an oblong shape, 100 miles long from N. to S., and 25 broad. On the E. it is fringed by precipitous cliffs, with isolated peaks rising 5000 feet above it. The lake itself lies 2720 feet above the sea, and 1470 feet below the general level of the country; its

water is fresh and sweet, and it is of great depth towards the centre. The N. and W. shores of the lake are bordered by the Blue Mountains, nearly 10,000 feet in height. The existence of this vast lake first became known to Europeans through Speke and Grant in 1862; in 1864 Sir Samuel Baker was the first European to visit it, and named it after the Prince Consort. In 1887 Emin Pasha recorded his conviction that the western part of the lake was filling up. It is a great reservoir or backwater of the Nile. The Somerset-Nile runs into its north-east corner, and the Nile issues out of its north-west corner.

Albert River, North Queensland, traverses a grassy plain, and flows 200 miles to the Gulf of Carpentaria, below Burketown. It is connected by a cross branch with another nearly parallel stream, the Gregory.

Albi, capital of the French dep. of Tarn, is built on a height near the Tarn, a tributary of the Garonne, 42 miles by rail NE. of Toulouse. It is very old, and suffered greatly during the persecutions of the Albigenses, who took their name from it. The chief buildings are the cathedral (1282–1512), the old fortress, and the archbishop's palace. Pop. 15,300.

Albion, a town of Michigan, U.S., on the Kalamazoo River, 96 miles W. of Detroit. It is the seat of a Methodist college, with over 300 students. Pop. 4716.

Albuera (*Albooai'ra*), in the Spanish province of Estremadura, a hamlet, famous for Beresford's defeat of the French, May 16, 1811.

Albufera (*Alboofai'ra*), a Spanish lake 10 miles long, close to the sea and connected by canal (7 miles) with Valencia.

Al'bula, a pass (7595 feet; ¾ mile long) and a mountain-stream in the Swiss canton of Grisons.

Albuñol, a small town of Spain, 40 miles SE. of Granada. Pop. 8945.

Albuquerque (*Albookerkay*), a town of Spain, 24 miles N. of Badajoz, near the Portuguese frontier. Pop. 7400.

Al'bury (or 'Federal City'), on the New South Wales bank of the Murray River, at the head of its navigation, and 190 miles NE. of Melbourne by rail. Pop. 5850.

Alcala' de Guadaira, a town of Spain, 9 miles E. by S. from Seville by rail, celebrated for producing the finest bread in Spain. Pop. 8991.

Alcala' de Henares, a town in Spain, Cervantes's birthplace, on the Henares, 21 miles E. of Madrid by rail. Its university, founded by Cardinal Ximenes in 1510, enjoyed a European fame, but was removed to Madrid in 1836, and the town is now not a shadow of its former self. Here was printed in 1517 the great Complutensian Bible, a monument of the piety and learning of the great cardinal. The chief buildings are the Colegio de San Ildefonso, the seat of the ancient university; its chapel containing the founder's tomb; the archbishop's palace; the cathedral; and the church of Santa Maria, in which, in 1547, Cervantes was baptised. Pop. 14,974. The *Complutum* of the Romans, the town owes its modern name to the Moors, under whom it was *Al-Kalat*, 'the castle.'

Alcala' la Re'al ('the royal castle'), a city of Andalusia, Spain, in the province of Jaen, 26 miles NW. of Granada. Its strong fortress was taken in 1340 from the Moors by Alfonso XI. in person, whence the name *Real*. Pop. 15,977.

Al'camo, a quaint old town of Sicily, 52 miles SW. of Palermo by rail. Originally founded by the Saracens on Monte Bonifato (2713 feet), it long retained a Moslem population, who were driven out by the Emperor Frederick II. in 1233, when the new town was built at the foot of the hill. Pop. 51,697.

Alcañiz', a town of Aragon, Spain, in the province of Teruel, 63 miles SE. of Saragossa, on the Guadalope, with a magnificent collegiate church; pop. 7673.

Alcan'tara (Arabic, 'the bridge'), an old Spanish town in Estremadura, on a rocky height above the Tagus, near the Portuguese frontier. The six-arched bridge, 670 feet long and 210 high, from which it takes its name, was built under Trajan, 105 A.D. It has twice been partially blown up, but the larger part is still intact. Pop. 3414.

Alcan'tara, a seaport of Brazil, in the province of Maranhão, on the Bay of St Marcos; pop. 10,000.

Alcaraz, a town of La Mancha, Spain, 36 miles WSW. of Albacete; pop. 4672.

Alcaude'te, a town of Spain, 22 miles SW. of Jaen. Pop. 9191.

Alcazar al-kebir, a city of Morocco, 80 miles NW. of Fez. Here, in 1578, Sebastian, king of Portugal, was defeated and slain by the Moors. Pop. 9000.

Alcazar de San Juan, a town of Spain, in the province of Ciudad Real, 92 miles SSE. of Madrid by rail. Pop. 9512.

Alcester, a Warwickshire market-town, at the confluence of the Alne and Arrow, 15 miles WSW. of Warwick. Pop. 2406.

Alci'ra, a town of Spain, 22 miles SSW. of Valencia by rail, on an island in the river Xucar; pop. 18,469.

Alcoy, a town of Spain, on the river Alcoy, 15 miles N. of Alicante, manufacturing paper, especially cigarette-paper, sugar-plums, and coarse woollen cloths; pop. 32,520.

Aldborough, a decayed town, now a mere village, of the West Riding of Yorkshire, on the river Ure and on Watling Street, 7½ miles SE. of Ripon. Till 1832 it sent two members to parliament. Extensive remains of the Roman town of Isurium have been found here. Pop. of township, 507.

Aldeburgh, a small seaport and watering-place of Suffolk, 29 miles NE. of Ipswich by rail. It was disfranchised in 1832; but in 1885 it received a new municipal charter. It has a quaint, half-timbered Moot Hall; and in the church is a bust of the poet Crabbe, who was a native. Pop. 2159.

Alderney (Fr. *Aurigny*), a British island in the English Channel, 55 miles S. by E. of Portland Bill, 15 NE. of Guernsey, 31 N. of Jersey, and 10 W. of Cape la Hogue. The Race of Alderney, or strait that separates it from the coast of Normandy, is very dangerous in stormy weather. The island is 4½ miles by 1½ mile; area, 3 sq. m. The highest point is 281 feet above sea-level. To the S. the coast is bold and lofty; to the N. it descends, forming numerous small bays, one of which has been formed into a fine, though uncompleted, harbour, with a granite breakwater, at a cost, including strong fortifications, of more than £1,250,000. The Caskets are a small cluster of dangerous rocks, 6¾ miles to the W., on which are three lighthouses. The soil in the centre of the island is highly productive; the Alderney cattle are a small but handsome breed. Half the inhabitants, originally French, now speak English, and all understand it. Protestantism

has prevailed here since the Reformation. Alderney is a dependency of Guernsey, and subject to the British crown. The 'town' of St Anne is situated in a picturesque valley near the centre of the island. It has an Albert memorial in the shape of a Gothic arch, and a cruciform church (1850) in the Early English style, with a tower 104 feet high. Pop. of island (1841) 1038; (1861) 4932; (1881) 2048; (1891) 1857; (1901) 2062. See Channel Islands.

Aldershot Camp, a permanent camp of exercise on the confines of Hampshire, Surrey, and Berkshire, 35 miles SW. of London, and 18½ S. of Windsor. It was established in 1854–55 during the Crimean war, to provide for practical instruction in tactics, outpost duties, and other exercises requiring a wide tract of country and large bodies of troops, &c. From its situation on the Bagshot Sands it is extremely healthy; the old wooden huts have been superseded by brick huts and barracks. The Basingstoke Canal, running directly across the Heath, has occasioned a division into North Camp and South Camp. There are usually from 10,000 to 15,000 troops of all arms at the camp; and a considerable town has sprung up near it, with a population of over 31,000, as against 875 in Aldershot parish in 1851.

Aldwinkle All Saints, a Northamptonshire parish, on the Nen, 3 miles NNE. of Thrapston. Dryden was a native, as was Fuller of the adjoining parish of Aldwinkle St Peter.

Aldworth. See Haslemere.

Ale, a Roxburghshire stream, flowing 24 miles to the Teviot.

Alemtejo (*Alen²tai'zho*), the largest (9381 sq. m.) but most sparsely peopled of the provinces of Portugal. The chief towns are Evora (the capital), Elvas, and Portalegre. Pop. 416,150.

Alençon (*Alon²son²*), chief town of the dep. of Orne, on the Sarthe, 68 miles SSE. of Caen. The cathedral of Notre Dame (1553–1617) is a Gothic edifice, with good stained glass. Woollens and linens, embroidered fabrics, straw-hats, lacework, artificial flowers, hosiery, &c. are made; the manufacture of the famous Alençon point-lace (*point d'Alençon*) employs barely a tenth part of the 20,000 hands that once engaged in it. The cutting of the so-called Alençon diamonds (quartz-crystals) is an industry which has also greatly declined. Pop. (1872) 15,080; (1891) 17,141; (1901) 14,500.

Aleppo (Italianised form of *Haleb*), a town in the north of Syria, capital of a Turkish province between the Orontes and the Euphrates, in a fruitful valley watered by the Kuweik. It stands in a large hollow, surrounded by rocky hills of limestone, and beyond is mere desert. The fruitful gardens, celebrated for their excellent plantations of pistachios, are the sole contrast to the desolation which environs the city, whose numberless cupolas and minarets, clean, well-paved streets, and stately houses, make it even yet one of the most beautiful in the East. Till the discovery of the sea-route to India, it was a principal emporium of trade between Europe and Asia. It supplied a great part of the East with fabrics of silk, cotton, and wool, and gold and silver stuffs; but in 1822 an earthquake swallowed up two-thirds of the houses. The plague of 1827, the cholera of 1832, and the oppression of the Egyptian government, all but completed its destruction. It has only partially recovered from its misfortunes, but is still the principal emporium of the inland commerce of Northern Syria. Its port is Scanderoon. Aleppo has a large trade in cotton and silk goods, skins, tobacco, wine, and oil; and manufactures much-admired cloth (of silk, cotton, and wool), carpets, cloaks, and soap. English goods are largely imported. The trade is mainly in the hands of the native Christians (Greeks and Armenians), who may number 20,000, and have superseded the European houses formerly here. The Jews, 5000 in number, are a very wealthy community. Aleppo is a telegraph station on the Indo-European line. Pop. 120,000.

Aleshki, a Russian town in the government of Taurida, on the Dnieper; pop. 8915.

Alessandria, the capital of a province of Northern Italy, in a marshy country near the confluence of the Bormida and Tanaro, 58 miles ESE. of Turin. It was built in 1168 by the inhabitants of Cremona, Milan, and Placentia, as a bulwark against the Emperor Frederick I., and was afterwards called Alessandria in honour of Pope Alexander III. In 1800, Bonaparte here concluded an armistice. It was the principal stronghold of the Piedmontese during the insurrection of 1848–49. The citadel is still one of the strongest fortresses in Italy, and in war the whole surrounding country can be inundated. The richly decorated cathedral was rebuilt in 1823. Pop. 70,761, who carry on a trade in linens, woollens, silk fabrics, stockings, and wax-candles. Two great fairs are held here annually.

Aletsch, the largest glacier (12½ miles long) in Europe, sweeps round the southern side of the Jungfrau. To the NW. lies the Aletschhorn (13,773 feet).

Aleutian Islands, a chain of about 150 islands, in several groups, extending westward from the American peninsula of Aliaska, and forming an insular continuation of that peninsula towards the Asiatic peninsula of Kamchatka. These islands are chiefly included in the United States territory of Alaska, and fall into five groups—the Fox, Andreanov, Rat (Kreesi), Blizhni, and Komandorski Islands. The chain is apparently a continuation of the main Alaskan range of mountains, and contains volcanic peaks from 4000 to 8000 feet high. The islands abound in springs, and are overrun with foxes, dogs, and reindeer, while the coasts swarm with fish, seals, and otters. The 2000 inhabitants, of mixed descent, from the aboriginal Eskimos and Russian settlers, are hunters and fishers, and trade in furs and fish. See works cited at Alaska.

Alexandra Park, a place of public recreation for northern London, 6 miles N. of Charing Cross. It was opened in 1863, and its present 'palace' dates from 1873, its predecessor having been burnt two years before.

Alexandretta. See Scanderoon.

Alexandria was founded by Alexander the Great in 332 B.C. It was situated originally on the low tract of land which separates the lake Mareotis from the Mediterranean, 14 miles west of the Canopic mouth of the Nile. In the Mediterranean, off the city, lay an island, on whose NE. point stood the famous lighthouse, the Pharos, built in the 3d century B.C., and said to have been 400 feet high. The island was connected with the mainland by a mole, thus forming the two harbours. Alexandria had reached its greatest splendour when, on the death of Cleopatra, the last of the Ptolemies, in 30 B.C. it came into the possession of the Romans. Its population may have numbered 300,000 free citizens, and a larger number of slaves. Its

glory was long unaffected, and it was the emporium of the world's commerce, especially for corn. In the reign of Caracalla, however, it suffered severely; and the rise of Constantinople promoted the decay of Alexandria. Christianity was introduced, according to tradition, by St Mark. The strife between Christianity and heathenism—powerfully described in Kingsley's *Hypatia*—gave rise to bloody contests in Alexandria. The Serapeum, the last seat of heathen theology and learning, was stormed by the Christians in 389 A.D., and converted into a Christian church. Alexandria was a chief seat of Christian theology till it was taken by the Arabs in 641. The choice of Cairo as capital of the Egyptian califs hastened the now rapid decay of the city; the discovery of America, and of the passage to India by the Cape of Good Hope, very much diminished its trade; and when, in 1517, the Turks took the place, the remains of its former splendour wholly vanished. In 1778 Alexandria contained no more than 6000 inhabitants. Under Mehemet Ali, however, the tide turned, and the city recovered rapidly. It is now again one of the most important commercial places on the Mediterranean. The Suez Canal diverted part of its trade; but this was more than compensated by the general impetus given to Egyptian prosperity. In 1882, during the rising of Arabi Pasha, an English fleet, in the interests of the khedive, bombarded the forts of Alexandria for over ten hours, July 11. On the two following days the town was sacked and plundered by the soldiery and populace, and great part of it destroyed by fire.

The present city (called *Skanderi'eh* by the Arabs) is chiefly built on the mole, which has been increased by alluvial deposits till it has become a broad neck of land between the two harbours. The city is a strange mixture of East and West, old and new. The unpaved native town contains poor houses and wretched huts. The ever-increasing Frankish quarters have quite a well-lit European appearance, and swarm with cafés, shops, theatres, and the like. The castle stands near the old Pharos, and the handsome new lighthouse has a revolving light, visible at a distance of 20 miles. Recent improvements, undertaken at a cost of £2,000,000, were to convert the old harbour—the western one—into one of the best and most spacious on the Mediterranean. There is railway communication with Cairo and Suez; the Mahmoudieh Canal connects Alexandria with the Nile. The recent growth of the city has been extraordinary. Pop. (1825) 16,000; (1840) 60,000; (1882) 227,064; (1900) 320,000, of whom 50,000 were foreigners, many Greeks, Italians, and French. The value of exports (cotton, cotton seed, lentils, wheat, oil seed, hemp, drugs) varied in 1891–1901 from £10,000,000 to £15,000,000 (two-thirds going to Britain); of imports, from £5,000,000 to £13,000,000 (half from Britain). Of the few remaining objects of antiquity the most prominent is Pompey's Pillar, as it is erroneously called. Of the so-called Cleopatra's Needles—two obelisks of the 16th century B.C. which long stood here—one was brought to England and erected on the Thames Embankment, 1878; and the other, presented by the khedive to the United States, was set up at New York in 1881.

Alexandria, a town of Dumbartonshire, on the west bank of the Leven, opposite Bonhill, 3 miles N. of Dumbarton. It has grown from a mere 'clachan' to a thriving town, such growth being due to the neighbouring cotton-printing, bleaching, and Turkey-red dye-works, established since 1768. Pop. (1841) 3039; (1891) 7796.

Alexandria, a port of entry on the right or Virginian bank of the Potomac, U.S., 7 miles below Washington (on the opposite side of the river), and 100 from the entrance of the Potomac into Chesapeake Bay, whence the largest vessels may reach the port. There are cotton manufactures here. Pop. (1870) 13,570; (1890) 14,339; (1900) 14,528.

Alexandropol (formerly *Gumri*), the largest town in the Erivan district of Russian Armenia, with a stronghold commanding the head-waters of the Euphrates. The silk trade is actively carried on. Pop. 30,477.

Alexandrov, a town in the Russian government of Vladimir, 58 miles NE. of Moscow. Pop. 7200.

Alexandrovsk, a Russian town in the government of Ekaterinoslav, on the Dnieper. Pop. 16,500.—(2) A port in East Siberia, opposite Saghalien.—(3) A town in the province of the Don, 15 miles NNE. of Novo-Tcherkask. Pop. 16,250.

Alexinatz, a town of Servia, on the Moravitza, 134 miles SSE. of Belgrade by rail. Pop. 5108.

Alford, (1) a market-town of Lincolnshire, 23 miles NNE. of Boston; pop. of parish, 2843.—(2) A village of Aberdeenshire, 30 miles NW. of Aberdeen. Here Montrose defeated the Covenanters under Baillie, 2d July 1645. Pop. 635.

Alfoxton Park, in Somerset, 12 miles WNW. of Bridgwater, was Wordsworth's home in 1797–98.

Alfreton, a market-town of Derbyshire, 14 miles NNE. of Derby by rail. It has manufactures of hats, stockings, and brown earthenware, with neighbouring collieries and ironworks. Pop. of parish, 17,355.

Algarve, the smallest and most southerly of the provinces of Portugal. The name is Arabic, and means 'a land lying to the west.' It was a Moorish province till 1253. Area, 1873 sq. m.; pop. 254,037. The northern part of the province is occupied by a range of barren mountains of 4000 feet high, terminating in Cape St Vincent. The chief town is Faro.

Algeci'ras, or ALGEZIRAS, a town of Spain, on the Bay of Gibraltar, 5 miles by water (9 by road) W. of Gibraltar. Its harbour is bad, but it possesses a good dock; and its oranges are famous, as well as its bull-fights. It was the first town in Spain taken by the Moors (711); in 1344 it was retaken by Alfonso XI. of Castile, after a twenty months' siege. He destroyed the old Moorish town; the modern one was built by Charles III. in 1760. Pop. 12,924.

Algeria (Fr. *Algérie*), a country on the north coast of Africa, which has since 1830 been a French possession, and is now regarded as an outlying part of France rather than as a colony. It lies between Morocco and Tunis, and is usually defined as extending from the Mediterranean to about the 30th parallel of N. lat. on the south. But the southern boundary, separating the Algerian Sahara from the rest of French Sahara (which now extends southwards to a line drawn west from Lake Chad to the Niger), is very arbitrary. The total area, with the northern or Algerian Sahara, is about 255,000 sq. m., or more than twice the size of Great Britain and Ireland. From the coast inwards Algeria is marked off into three distinct regions: in the north, the *Tell*—mountainous, cultivated land, with fruitful valleys; in the middle, the region of Steppes

—mountainous tableland, producing much grass and other fodder for cattle after the rains, and traversed from west to east by a string of brackish lakes or marshes, called *Shotts;* while farther south is the Algerian Sahara, with oases. In the northern part of the Tell is a series of mountain-chains, called by the French the Lesser Atlas or Coast Mountains; while the south limit is a parallel chain, the Middle Atlas. The Tell, the most fertile and much the most populous section of Algeria, occupies an area altogether of about 54,000 sq. m. The Algerian Sahara consists partly of sandy dunes, partly of country covered after rain with herbage; and there are oases round the wells.

The more considerable streams of Algeria rise in the *middle region,* and have therefore to seek their outlet in the Mediterranean, through passes in the middle and coast ranges. Though swollen in the winter, they shrink in the summer to a thread, or even quite out of sight. Not one of them is navigable, but they are used for purposes of irrigation. The Shelif is the longest and largest.

The climate of Algeria is distinguished into only three seasons: winter, from November to February; spring, from March to June; summer, from July to October. The planting of forests, drainage, and irrigation, by the French, have effected great improvements. In the Sahara, by the sinking of artesian wells, desert tracts have been converted into cultivated land, and in ten years the inhabitants of the oases of the northern Sahara increased from 6600 to 13,000, while about 517,000 palms and 90,000 fruit-trees are now counted. Algeria is coming to the front as a wheat-growing country. Fruits and vegetables are grown for the markets in France, England, and Germany. The cultivation of the grape, silk, and tobacco is rapidly extending. Immense tracts of land, suitable for no other cultivation, have been successfully planted with vines. The forest vegetation of Algeria is extremely rich by nature, comprising pine, oak, cedar, pistachio, mastic, carob, olive, myrtle. Special exports are cork and halfa or esparto grass. Algeria has a very considerable wealth of metals, iron and copper being abundant, though little worked. Over 100 mineral springs are counted in Algeria.

Algeria is divided into three departments, each subdivided into a civil and a military territory:

	Area in sq. m.	Pop. 1901.
Algiers department	65,930	1,641,210
Oran	44,620	1,107,354
Constantine	73,930	1,990,992
	184,480	4,739,556
Algerian Sahara	193,000	62,000
Total	377,480	4,801,556

The number of Europeans, in 1830 only 600, in 1840, 27,000, in 1881, 400,000, was in 1901 about 500,000, of whom 293,000 were French by origin or naturalisation, and 150,000 Spanish, and 57,667 naturalised Jews, besides Italians, Germans, &c. The native population, partly Arabs (including Bedouins), partly Berbers or Kabyles; the Moors of the towns being of mixed descent from these two stocks. In 1904 about 1900 English miles of railway were open for traffic, and the telegraph had over 6300 miles of line.

The trade of Algeria shows a constant increase. Since the French occupation, the imports have increased fifty, and the exports one hundredfold. The imports, three-fourths of which come from France, have varied of late years from £8,800,000 to £13,000,000. The exports, two-thirds of which go to France, varied from £6,000,000 to over £12,000,000. The imports are chiefly manufactured cotton, hemp, linen, silk, and woollen stuffs; cloths, sugar, hides, paper, liquors, metals, building materials, &c. The exports are cereals, wool, raw hides, living animals, minerals, early fruit, halfa and other vegetable fibres, cork, iron, copper, and lead ores.

Part of the present Algeria was anciently included in Numidia and part in Mauritania. Occupied and partially Romanised by the Romans, it was overrun by the Vandals in the 5th century. Later came the Arabs, who began about the 9th century to establish Mohammedan dynasties and states. Hither emigrated many of the Moors expelled from Spain. From the middle ages downward, the Algerian coast towns were known to Europe mainly as nests of pirates. The French conquered the country, not without much fighting, in 1830. From 1834 down to 1870 Algeria was entirely under military rule. At that date a civil governor-general, with residence at Algiers, was substituted; the Sahara is still under military rule. The governor-general is assisted by a council whose function is purely consultative. The colonists send two deputies and one senator for each department to the French Chambers.

Alghero (*Algai'ro*), a seaport on the west coast of the island of Sardinia, 15 miles SW. of Sassari. It has a cathedral. Pop. 8995.

Algiers (*Aljeers';* Fr. *Alger;* Ar. *Al-jezair,* 'the islands'), the capital of Algeria, was built about 935 A.D. by an Arab chief. It rises from the sea-shore up the sides of a precipitous hill in the form of an equilateral triangle. The apex is formed by the Kasbah, the ancient fortress of the *deys,* which is 500 feet above sea-level. With the exception of some mosques, the new or low town consists of wharfs, warehouses, government houses, squares, and streets, principally built and inhabited by the French; while the old or high town is almost wholly Moorish. The great glory of the city is the Boulevard de la République, with its magnificent terrace, built in 1860-66 by Sir Morton Peto, at a cost of eight million francs. Here may be found as motley a crowd as anywhere in the world, denizens of all nations—Arabs, Moors, and Jews; French, Spaniards, Maltese, English, Germans, and Italians. The shops, too, are occasionally very good. The French have at great expense improved the port, which is safe and spacious and has a lighthouse. It is strongly fortified, and can contain 40 warships and 300 trading vessels. The original harbour was made in 1525 by connecting with the shore four little islands (hence the name of the city). Near the great quays is the railway station, connecting Algiers with Constantine and Oran. The town has a Catholic cathedral, a French Protestant church, an English church, a synagogue, a library, museum, hospitals, theatres, and banks. There is a great trade, Algiers being the chief commercial place in Algeria. Algiers has become famous as a winter residence for Europeans suffering from chest diseases. It fell into the hands of the French in 1830. Pop. (1901) 96,550; with suburbs, 140,000—not quite half French.

Algoa Bay, a broad inlet at the eastern extremity of the south coast of Africa, with a sheltered anchorage except towards the south-east. On it stands Port Elizabeth.

Alham'a (Arabic *Al Hammám,* 'the bath'), a decayed town of Andalusia, Spain, 24 miles SW.

of Granada. Its warm sulphur baths are still frequented by visitors. It was a famous fortress of the Moors; and there are still remains of Roman and Moorish buildings. The town was much injured by a severe earthquake in the end of 1885. Pop. 7867.—ALHAMA DE ARAGON, 8 miles SW. of Calatayud, has famous mineral springs. Pop. 1500.—ALHAMA, 13 miles SW. of Murcia, is also celebrated for its warm mineral waters. Pop. 8356.

Alhambra, a fortified suburb of Granada, which forms a sort of acropolis to the city, and in which stand the exquisite remains of the palace of the ancient Moorish kings of Granada. The name is a corruption of the Arabic *Kal 'at al hamra*, 'the red castle.' It is surrounded by a strong wall, more than a mile in circuit, and studded with towers. One of them contains the famous *Hall of the Ambassadors*. The remains of the Moorish palace are called by the Spaniards the Casa Real. It was begun by Ibn-l-ahmar (1248), and completed by his grandson, Mohammed III., about 1314. The portions still standing are ranged round two oblong courts, one called the *Court of the Fishpond*, the other the *Court of the Lions*. They consist of porticos, pillared halls, cool chambers, small gardens, fountains, mosaic pavements, &c. In the most beautiful room in the palace, the *Hall of the Abencerrages*, to the beauty of colour and of ornamentation is added an arcade resting on light and graceful marble arches that run round the place. A great part of the ancient palace was removed to make way for the palace begun by Charles V., but never finished. Since then it has suffered from the neglect and greed of successive governors; from the French, who blew up eight of its towers and tried to destroy the whole; and from earthquake. A partial restoration was made at the expense of Queen Isabella (1862); but much damage was done by fire in September 1890. See the works by Washington Irving (1832), Owen Jones (1848), and Murphy (new ed. 1856).

Alican'te, chief town of a Spanish province, on a bay of the Mediterranean, 282 miles SE. of Madrid by rail. It is the third seaport in the kingdom. The chief exports are esparto grass, lead, wine, almonds, and liquorice root. Its climate is well suited for invalids. Population, 50,250.—The province, formed in 1834 of parts of the old kingdoms of Valencia and Murcia, has an area of 2098 sq. m. The wine of Alicante has a high reputation, and there are about twenty lead and copper mines. Pop. (1900) 470,150.

Aligarh (or *Allygurh*), a fort in the United Provinces of India, 55 miles N. of Agra. It was stormed by the British in 1803; and here early in the mutiny of 1857—ten days after the outbreak at Meerut—the native troops rose. There is here a Mohammedan Anglo-Indian college. Fort, station, and the native city of Koil form the municipality of Aligarh; pop. 70,000.

Alima, a right-hand tributary of the Congo, flowing mainly westward.

Aline, a sea-loch of Argyllshire.

Aliwal, a Punjab village on the Sutlej, 9 miles W. of Ludhiana; scene of a British victory over the Sikhs on 28th June 1846.—ALIWAL NORTH, a town of Cape Colony, just across the Orange from the Orange Colony, with a brisk trade; pop. 3500.—ALIWAL SOUTH, a port of Cape Colony, 200 miles E. of Capetown; pop. 3000.

Alkmaar, an old town of the Netherlands, on the North Holland Canal, 19 miles N. by W. of Amsterdam by rail. It has a Gothic town-house, the 15th-century church of St Lawrence, manufactures of sailcloth, sea-salt, &c., and trade in cattle, grain, butter, and excellent cheese—of which it exports enormous quantities. Alkmaar held out against Alba in 1573, and here, in 1799, the Duke of York signed a not very honourable capitulation. Pop. 19,048.

Allahabad ('city of God'), the seat of the government of the United Provinces of British India, occupies the fork of the Ganges and Jumna, 390 miles SE. of Delhi, and 564 WNW. of Calcutta. The situation of Allahabad, at the confluence of the holy streams of India, has rendered it a much-frequented place of pilgrimage. A stronghold existed here from the earliest times, but the present fort and city were founded by Akbar in 1575. From 1736 till 1750 the Mahrattas held Allahabad, which was ceded to the British in 1801. On 6th June 1857, the mutiny extended to Allahabad; and, the Europeans continuing to hold the fort, the city soon became little better than a heap of ruins. The position of Allahabad, with its ready communication by river and rail, renders it naturally a centre of commerce and civilisation. The most noteworthy buildings are the great mosque and the Sultan Khossor's caravanserai—a fine cloistered quadrangle. The fort contains the famous pillar of Asoka (240 B.C.). Near by is the temple covering the undying banian tree; it is said to communicate with Benares by a subterranean passage, through which flows a third holy river, the Saraswati, visible only to the eye of faith. Allahabad possesses the government offices and courts, Roman Catholic cathedral, Mayo Memorial and town hall, a free public library, &c. The Muir Central College, instituted by Sir W. Muir, was opened in 1886; and a university was opened in 1889. A great fair is held annually, which is visited by about 250,000 persons. The cotton, sugar, and indigo produce of the fertile district of Allahabad is brought in large quantities into the city. Pop. (1872) 143,693; (1991) 172,032.—ALLAHABAD district is 85 miles in length by 50 in breadth. Area, 2850 sq. m.; pop. 1,500,000.

Allan, (1) a tributary of the Forth, near Stirling.—(2) A tributary of the Teviot, near Hawick.

Alleghanies (*Allegai'nies*), a term sometimes used as synonymous with the Appalachians (q.v.), sometimes applied only to that portion of the system which extends from Pennsylvania to North Carolina, and which forms the watershed between the Atlantic and the Mississippi. It is sometimes used in a still more restricted sense. The ridges, 2000 to 2400 feet high, are remarkable for their parallelism and regularity, all the main valleys being longitudinal. Composed of stratified rocks of the Silurian, Devonian, and Carboniferous ages, they are rich in coal, iron, and limestone, and their forests supply much valuable timber.

Alleghany, a river, which, rising in the north part of Pennsylvania, unites with the Monongahela at Pittsburgh to form the Ohio. It is navigable for nearly 200 miles above Pittsburgh.

Allegheny, or ALLEGHANY, one of the chief manufacturing cities of Pennsylvania, on the Alleghany River, opposite Pittsburgh. It is the terminus of important railway lines, and the site of the Western Penitentiary, a Presbyterian theological seminary, an observatory, the Carnegie Public Library, a park of 100 acres, a Catholic orphanage, and a college for coloured persons. The

chief industries include rolling-mills for iron, cotton and woollen mills, breweries, foundries, a steel factory, blast-furnace, and locomotive works. It is a favourite place of residence for Pittsburgh business men. Pop. (1870) 53,180; (1880) 78,681; (1890) 105,237; (1900) 129,896.

Allen, Bog of, a series of morasses east of the Shannon, in King's County and Kildare, Ireland, comprising about 150,000 acres. Their average elevation is 250 feet above sea-level. Lough Allen, in Leitrim, is a lake on the upper course of the Shannon (q.v.), 8900 acres in area.

Allendale, a town of Northumberland, on the Allen rivulet, 9 miles SW. of Hexham. Pop. of parish, 3009.

Allentown, a manufacturing town of Pennsylvania, U.S., on the Lehigh River, 60 miles NW. of Philadelphia by rail. The Lehigh Valley is rich in iron ore and anthracite coal, and has large blast-furnaces, ironworks, and rolling-mills; and there are manufactures of furniture and linen thread. Pop. (1860) 8025; (1880) 18,063; (1890) 25,228; (1900) 35,416.

Alleppi. See Aulapolai.

Allier, a river of Central France, rising in the east of the dep. of Lozère, and flowing 233 miles northward through Haute-Loire, Puy-de-Dôme, and Allier, to the Loire below Nevers.

Allier, a dep. in the centre of France, has an area of 2822 sq. m., and a population of 422,000. Mineral springs are found at Vichy and elsewhere. The chief town is Moulins.

Allington, a Kentish parish, 1½ mile NNW. of Maidstone. It was the birthplace of Sir Thomas Wyatt the poet.

Alloa, a seaport town in Clackmannanshire, on the left bank of the tidal Forth, 6½ miles E. of Stirling, and 35 WNW. of Edinburgh. Among its buildings are the county court-house (1865), the handsome new town-hall (1888), the corn exchange (1862), and the parish church (1819); and its special feature is the Lime-tree Walk (1714), leading up from the harbour. It manufactures whisky, ale, woollen yarn, pottery, glass, iron, &c. There is some shipbuilding; and coals are exported from neighbouring pits. The harbour was improved in 1863. The Forth is here crossed by a railway viaduct (1885). Close by is Alloa House (1838), the seat of the Earl of Mar and Kellie, with Alloa Tower, 89 feet high, and built about 1223. Here Queen Mary spent part of her childhood, as also did James VI. and Prince Henry. Pop. (1841) 5443; (1901) 11,417.

Alloway, Burns's birthplace, and the scene of his *Tam o' Shanter*, lies on the right bank of the 'bonny Doon,' 2 miles S. of the town of Ayr. The 'auld clay biggin,' in which the poet was born on 25th January 1759, was in 1880 converted into a Burns Museum. The 'haunted kirk' still stands, a roofless ruin, near the 'Auld Brig;' and hard by is the Burns Monument (1820).

All-Saints' Bay, in the province of Bahia, Brazil, forms a superb natural harbour, measuring 37 by 25 miles.

Allygurh. See Aligarh.

Alma, a river in the Crimea, rising at the foot of the Tchadir Dagh, and flowing westward into the Bay of Kalamita, half-way between Eupatoria and Sebastopol. On its steep banks a brilliant victory was won on 20th of September 1854, by the allied armies of Britain and France, under Lord Raglan and Marshal St Arnaud, over the Russian army commanded by Prince Menschikoff.

Alma'da, a town of Portugal, in the province of Estremadura, built upon a height over the Tagus, opposite Lisbon. Pop. 8091.

Almaden', a town of Spain, in the chain of the Sierra Morena, 50 miles SW. of Ciudad Real. It is famous for its twelve rich quicksilver mines, employing 4000 miners, with an annual output of 2,500,000 lb. The present mines, 1200 feet deep, date from the 17th century; but the quicksilver was worked here by the Romans. Crown property, they were rented by the Fuggers of Augsburg (1525–1645), and by the Rothschilds (1836–63), but are now again carried on by government. Pop. 8126.—New Almaden, in the Coast Range, California, 12 miles from San José, was first worked regularly for mercury in 1845, and now yields upwards of 2,000,000 lb. a year.

Almagro, a town of Spain, 13 miles ESE. of Ciudad Real. It has a great manufacture of lace. Pop. 8289.

Almali. See Elmalu.

Almansa, a town of Spain in the province of Albacete, 60 miles NW. of Alicante by rail. There is a ruined Moorish castle. An obelisk, about a mile distant, marks the spot where the French, under the Duke of Berwick, on 25th April 1707, defeated an army of Spanish and English troops. Pop. 9480.

Almeida, one of the strongest fortified places in Portugal, on the Spanish frontier, and in the province of Beira. In 1762 it was captured by the Spaniards, and in 1810 it was defended against Massena by an English officer, until the explosion of a powder-magazine compelled him to capitulate. Pop. 2500.

Almeri'a (Arabic *Al-Mariyat*, 'the conspicuous'), the chief town of a Spanish province, on a gulf or bay of the Mediterranean, 120 miles E. of Malaga. It has a well-defended harbour, a cathedral, and a grammar-school. In the time of the Moors, it was, next to Granada, the richest town in the kingdom, with 150,000 inhabitants. Now, it has only a few trifling manufactures, although it still keeps up considerable trade. The much-needed railway from Linares to this isolated port was being made in 1893–94. Population, about 50,000.—The province consists of the eastern portion of the ancient kingdom of Granada, and has an area of 3302 sq. m. There are rich mines in the sierras, yielding copper, iron, mercury, silver, and lead. Population, 360,000.

Almodo'var del Campo, a town of New Castile, Spain, 22 miles SW. of Ciudad Real; pop. 12,279, chiefly employed in agriculture and silver-mining.

Almond, in Scotland, tributaries (1) of the Firth of Forth at Cramond; and (2) of the Tay above Perth.

Almondbury, to the SE. of Huddersfield, is practically a part of Huddersfield (q.v.).

Almo'ra, a town in the United Provinces of India, 87 miles N. of Bareilly, on the crest of a ridge of the Himalayas, 5337 feet above the sea. Pop. 8000.

Almuñecar, a seaport of Andalusia, Spain, 33 miles S. of Granada; pop. 8878.

Alnmouth, a little watering-place of Northumberland, at the mouth of the Alne, 5 miles ESE. of Alnwick. Pop. 593.

Alnwick (*An'nick*), the county town of Northumberland, on the Alne, 38½ miles N. by W. of Newcastle by rail. It has a large central market-place, a spacious town-hall, and a corn exchange

of 1862. Alnwick was at an early period a fortified town, and one of its four gates remains, with fragments of the walls. At the north entrance of the town stands Alnwick Castle, the seat originally of the De Vescis, and since 1310 of the Percies of Northumberland. It has been sumptuously restored since 1854 in the Italian palazzo style, and is one of the most magnificent baronial structures in England. During the middle ages, it was a bulwark against the invasions of the Scots, and it was thrice besieged—by Malcolm Canmore, who here met his death; by David I., who captured it; and by William the Lion, who here was taken prisoner. Alnwick ceased in 1886 to enjoy certain prescriptive municipal usages it formerly possessed. Pop. 7500.

Alo'ra, a town of Spain, 23 miles NW. of Malaga by rail. Pop. 10,568.

Alost, or AALST, a town in the Belgium province of East Flanders, on a navigable tributary of the Scheldt, 19 miles NW. of Brussels by rail. The church of St Martin, though unfinished, is one of the grandest in Belgium, with a famous painting by Rubens—'St Roche beseeching our Saviour to stay the Plague of Alost,' and also the mausoleum of Marten, a native of Alost and Belgium's first printer (1473). Alost has also a 13th-century town-hall with a beautiful belfry, and a Jesuit college. Pop. 30,200.

Alpe'na, an American post-town, at the mouth of Thunder Bay River, in Michigan, with foundries and numerous sawmills. Pop. (1880) 6153; (1890) 11,283; (1900) 11,802.

Alpes, name of three deps. in France. That of BASSES-ALPES occupies the NE. part of Provence, and is, for the most part, mountainous. The wines are excellent; the mines produce lead, green marble, &c. The dep. is watered by the Durance; its chief town is Digne. Area, 2685 sq. m.; population, 115,000.

The HAUTES-ALPES, lying north of the Basses-Alpes, and forming a part of the old province of Dauphiné, is traversed by the chief range of the Cottian Alps, which here rise to 14,000 feet. The scenery, especially along the impetuous Durance, is singularly picturesque. Area, 2158 sq. m.; population, 109,000. The mines produce lead, copper, iron, and anthracite. Chief town, Gap.

ALPES MARITIMES, a dep. in the extreme SE. of France, on the shores of the Mediterranean and confines of Italy, was formed in 1860. It is made up of the ancient county of Nice, then ceded to France, and of the arrondissement of Grasse. The chain of the *Alpes Maritimes* forms the northern boundary of the dep., and from it numerous spurs run seaward, among which are lovely and fertile valleys. The silkworm is reared, and honey exported. There are some mineral springs. The tunny, anchovy, and sardine fisheries are important. The capital is Nice, and the other principal towns are Antibes, Villefranche, Cannes, Grasse, and Menton or Mentone. Area, 1482 sq. m.; pop. 293,500.

Alpnach, or ALPNACHT, a Swiss village, in the canton of Unterwalden, at the foot of Mount Pilatus, 1½ mile from that part of Lake Lucerne called Lake Alpnach. Its celebrated 'slide,' 8 miles long, for the timber of Mount Pilatus, is now disused. Pop. 1679.

Alps (possibly a Celtic word meaning 'high;' cf. Gaelic *alp*, 'a high mountain;' or connected with Lat. *albus*, 'white'), the most extensive system of lofty mountains in Europe, raising their giant masses on a basis of 90,000 sq. m., between 6° 40′ and 18° E. long., and extending in some places from the 44th to the 48th parallel of latitude. The Alpine system is bounded on the N. by the hilly ground of Switzerland and the upper plain of the Danube; on the E., by the low plains of Austria; on the S., by the Adriatic Sea, the plains of Lombardy, and the Gulf of Genoa; and on the W., by the plains of Provence and the valley of the Rhone. A string of lakes encircles both the northern and southern bases of these mountains, the former at an elevation of 1200 to 2000 feet; the latter, 600 to 700 feet. The varied natural scenery of France, Italy, Germany, and Austria has a common centre of union in this lofty region. Valleys open out in all directions, sending their melted snows on one side into the North Sea, on another into the Black Sea, and on another into the Mediterranean. The principal basins are those of the Rhine, the Danube, the Po, the Rhone, and the Var.

I. Of the WESTERN ALPS the principal ranges are: (1) The Maritime Alps, extending from the middle Durance southwards to the Mediterranean, and rising in the Aiguille de Chambeyron to a height of 11,155 feet. (2) The Cottian Alps, north of these, whose highest summit, Monte Viso, is 12,605 feet. (3) The Dauphiné Alps, separated by the valley of the Durance from the Cottian; their highest summit is the Pic des Ecrins, 13,462 feet. (4) The Graian Alps, forming the boundary between Savoy and Piedmont, and attaining in the Grand Paradis, an elevation of 13,300 feet. II. MIDDLE ALPS. *Central Chain.*—(1) The Pennine Alps, between the plains of Lombardy and the valley of the Rhone. Highest summits: Mont Blanc, 15,732 feet; Monte Rosa, 15,151 feet. (2) The Lepontian or Helvetian Alps, from the depression of the Simplon, along the plateau and masses of St Gothard, to the pass of the Splügen. (3) The Rhætian Alps, between the Inn, the Adda, and the Upper Adige. *Northern Chain.*—(1) The Bernese Alps, between the Rhone and the Aar. Highest summits: Finsteraarhorn, 14,026 feet; Aletschhorn, 13,803; Jungfrau, 13,671 feet. (2) The Alps of the Four 'Forest Cantons,' the Schwyz Alps, &c. *The Southern Chain.*—(1) The Ortler Alps, between the Adda and the Adige. (2) The Trientine Alps, between the Adige and the Piave. III. Of the EASTERN ALPS the principal chains are: (1) The Noric Alps, between the plains of the Drave and the Danube. (2) The Carnian Alps, between the Drave and the Save. (3) The Julian Alps, between the Save and the Adriatic Sea.

No lofty mountains in the world are more easily crossed than the Alps; the Mont Cenis, the Brenner, the St Gothard, and the Simplon (with still longer tunnel bored 1896–1904) railways into Italy from the north now afford special facilities. Other notable passes are the Little St Bernard (7190 feet at the highest point), the Great St Bernard (8120 feet), and the Splügen (q.v.).

The rocks which enter into the composition of the Alps belong to many different geological systems, and occur for the most part as more or less interrupted belts or zones, which extend in the same general direction as the great chain itself—viz. from SW. to NE. The higher and central ranges consist principally of crystalline schists, such as gneiss and mica-schist, with which granite is occasionally associated. These crystalline Archæan rocks are flanked on either side by an irregular zone of various sedimentary strata, along with beds of limestone, dolomite,

&c. The geological structure of the Alps clearly shows that these mountains are 'mountains of upheaval.' The strata of which they are composed must originally have been spread out in approximately horizontal positions, and they have since been folded, flexed, puckered, and fractured. Since their upheaval, the Alps have suffered excessive denudation. Enormous mountain-masses have been gradually removed by the action of ice, running water, &c.

The population of the Alpine regions is estimated at 6,000,000 to 7,000,000, of whom perhaps one half are Teutonic, and the other half of French, Italian (and Romanic), or Slavonic origin, in pretty equal proportions. Six states share the Alps. The western portion is shared by France and Italy. Switzerland claims the Middle Alps almost exclusively for her own. Bavaria has only a small share. Austria has the largest share of the Alps—in the provinces of Tyrol, Illyria, Styria, and the archduchy. The Alpine mountains are rich in singularly beautiful natural scenery, and attract such crowds of visitors that they have been called 'the playground of Europe.'

See works by Agassiz, the brothers Schlagintweit, Murchison, Tyndall (1860–73), Bonney (1868), Ball's Guides (3 vols. 1868-70), Umlauft (Eng. trans. 1888), and see also SWITZERLAND.

Alpujarras (*Al-poo-har'ras*; Arabic *Al-Busherat*), a name applied to all the valleys lying south of the chief chain of the Sierra Nevada, in the south of Spain.

Alsace-Lorraine (Ger. *Elsass-Lothringen*), since 1871 a state or 'imperial territory' (*Reichsland*) of the German empire, bounded west by France, east by Baden, and south by Switzerland. Its utmost length, from north to south, is 123 miles; its breadth varies between 22 and 105 miles; and its area is 5580 sq. m., of which 1353 belong to Upper Alsace (in the south), 1844 to Lower Alsace (NE.), and 2383 to Lorraine (NW.). Pop. (1871) 1,549,738; (1900) 1,719,470, of whom over 1,300,000 were Catholics, and 80 per cent. German-speaking, the French-speaking population being mainly in the larger towns and in Lorraine. The Rhine flows 115 miles north-by-eastward along all the eastern boundary, and receives, below Strasburg, the Ill from Alsace, 127 miles long. Other rivers are the Moselle, flowing through Lorraine past Metz, and its affluent the Saar. Along the Rhine is a strip of level country, 9 to 17 miles broad, and declining from 800 to 450 feet above sea-level. Westward of this rise the Vosges Mountains, culminating at a height of 4677 feet; whilst Lorraine, rather hilly than mountainous, rarely attains 1300 feet. About 48·5 per cent. of the entire area is arable, 11·6 meadow and pasture, and 30·8 under wood. Alsace-Lorraine produces much wine, grain, and tobacco; it is rich in mines, iron and coal; and manufactures iron, cotton, wool, silks, chemicals, glass, and paper. It contains the important cities of Strasburg, Mühlhausen, Metz, and Colmar.

In Cæsar's time Alsace-Lorraine was occupied by Celtic tribes, and formed part of ancient Gaul; thereafter largely Germanised, from the 10th century it formed part of the German empire, till a part of it was ceded to France at the Peace of Westphalia (1648), and the rest fell a prey to the aggressions of Louis XIV., who seized Strasburg (1681) by surprise in time of peace. By the Peace of Ryswick (1697), the cession of the whole was ratified. In 1814–15 Russia would not hear of the restitution of Alsace-Lorraine to Germany; and it was not till 1871, after the Franco-German war, that Alsace and German Lorraine were, by the treaty of Frankfort, incorporated in the new German empire. The great mass of the population were strongly against the change, and 160,000 elected to be French, though only 50,000 went into actual exile, refusing to become German subjects. For, at least since the era of the Revolution, Alsace in sentiment was wholly French. To France she gave the bravest of her sons—Kellermann, Kléber, and many another hero; Strasburg first heard the *Marseillaise;* and MM. Erckmann-Chatrian, Lorrainers both, faithfully represented their countrymen's love of *La Patrie* in the days of the second as of the first Napoleon. See French works by Grad (1889) and Matthis (1890).

Alsen, a Baltic island off the coast of Sleswick. Formerly Danish, it became Prussian in 1864. It is 19 miles long, and 12 broad; its area is 121 sq. m. Pop. 25,000, almost all Danish-speaking. The chief town is the port of Sonderborg; pop. 6000.

Alster, a river in Holstein, formed by the confluence of three streams, in the neighbourhood of Hamburg spreads itself out, and forms a lake, called the Great or Outer Alster, and within the town, the Inner Alster. It flows by several channels into the Elbe.

Alston, a market-town of Cumberland, 26 miles ESE. of Carlisle. Pop. of parish, 3184.

Altai, the Ghin-shan or Golden Mountains of the Chinese, is the name given to a wild mountainous region which covers the southern parts of Tomsk, in Siberia, and partly extends into Mongolia. It comprises the mountainous border-region of the great plateau of Central Asia, between the Tian-shan and the Sajan Mountains, and consists of two separate parts—the Altai proper, belonging to the Russian empire; and the Great Altai, in Mongolia. The highest summit, Byelukla, reaches the height of 11,000 feet. The valleys on its outskirts are being rapidly colonised by Russian agriculturists (over 600,000), who find an easy living in the fertile soil and the rich sub-alpine meadows. The gold-washings of the Altai, and its silver, lead, copper, iron, and coal mines, are another source of wealth. Nearly 45,000 Kalmucks, Teleutes, and Kumandintses represent the small remainder of the formerly much denser and more highly civilised population, all of the Ural-Altaic stock. The town of Barnaul (17,180 inhabitants) is the chief centre of administration.

Altamu'ra, a town of South Italy, 28 miles SW. of Bari, with a fine cathedral, founded in 1220; pop. 19,817.

Alte'a, a Spanish seaport, 25 miles NE. of Alicante; pop. 5865.

Al'tena, a town of Prussia, 47 miles NW. of Siegen by rail, with manufactures of needles, pins, and hardware; pop. 12,900.

Altenburg, the capital of the duchy of Saxe-Altenburg, on the Pleisse, 30 miles S. of Leipzig by rail. On an almost perpendicular rock of porphyry stands the old castle of Altenburg, the scene in 1455 of the 'Prinzenraub.' Its foundations are probably as old as the 11th century; and, since the two fires of 1865 and 1868, it has been finely restored. Brushes, woollen goods, gloves, and cigars are manufactured. Pop. (1890) 31,439; (1900) 37,150.

Altengaard, a hamlet in Finmarken, the northernmost province of Norway, on the south

side of the Alten Fiord, in 69° 55′ N. lat., with a meteorological station.

Althorp Park, the seat of Earl Spencer, 6 miles NW. of Northampton.

Alton, a town of Hampshire, 8¾ miles SW. of Farnham. Its Perpendicular parish church was thoroughly restored in 1867. Hops are grown in the neighbourhood, and there are large breweries in the town. Pop. 5600.

Alton, a city and port of Illinois, U.S., on the left bank of the Mississippi, 24 miles N. of St Louis. Laid out in 1817, and since 1863 the seat of a Catholic bishopric, it is a centre of commerce, and has a Baptist college (1836). Pop. (1860) 6332; (1900) 14,210.

Al'tona, the largest and richest city in the Prussian province of Sleswick-Holstein, is situated on the steep right bank of the Elbe, just below Hamburg, so that the two cities are divided only by the state-boundaries. Altona lies higher than Hamburg, and is much healthier. Of public buildings, the most notable are the churches of the Trinity (1743) and St John (1873); and of four monuments, there is one to Blücher (1832). Invested with special privileges in 1664, and burnt by the Swedes in 1713, Altona was annexed to Prussia in 1866. Pop. (1840) 28,095; (1860) 45,524; (1890) 143,249; (1900) 161,501.

Altoo'na, a city of Pennsylvania, U.S., at the eastern base of the Alleghanies, 117 miles E. of Pittsburgh. It contains large locomotive works and machine-shops in connection with the Pennsylvania Central Railroad, employing 5000 hands. Pop. (1870) 10,610; (1900) 38,973.

Altorf, or ALTDORF, the chief town in the Swiss canton Uri, at the head of the Lake of Lucerne, and on the St Gothard road and railway. There is a colossal statue of William Tell in this the scene of his chief exploits. Pop. 3000. —ALTORF, or ALTDORF, in Middle Franconia (pop. 4000), was the seat of a university from 1623 to 1809.

Altötting, a very ancient place of pilgrimage in Upper Bavaria, not far from the river Inn, 31 miles N. of Traunstein. A chapel contains the wonder-working black image of the Virgin, dating from the 8th century, and a rich treasure of gold, silver, and precious stones. Another chapel contains the tomb of Tilly. Pop. 4232.

Altrincham (*Al'tring-am*), a town of Cheshire, on Bowdon Downs, 8 miles SW. of Manchester by rail, is situated on the Bridgewater Canal. It has manufactures of artificial manures, and an iron-foundry; but the chief employment is raising fruits and vegetables for the Manchester market. Pop. 17,100.

Altrive, the home and death-place of Hogg, the Ettrick Shepherd, in Yarrow parish, Selkirkshire.

Alum-Bagh (*Alambágh*), a domain 4 miles from Lucknow, comprised a palace, mosque, and park; and in 1857 was converted by the rebels into a fort. It was taken by the British in September; and on evacuating Lucknow, Sir James Outram with 3500 men held it against 30,000 sepoys and 50,000 volunteers, until in March, Sir Colin Campbell reconquered Lucknow, and relieved the Alum-Bagh. Havelock had been buried within the walls in November 1857.

Alum Bay, Isle of Wight, near the Needles, a bay with fantastically variegated cliffs.

Alva, a town in what since 1891 is Clackmannanshire, at the base of the Ochils, 7¾ miles ENE. of Stirling by rail (1863). It has extensive manufactures of shawls and tweeds. Immediately behind the village is Alva Glen, noted for its picturesque beauty and magnificent waterfall. Pop. 5000.

Alvara'do, a town of Mexico, on the Gulf of Mexico, at the mouth of the river Alvarado, 40 miles SE. of Vera Cruz; pop. 6000.

Alwar, or ULWAR, a Rajput state of India, in Rajputana, with an area of 3024 sq. m. and a pop. of 750,000. The capital, Alwar, is a town of 56,750 inhabitants, 94 miles WNW. of Agra.

Alyth (*Ai'lith*), a Perthshire town, 26 miles NE. of Perth, with woollen, linen, and jute manufactures. Pop. 1965.

Alzey (*Altzei*), a town of Rhenish Hesse, on the Selz, 18 miles SW. of Mainz. Pop. 6932.

Amalfi (*Amál'fee*), a seaport on the Gulf of Salerno, 24 miles SE. of Naples. It has a Romanesque cathedral. Founded under Constantine the Great, and long a powerful republic, with 50,000 inhabitants, and 'doges' of its own, it fell about the close of the 11th century under the power of the Normans, was plundered by the Pisans in 1135, and saw its commercial decay completed by a terrible storm in 1343. Masaniello was a native. Pop. 7792.

Amarapu'ra ('city of the gods'), till 1860 the capital of Burma, was situated on the left bank of the Irawadi, 6 miles NE. of Ava. Founded in 1783, it was totally destroyed by fire in 1810, and almost totally by earthquake in 1839; so that the population dwindled from 175,000 in 1800, to almost *nil* after Mandalay became the seat of government. Little remains but some beautiful trees, and a few ruined pagodas.

Amasia, a town in the province of Sivas, in Asia Minor, in the deep valley of the Yeshil-Irmak. The ancient town, long capital of the kings of Pontus, was the birthplace of Strabo. There are numerous interesting remains of antiquity, particularly the tombs of the kings of Pontus. Silk and salt are the chief articles of export. Pop. 25,000.

Amatitlan, a deep lake in the Central American state of Guatemala, surrounded with precipitous volcanic rocks. It empties into the Pacific Ocean through the river Michatoyat. Near the lake are many hot springs, and on the river is the town of Amatitlan, as late as 1840 a miserable Indian village, but now, through the introduction of the cochineal culture, an active town of 10,000 inhabitants.

Amazon, or AMAZONS (Portuguese *Amazõnas*, from an Indian word *Amassona*, 'boat-destroyer'), a river of South America, and the largest stream on the face of the globe. It is known locally as Marañon, Orellana, Solimoens, Parana-tinga, and Parana-uassu. The name Marañon (or Tunguragua) belongs properly to the more northern of its two main head-streams, rising in Lake Lauricocha (Peru) about 10° 30′ S. lat., 76° 10′ W. long. Some writers insist that the river Apurimac, or Ucayali (the more southern of the two great head-streams), is the true Amazon. It is commonly said that the Amazon, to its remotest source, is nearly 4000 miles long; but 3000 miles is a more probable estimate. Most of the upper branches flow in deep mountain gorges of the Cordillera; east of the Cordillera the vast forest-plain is entered, which stretches from the sub-Andean foot-hills to the sea. It is a region rich in botanical treasures, having a fertile soil and a prodigiously large rainfall. Owing to this rainfall, the country is traversed by a very great number of large navigable rivers, either direct or

indirect affluents of the Amazon. Steam navigation has been introduced on many of the larger branches; but the natural resources of the country are very little developed.

The principal tributaries from the north are the Napo, the Putumayo, the Japurá, and the Rio Negro (which connects, through the Cassiquiare, with the Orinoco); from the south the Javary, the Jutahy, the Juruá, the Purus, the Madeira, the Tapajos, the Xingu, and the Tocantins. For a considerable distance the main river forms the boundary between Peru and Ecuador; but its course lies chiefly through the northern half of Brazil, its general direction being to the NNE. Its mouth is crossed by the equator. The drainage area of the river is placed at 2,500,000 sq. m., or two-thirds the area of Europe; and the main stream and its tributaries are said to afford over 25,000 miles of waterway suitable for steam navigation. The main channel, at the mouth, is 50 miles wide. The average flow of the river is placed at 2¼ miles per hour. The tides are noticed for about 400 miles up the river. The tidal phenomenon called the *bore* (here known as *Pororoca*) is very destructive in the main channel of the lower river, near its mouth. The name Amazon is probably derived from the female warriors (Amazons) seen by early explorers in the valley of this river; the name Marañon is derived from a voyager who visited the river in 1503; Orellana was the name of one who sailed on it in 1540.

The climate of the river-valley, though hot and very damp, is greatly mitigated by its trade-winds, which blow from the east with little interruption throughout the dry season. The river abounds in fish in very great variety of species, and turtles and alligators are plentiful, as well as porpoises and manatees. The main river is fullest from March to June inclusive, and lowest in August and September. The river is open to the commerce of all nations, but trade has been impeded by import and export duties. Pará is the principal outlet by sea of the commerce of the Amazon Valley. Many useful and some highly valuable timber-trees grow on the river. One of the leading pursuits of the lower valley is the shipment to Pará of india-rubber and Brazil-nuts. The western part of the basin affords quinine-yielding barks, coca, cacao, sugar, coffee, palm-wax, ipecacuanha, copaiba, sarsaparilla, vanilla, and other valuable vegetable products, and a considerable amount of gold is procured in it.

See works by A. R. Wallace (1853; new ed. 1889), H. W. Bates (1864; new ed. 1892), Agassiz (1868), Brown and Lidstone (1878), and H. H. Smith (New York, 1879).

Amazo'nas, (1) the northernmost province of Brazil, has an area of 750,000 sq. m., and a pop. of 148,000.—(2) A fertile department of Peru, bounded on the N. by Ecuador. Area, 14,150 sq. m.; pop. 70,800.

Ambala. See UMBALLA.

Amber, a decayed city in the Rajput state of Jaipur, India, formerly its capital, about 4 miles NE. of Jaipur, with a vast but deserted palace. It is situated on the margin of a small lake, in a deep hollow among hills.

Amberg, a town of Bavaria, 35 miles E. of Nuremberg. Chief buildings are the town-hall (1490) and St Martin's (1421), with a steeple 321 feet high. There is a large arsenal, some manufactures, and mining. Near is the Maria-Hilfsberg, a place of pilgrimage. Pop. 22,500.

Ambleside, a market-town of Westmorland, situated in the heart of the Lake District, about a mile from the head of Lake Windermere. Rydal Mount, for many years the residence of Wordsworth; Fox How, a summer retreat of Dr Arnold; and the Knoll, where Miss Martineau lived and died, are all in the neighbourhood. Coarse woollen cloths are made here. Pop. 2360.

Amboise, a French town in the dep. of Indre-et-Loire, on the Loire, 15 miles by rail E. of Tours. The town is memorable for the Huguenot conspiracy (1560), which cost the lives of 1200 Protestants. The castle of Amboise from 1431 was a frequent residence of the Valois kings; and since the days of Louis XI., 15,000 prisoners are said to have been confined in its subterranean 'oubliettes.' Pop. 4580.

Amboyna, the most prominent of the Moluccas or Spice Islands belonging to the Dutch, lies SW. of Ceram, and NW. of Banda. Area, 365 sq. m. Pop. about 38,000, nearly a third Mohammedans. Amboyna is mountainous, well watered, fertile, and healthy. Clove, sago, mango, and cocoa-nut trees are abundant, also fine timber for cabinet-work. The Dutch took Amboyna from the Portuguese in 1605. The British settlement was destroyed by the Dutch in the infamous Amboyna massacre of 1623, for which, in 1654, Cromwell exacted compensation. The British held the island in 1796–1802. It became finally Dutch in 1814.—AMBOYNA, capital of the Dutch Moluccas, on the bay of Amboyna, has a good roadstead; pop. about 9000.

Ambriz, the northernmost division of the Portuguese territory of Angola, West Africa, extending from the Congo to the river Ambriz. The town of Ambriz has a pop. of 5000. See ANGOLA.

America, the western continent and its adjacent islands, forming the main body of land found in the western hemisphere. America has an area of about 16,500,000 sq. m., and is larger than Europe and Africa together. It is more than four times as large as Europe, five times as large as Australia, and half as large again as Africa; but is considerably smaller in area than Asia. It is customary to regard Greenland as a part of America; while the adjacent island of Iceland, though partially in the western hemisphere, is usually associated with Europe. The other principal American islands in the Atlantic are Newfoundland, Cape Breton, Anticosti, Prince Edward Island, Long Island, the Bermudas, the Antilles or West Indies, Joannes, the Falkland Islands, Staten Land, and South Georgia. At the southern extremity of America lies the archipelago of Fuegia (Tierra del Fuego). In the Pacific are the Aleutian Islands, Kadiak, the Alexander and Queen-Charlotte groups, Vancouver and other British-Columbian Islands; the Santa Barbara group, Revilla-Gigedo, the Pearl Islands, and others in the Gulf of Panama, the Galápagos, Juan Fernandez and the associated islets, Chiloe and the Chonos Archipelago. In the Arctic Ocean there are many large but unimportant islands.

The American continent consists of two principal parts, NORTH AMERICA and SOUTH AMERICA, which are connected by the narrow Isthmus of Panama. These two bodies of land, though differing very much in climate and productions, are much alike in several respects. Each is of triangular outline, with the shortest side to the north, and with a narrow southern prolongation. In outline, North and South America have each

a certain resemblance to Africa. The two Americas have each a high range of volcanic mountains, extending from north to south along the west coast, a broad central plain, and a relatively low eastern mountain-range. Their great rivers have also some features in common, especially in regard to their direction. America is called the New World; and from the historical point of view, this name is obviously appropriate; but geologically it may be called the Old World, since the oldest known strata have their widest development on its surface; and there have been here found relics of prehistoric man, which must be regarded as among the oldest yet discovered.

North America has an area of more than 9,000,000 sq. m. It is considerably larger than South America, which is in turn larger than Europe and Australia combined. The western mountain-system of North America comprises a very great number of minor ranges, mostly having a north and south direction. The main chain (Sierra Madre) cannot be said to preserve an unmistakable identity throughout. The Coast Range, the Sierra Nevada, and the Cascade Mountains are the most noted of the western parallel ranges; they all lie on the Pacific slope, and they contain some of the highest of North American peaks. The elevated plateau called the Great Basin (chiefly in Utah and Nevada, U.S.), contains the Great Salt Lake and several smaller bodies of strongly saline water, evidently the remains of a much larger lake which once sent its waters to the sea. The eastern or great Appalachian mountain-system has a general NNE. direction, nearly parallel with the Atlantic coastline.

North of the St Lawrence River is seen the vast and complicated mountain-system of the Laurentides, which extend from the Atlantic westward to near Lake Superior. The highest mountain in North America is Mount McKinley, in Alaska (20,464 feet). Orizaba, in Mexico, is 18,250 feet; Mount Logan, in Yukon, 19,539; Mount St Elias, long believed to be the highest summit, 18,024. Popocatepetl and Iztaccihuatl, in Mexico, are 17,520 feet and 16,960 feet respectively. Many other peaks are over 14,000 feet.

A very remarkable feature of North America is the great central plain which reaches from the Arctic Ocean to the Gulf of Mexico. A prominent feature of the central plain is the *Hauteur des Terres*, a high ridge, whence flow the Mississippi, the Red River, the St Lawrence, and the Winnipeg. This ridge is nowhere over 2000 feet high, and its ascent is extremely gradual. The most general name for the great plains of North America is *prairie;* there are local distinctions between *timbered* and *bald* or treeless prairies; and few prairies are of a dead-level surface, and many are 'rolling'—that is, their surface is a succession of low wave-like swells and depressions.

The coast-line of North America on the west is almost everywhere high and rocky. To the south of Puget Sound, good harbours are rare; but British Columbia and Alaska have great numbers of good seaports, the coast-line being, in many places, deeply cut with high-walled fjords, or 'canals,' and elsewhere sheltered by ranges of high and well-wooded islands. The Atlantic coast, to the north of New York Bay, is generally rocky and well sheltered with islands, and has abundance of good natural harbours; but south of the parallel of New York, the coast of the mainland is [illegible] everywhere low and sandy. Many of the best ports [illegible] almost [illegible] are formed by river-mouths, and have sand-bars across their entrances. Nowhere else in the world is there any such extent of low and sandy coast as on the Atlantic and Gulf seaboards of the United States.

In general, Canada and the Atlantic slope are well watered and have abundant rains. Along a narrow strip on the Pacific slope, from San Francisco southward to Acapulco, the water-supply is deficient, and the interior regions near the coast have locally a desert character; while from Acapulco southward the rainfall is ample for all needs. The central valley is generally well supplied with water; but to the west of the Mississippi there are but scanty summer rains. As the Rocky Mountains are approached, the water-supply becomes more deficient; and, except where irrigation is practicable, agriculture proper generally gives place to the grazing of cattle. But in the Canadian part of the central valley there is ordinarily no deficiency of rainfall. In the Rocky Mountain region, the summers are generally very dry; and in some sections, irrigation is required in order to produce crops. Still the great volume and length of the North American rivers, and the immense number of lakes, are sufficient proof of the amplitude of the general rainfall. In the Rocky Mountain region of Canada, the great rivers, Yukon, Fraser, Columbia, Saskatchewan, and Mackenzie, take their rise. Between these mountains and Hudson Bay, a girdle of vast lakes, or inland seas (Great Bear, Great Slave, Athabasca, Deer Lake, Winnipeg, and others), are seen to form a regular succession running from the Arctic Circle in a SSE. course to Lake Superior (412 by 167 miles), which is itself the largest fresh-water lake in the world, and the first of a wonderful chain of great sea-like expansions of the Upper St Lawrence (the others being Michigan, Huron, Erie, and Ontario). The line of these great lakes (from Great Bear Lake to the Lake of the Woods inclusive) marks the eastern limit of a fertile prairie region resting on fossiliferous rocks. East of this line we find a vast wilderness of 'Barren Grounds.' North of the St Lawrence system, almost the whole country is thickly studded with lakes, which, with their connecting streams, form a network of important waterways traversable by canoes and boats.

The Atlantic slope of the United States is well supplied with water, and many of its streams afford extensive navigation. The Hudson is noted for its fine scenery; the Potomac is one of the noblest of American rivers; and important streams flowing to the Atlantic are the St John, the Penobscot, the Kennebec, the Merrimac (noted as affording more utilised water-power than any other river in the world), the Connecticut, the Delaware, the Susquehanna, the James, and the St John's, nearly all navigable in their lower courses. The chief rivers flowing to the Gulf of Mexico are the Appalachicola, the Mobile, the Pearl, the great Mississippi, the Sabine, the Trinity, the Brazos, the Colorado of Texas, and the Rio Grande.

Of the many large Alaskan rivers, the principal are the Yukon and the Kuskoquim. The Fraser is a swift and strong river; the great river Columbia is noted alike for its navigation, its salmon-fisheries, and its enormous cataracts. The Rio Colorado, whose waters flow to the Gulf of California, traverses a desert plateau. Here, nearly every watercourse runs in a deep-walled cañon, a narrow valley with precipitous sides, often of prodigious height.

The winter cold and the summer heat of North America are extreme, when we consider the latitudes. Variations of temperature are more sudden and more extreme than in South America or Western Europe. The arctic portion of North America has a climate of extreme severity; and much of the northern sub-arctic region has a decidedly arctic climate. South of the Canadian line, we are still in the spring-wheat belt; and not till we go south 4 or 5 degrees of latitude do we enter the winter-wheat belt. Maize is planted in the warmer parts of Canada, and in nearly all the more southern parts of North America. The other cereals grown in the United States are much the same as those ordinarily produced in Europe. Sugar-cane is raised only in the most southern parts of the United States, and in latitudes still farther south. Tobacco is an important crop not only in tropical America, but nearly as far north as Canada. Cotton reaches its northern limit in California, Missouri, and Virginia. True rice is grown in the more southern United States. Throughout the Atlantic and Gulf slopes of North America, the winter climate is much more severe than in corresponding European latitudes. It will be observed that nearly all the cultivated crop-products of North America (except maize, potatoes, and tobacco) are of Old-World origin. The same thing is true in a less degree of the cultivated fruits. The European apple thrives even better in North America than in Europe; so likewise do the peach, the pear, and other fruits. But the grapes generally cultivated in America are of native or hybrid origin; although the European grape does well in California and Mexico. The cranberries, strawberries, and some of the other cultivated small fruits of North America, are of native origin, as are some of the more hardy varieties of the plum. Subtropical fruits, such as the orange, fig, and lemon, do well in that limited part of non-tropical North America which lies south of the frost-line. The mineral treasures of North America are vast; coal, iron, copper, gold, silver, lead, and petroleum being abundant, besides salt and other valuable products.

The native peoples of North and South America alike would appear to have been all of one race, although the Eskimo of the far North resemble the 'Indian,' or copper-coloured native races, not so much in appearance and in physical features, as in the polysynthetic or incorporative character of their system of word-building. The present population of North America contains a copious element of the Indian stock, chiefly found in the remoter parts of Canada and in Mexico and Central America. In Spanish America and in Manitoba (Canada), there are many persons of mixed white and Indian origin. The Spanish language is spoken in Central America, Mexico, Cuba, and Puerto Rico; French prevails in parts of Canada and Louisiana, and in some of the West Indies; and a German dialect prevails locally in Pennsylvania. But by far the largest share of the North American people are English in language, if not in descent.

The political divisions of North America are (1) Danish America, which includes Greenland, and three small islands of the Virgin group in the West Indies. (2) British North America, in which division we may place the Dominion of Canada, Newfoundland, Labrador, the Bermudas, the numerous British West Indian islands, and British Honduras. (3) The United States, including the detached territory of Alaska. (4) Mexico. (5) The Central American republics of Honduras, Guatemala, Salvador, Nicaragua, and Costa Rica, together with Panamá—unless its southern part be regarded as belonging to the South American continent. (6) The West Indian republics of Hayti and San Domingo. (7) The Dutch West Indies. See the articles on the separate states and colonies.

The population of North America, with the West Indies, is not less than 105,000,000 souls, of whom 7,000,000 may be of Indian descent. The very great majority of North American Indians, who fall into about a dozen stocks or groups of tribes, are found in Mexico and Central America. The people of African stock number at least 11,000,000, most of whom are natives of the United States. The original slave element was derived from almost every coast-region of the African continent.

South America has somewhat the same general shape on the map as North America, and the semi-continents have many features in common, as well as certain marked contrasts. The broadest part of each is towards the north; but the northern portion of North America is a frozen and most repelling region, having its coasts washed by a trackless frozen ocean, filled with barren and ice-crowned islands; while the Caribbean Sea, which lies north of the southern half of the continent, is entirely tropical, and is encircled by a chain of rich and beautiful islands, where frosts are never seen. The climates are therefore reversed. The greater portion of North America has either a cold or a temperate climate; while that part of South America which is of corresponding position and importance has a hot climate. The tropical region of North America is relatively small in area; while in South America it is much the smaller part which has a cold climate. Moreover, the winter cold of Patagonia, Tierra del Fuego, and the Falkland Islands is never extreme, like that of so great a part of North America. Even Tierra del Fuego, which has a terribly bleak and blustering wet and windy climate, is never very cold. The summers of the extreme south of America are indeed relatively cold, but the winters are correspondingly mild; that is to say, the climate is more steady and less changeable than that of North America.

The Andes, or South American Cordilleras, have some features in common with the great North American Cordilleras, the Rocky Mountain system. They both extend north and south; both are near the west coast; both are volcanic; and both cut off the rains from a considerable region, rendering the climate locally very dry. But the Andes are much more nearly continuous; they are a much more complete barrier to the traveller and merchant, as well as to the rain-bearing winds of the Atlantic; they have a much greater absolute height, and contain a far greater number of very lofty peaks. Their volcanic activity is also at present much more intense than is seen at any point in North America north of the Tehuantepec Isthmus. The dry or desert region west of the Andes is far more extensive and far more completely arid than the corresponding section of North America. To the east of the Andes, and as it were reclining against them, there is an enormous and lofty plateau on which are scattered various extinct or dormant volcanic peaks; but the western slope of the Andes is usually very steep. In some parts of the eastern sub-Andean plain there appear complicated (but generally north and south) ranges of lower mountains, occasionally

sending out an arm of hills into the plains of the interior. The really temperate part of South America, including most of Chili, Uruguay, and the Argentine Republic, has a mild, and for the most part singularly equable and agreeable climate; although Northern Chili is a hot and arid desert, and the southern third of that country, including the Chonos Archipelago, is drenched with continual rains. The greater and most characteristic region of South America is the tropical portion. For a tropical country the climate is in general remarkably fine, regular, and healthful. A marked feature is the large and regular rainfall, caused by the Andes, which here stand exactly across the course of the trade-winds. These winds, carried gradually upwards by the shelving plateaus, till they reach the cold Andean summit-region, precipitate nearly all their moisture, and leave the narrow strip of land west of the Andes a desert. Towards the north and south, the Pacific slope, being out of the highway of the trade-winds, receives abundant moisture from the Pacific. Owing to the enormous rainfall of tropical South America, it is above all others the land of great rivers. The three great river-systems of the Orinoco, the Amazon, and the Plata are all primarily developed upon the eastern terraces of the Andes; but the Plata derives its main water-supply from the Brazilian mountains. Other large rivers are the Magdalena in Colombia, the São Francisco in Brazil, and the Rio Negro in the Argentine Republic. South America has few large lakes, Lake Titicaca being one of the most remarkable; but the slopes of the Southern Andes abound in smaller lakes, doubtless of glacial origin.

The interior of South America presents considerable variety. In the central and southern portion of Venezuela we find extensive steppes or prairies, here called llanos; an open region, in part treeless, but in general grassy and devoted to pasturage. To the east and west of these the country is for the most part densely wooded. The vast forest-clad plain of the Amazon is of fluviatile origin. Towards the southern tropic we encounter a region which, though little developed, appears to be one of the finest and most fertile on the globe. Farther south the forests begin to disappear, and finally end in the great treeless pampas of the Argentine Republic. The Patagonian region south of the pampas consists largely of a succession of terraces rising westward to the Andes, and crossed by many swift and copious rivers. Here are seen vast fields covered with loose stones and shingle, recalling the enormous boulder-covered waste of Labrador. Farther south lies the Fuegian Archipelago, a gloomy and unpleasant region with a bleak climate.

The *mineral wealth* of South America is very great, including gold, silver, mercury, copper, diamonds, and coal.

The *agricultural capabilities* of a large part of South America are unquestionably very great. Stock-breeding is the leading industry on the pampas of the south, and on the llanos and campos of the north. Coffee-growing is a prominent pursuit in Brazil. The cereal grains thrive remarkably in the temperate regions. Sugar, tobacco, and cotton are produced in the warmer latitudes. Silver, copper, iodine, nitrates, guano, hay, and provisions are shipped from the west coast. From the La Plata countries wool and various cattle products still take the lead, although flour and grain are becoming important staples of export. Peruvian bark and other medicines, india-rubber, cabinet-woods, chocolate, tobacco, and fruits are shipped from the tropical and forest-regions of the north.

The *aboriginal population* of South America is divided into a large number of tribes, which have been grouped under some eight different stocks. The white population is largely Spanish in language and descent, except in Brazil, where Portuguese is spoken. The common people of Chili are largely of Gallician (Spanish) descent; while Basque blood is said to prevail in Peru. The Brazilian whites are to a considerable extent of Azorean and Madeira stock. There are numbers of German colonists in Brazil, the La Plata countries, and Chili; and also many Italians, Basques, and other Europeans in the Argentine Republic and Uruguay. The English language is spoken in the Falklands and in Guiana; French and Dutch prevail in parts of Guiana. The negro element is strong in Brazil, in parts of Peru, and in Guiana; and there are many persons of mixed descent. It is believed that the total population of South America is about 38,000,000.

A considerable number of the islands usually reckoned as West Indian, and assigned by most geographers to North America, are really continental and South American. Such are the large British colony of Trinidad; the Venezuelan island of Margueríta; and the Dutch island of Curaçoa.

All the states of America, each with a separate article, are either republics or colonies.

NORTH AMERICA.

States.	Area in sq. m.	Pop.
United States	3,025,600	76,685,794
British America, including Canada, Newfoundland, Bermuda, British Honduras	3,556,350	5,639,201
Mexico	766,000	13,545,462
Central America, including San Salvador, Nicaragua, Honduras, Guatemala, Costa Rica	172,700	3,984,721
Greenland (Danish)	320,000	10,516
Polar lands (say)	1,062,800	—
West Indies	96,550	6,340,267
Total	9,000,000	105,605,961

SOUTH AMERICA.

States.	Area in sq. m.	Pop.
Venezuela	417,000	2,444,816
Colombia and Panama	332,000	3,878,600
Ecuador	160,000	1,205,600
Peru	528,000	4,609,999
Bolivia	536,000	1,788,674
Argentine Republic	1,970,000	4,794,149
Uruguay	72,700	930,680
Paraguay	57,300	635,571
Chili	218,900	3,128,095
Guiana (Brit., French, Dutch)	170,500	407,553
Brazil	3,288,000	14,339,915
Falkland Islands (British)	6,500	2,043
Total	7,756,900	38,165,695
Grand Total of America	16,756,900	143,771,656

Amersfoort, an ancient town of the Netherlands, 14 miles NE. of Utrecht by rail. It has a large trade in grain; and manufactures of brandy, cotton, and woollen goods, leather, soap, and beer. Here was born the statesman Oldenbarneveld. Pop. 18,182.

Amersham, a town of Bucks, 7½ miles ENE. of Wycombe. Pop. 3210.

Amesbury, a coursing ground in Wiltshire, near Stonehenge, and 7½ miles N. of Salisbury.

Amesbury, a township of Massachusetts, 38 miles by rail N. of Boston, with woollen and carriage factories. Pop. 9473.

Amha'ra ('the high lands'), the middle and largest of the three divisions of Abyssinia, extending from the Tacazzé to the Blue Nile, and embracing the beautiful Lake Tzana. Capital, Gondar (q.v.).

Amherst, a seaport of Tenasserim, Burma, on the Bay of Bengal, at the mouth of the Salwin, 30 miles S. of Maulmain. Founded in 1826 as capital of the newly-ceded province, it was next year superseded by Maulmain. Pop. 3000.

Amherst, a seaport of Nova Scotia, at the head of Cumberland Basin, an inlet of the Bay of Fundy; pop. 5000.

Amherst, in Massachusetts, 20 miles N. of Springfield, is seat of Amherst College (Congregational) and of an agricultural college; pop. 5000.

Amherstburg, a town of Ontario, Canada, at the head of Lake Erie, 4 miles S. of Detroit; pop. 2272.

Amiens (Fr. pron. *Am-i-on'*; anc. *Samarobriva*), a French city, capital once of Picardy, and now of the dep. of Somme, on the many-channelled, navigable Somme, 81 miles N. of Paris by rail. Its fortifications have been turned into charming boulevards, but it still retains its old citadel. The cathedral of Notre Dame is a masterpiece of Gothic architecture. Begun in 1220, it is 452 feet long, and has a spire (1529) 426 feet high; but its special feature is the loftiness of the nave, 141 feet. In his little work called *The Bible of Amiens*, Ruskin says this church well deserves the name given it by Viollet-le-Duc, 'the Parthenon of Gothic architecture,' and affirms that its style is 'Gothic pure, authoritative, and unaccusable.' Other noteworthy buildings are the Hôtel-de-Ville (1600–1760), in which the Peace of Amiens was signed in 1802; the large museum (1864), in Renaissance style; and the public library (1791), with 70,000 volumes. Amiens has considerable manufactures of velvet, silk, woollen, and cotton goods, ribbons, and carpets. Peter the Hermit and Ducange were natives, and there are statues to both of them. In the Franco-German war, on 27th November 1870, General Manteuffel inflicted, near Amiens, a signal defeat on a French army 30,000 strong, and three days later the citadel surrendered. Pop. (1872) 61,063; (1901) 90,758.

Amirante Islands, a group of eleven low, wooded islands lying SW. of the Seychelles, opposite the east coast of Africa. Area, 32 sq. m.; pop. 100 French-speaking half-breds. They fell to Great Britain in 1814, and form a dependency of Mauritius.

Am'lwch (pron. *w* as *oo*), a small seaport of Anglesey, North Wales, on the north coast of the island, 21½ miles NNW. of the Menai Bridge by rail (1867). It is a busy but rather dirty town, with the neighbouring rich copper-mines of the Parys Mountain. Till 1885 Amlwch united with Beaumaris, &c. in returning one member. Pop. of parish, 4443.

Ammergau. See Ober-Ammergau.

Amol, a town of Persia, 76 miles NE. of Teheran, on the Heraz, a river which flows into the Caspian; pop. 10,000.

Amoor. See Amur.

Amoy', a seaport of China, on a small island of the same name, in the province of Fukien, 325 miles ENE. of Canton direct. The third in importance of the treaty ports, it was one of the earliest seats of European commerce in China, the Portuguese having had establishments here in the 16th, and the Dutch in the 17th century. In 1841 it was taken by the British, and by the treaty of Nankin, a British consul and British subjects were permitted to reside there. The trade is now open to all nations. The imports are opium, rice, cotton-twist, British long-cloths, beans, peas, umbrellas, clocks, &c.; the exports are tea, sugar, paper, opium, grass-cloths, gold-leaf, &c. Pop. 95,000. The island of Amoy, measuring 9 by 7 miles, has 400,000 inhabitants.

Ampthill, a town of Bedfordshire, 7 miles S. by W. of Bedford. Pop. of parish, 2194.

Amraoti (sometimes *Oomrawuttee*), a district in Berar, British India, with an area of 2759 sq. m., and a pop. of 675,328. Its capital, Amraoti, is an important cotton-mart, the terminus of a state branch railway; pop. 28,550.

Amritsar (often *Umritsir*), a well-built city of the Punjab, 32 miles E. of Lahore by rail. It is the religious metropolis of the Sikhs, a distinction which, along with its name (literally, 'pool of immortality'), it owes to its sacred tank, in the midst of which stands the marble temple of the Sikh faith. Founded in 1574, but all of it more recent than 1762, it possesses considerable manufactures of cashmere shawls, cotton, silks, &c., and carries on trade to the annual value of £3,500,000. Pop. (1901) 162,500.

Amroha, a town in the United Provinces of India, 20 miles NW. of Moradabad; pop. 37,000.

Amrum, a north Frisian island off the coast of Sleswick, SW. of Föhr, is a low-lying half-moon of grassy downs, 8 miles long, of late visited as a health-resort. Oysters are taken and wild ducks decoyed. Pop. 1000.

Amsterdam ('dam' or 'dike of the Amstel'), the capital of the Netherlands, is situated at the influx of the Amstel to the Ij or Y (pron. *eye*), an arm (now mostly drained) of the Zuider-Zee, 44¾ miles NNE. of Rotterdam by rail. It is divided by the Amstel and numerous canals into a hundred small islands, connected by more than 300 bridges. Almost the whole city, which extends in the shape of a crescent, is founded on piles driven 40 or 50 feet through soft peat and sand to a firm substratum of clay. Merely a fishing-village at the beginning of the 13th century, with a small castle, in 1482 it was walled and fortified. After the revolt of the seven provinces (1566), it speedily rose to be their first commercial city; and in 1585 it was enlarged by the building of the New Town on the west. The establishment of the Dutch East India Company (1602) did much to forward the well-being of Amsterdam, which, twenty years later, had 100,000 inhabitants. It had to surrender to the Prussians in 1787, to the French in 1795; and the union of Holland with France in 1810 entirely destroyed its foreign trade. The old firms, however, lived through the time of difficulty, and in 1815 commerce again began to expand—an expansion greatly promoted by the opening of the North Holland Canal (1825), and the North Sea Canal (1876).

The city has a fine appearance when seen from the harbour, or from the high bridge over the Amstel. Church towers and spires, and a perfect forest of masts, relieve the flatness of the prospect. The old ramparts have been levelled, planted with trees, and formed into promenades. The three chief canals—the Heerengracht, Keizers-

gracht, and Prinsengracht—run in semicircles within each other, and are from 2 to 3 miles long. On each side of them, with a row of trees and a carriage-way intervening, are handsome residences. The building-material is brick; and the houses have their gables towards the streets, which gives them a picturesque appearance. The defences of Amsterdam now consist in a row of detached forts, and in the sluices, several miles distant from the city, which can flood (save in time of frost) the surrounding land.

The population, which from 217,024 in 1794, sank to 180,179 in 1815, rose to upwards of 538,000 in 1902, of whom the majority belong to the Dutch Reformed Church. The chief industrial establishments are sugar refineries, engineering works, mills for polishing diamonds and other precious stones, dockyards, manufactories of sails, ropes, tobacco, silks, gold and silver plate and jewelry, colours and chemicals, breweries, distilleries, with export houses for corn and colonial produce; cotton-spinning, book-printing, and type-founding are also carried on. The present Bank of the Netherlands dates from 1824, Amsterdam's famous bank of 1609 having been dissolved in 1796.

The former Stadhuis ('Townhouse'), converted in 1808 into a palace for King Louis Bonaparte, and still retained by the reigning family, is a noble structure of 1648–55, 282 feet long, and 235 broad, with a round tower rising 182 feet. It has a hall, 120 feet long, 57 wide, and 90 high, lined with white Italian marble. The cruciform *Nieuwe Kerk* (New Church), a Gothic edifice of 1408-14, has a splendidly carved pulpit, and the tombs of Admiral de Ruyter and Vondel. The 14th-century Old Church (*Oude Kerk*) is rich in painted glass, has a grand organ, and contains several monuments of naval heroes. Literature and science are represented by a university supported by the municipal principality, museums and picture-galleries, a botanical garden, several theatres, &c. The new Ryksmuseum contains a truly national collection of paintings, its choicest treasure Rembrandt's 'Night-guard.' Rembrandt made Amsterdam his home; and his statue (1852) now fronts the house he occupied. Spinoza was a native. A water-supply was introduced in 1853.

Amsterdam, a manufacturing town of New York, on the Mohawk River, 33 miles NW. of Albany. Pop. 22,000.

Amsterdam, a barren volcanic islet annexed by France, with the islet of St Paul, in 1893, is in 37° 50′ S. lat. and 77° 30′ E. long., about midway between the Cape of Good Hope and Tasmania.

Amu-Daria. See Oxus.

Amur (*Amoor*), or Sakhalin, a river formed by the junction of the Shilka and the Argun, which both come from the south-west—the former rising in the foothills of the Yablonoi Mountains. From the junction, the river flows 3000 miles south-eastward and north-eastward to the Sea of Okhotsk, opposite the island of Saghalien. Its main tributaries are the Sungari and the Usuri, both from the south. Above the Usuri, the Amur is the boundary between Siberia and Manchuria; below it, the river runs through Russian territory. It is very valuable for navigation, and carries a considerable fleet of steamers, but on account of the bar at its mouth, goods are generally disembarked, and carried overland to Alexandrovsk. The river is frozen for six months of the year; in summer there are extensive inundations.

From 1636, Russian adventurers made excursions into the Chinese territories of the Lower Amur; but it was not until 1854–56 that two military expeditions established the stations of Alexandrovsk and Nikolaevsk. In 1858 China agreed to the treaty of Tientsin, by which the left bank of the Amur, and all the territory north of it, became Russian; and below the confluence of the Usuri, both banks. In 1860 Russia acquired the wide territory extending from the Amur and the Usuri to the Pacific coast, with harbours on the Pacific in a comparatively temperate latitude, where navigation is impeded by ice for not more than three or four months a year.

This vast territory falls into two Russian provinces—the Maritime Province between the Usuri and the sea, and the government of Amur, north of the river. The latter has an area of 172,850 sq. m., and a pop. of 122,640, mostly belonging to the Tungusic stock. The capital is, since 1882, Khabarovka, and not, as formerly, Blagovestschensk. Nikolaevsk, once the only important place in these regions, is on the Amur, 26 miles from its mouth, where the river is 1½ mile wide, and in places 15 feet deep. Near the southern end of the Maritime Province (area, 715,980 sq. m.; pop. 221,750) is situated the important harbour of Vladivostok ('Rule of the East'), or Port May, which, in 1872, was placed in telegraphic communication with Europe by the China submarine cable. Vladivostok is one terminus of the Trans-Siberian railway commenced in 1891. The island of Saghalien (q.v.) is also a part of the Amur region in the wider sense.

Amurnath, a cave in Cashmere, amidst the mountains on the north-east boundary. It is an opening in a gypsum rock, 30 yards high, and 20 in depth. Believed to be the residence of the god Siva, it is visited by multitudes of pilgrims.

Anadyr, a gulf of North-east Siberia, into which flows the Anadyr River after a course of 500 miles from the Stanovoi Mountains.

Anagni, a town of Italy, on a hill, 40 miles ESE. of Rome. The seat of a bishop since 487, it was the birthplace of popes Innocent III., Gregory IX., Alexander IV., and Boniface VIII. Pop. 6347.

Anahuac ('near the water'), the original name of the ancient kingdom of Mexico.

Anam. See Annam.

Ananiev, a town of Southern Russia, 100 miles N. of Odessa; pop. 16,449.

Anapa, a Russian seaport on the east shore of the Black Sea, 50 miles SE. of Yenikale; pop. 7037.

Anatolia. See Asia Minor.

Anco'na, the capital of a province in Italy, on a promontory of the Adriatic, 127 miles SE. of Ravenna by rail. Its harbour had become much silted up, but in 1887 was improved and deepened; and it is still the most important seaport between Venice and Brindisi. The manufactures are silk, ships' rigging, leather, tobacco, and soft soap; the exports (declining) are cream-of-tartar, lamb and goat skins, asphalt, bitumen, corn, hemp, coral, and silk. Since 1815, the old citadel was the only fortification until, recently, strong forts were erected on the neighbouring heights. A mole 2000 feet long, built by Trajan, and a triumphal arch of the same emperor, are the most notable antiquities; the cathedral was built in the 11th c. Pop. (1901) 57,000. Founded about 380 B.C. by Syracusans, Ancona was destroyed by the Goths, rebuilt by Narses, and

again destroyed by the Saracens in the 10th century. It afterwards became a republic, but in 1532 was annexed to the States of the Church. In 1797 it was taken by the French, but surrendered to the Russians and Austrians. During 1832–38 a French force held it; in 1849 a revolutionary garrison capitulated to the Austrians; and in 1861 it was incorporated in the kingdom of Italy.—*The March of Ancona* was the name applied to the territory lying between the Adriatic and the Apennines, from Tronto NW. to San Marino.

Ancrum Moor, Roxburghshire, 5¼ miles NW. of Jedburgh, was in 1544 the scene of the defeat of 5000 English.

Andalu'sia (Span. *Andaluci'a*), a large and fertile region occupying the south of Spain, and washed both by the Mediterranean and the Atlantic. The name is a form of *Vandalitia* or *Vandalusia*, from the Vandals, who overran it in the 5th century. The biblical *Tarshish* probably, it was the seat of a splendid Moorish monarchy from the 8th century A.D. to 1235–48. Andalusia mainly consists of the great basin of the Guadalquivir; in the south, the Sierra Nevada attains a height of 11,657 feet. It is still one of the most fertile districts of Spain, with celebrated breeds of horses and mules. It is divided into the provinces of Almeria, Jaën, Malaga, Cadiz, Huelva, Seville, Cordova, and Granada. The chief towns are Seville, Cordova, Jaën, and Cadiz. Area, 33,340 sq. m. Pop. 3,470,089.

An'damans, a group of thickly wooded islands towards the east side of the Bay of Bengal, 680 miles S. of the Hooghly mouth of the Ganges. They consist of the Great and Little Andaman groups. The former group, more than 150 miles long and 20 miles broad, comprises four islands, the North, Middle, and South Andaman, and Rutland Island. The Little Andaman, 30 miles S. of the larger group, is 28 miles long by 17 miles broad. The total area is 2508 sq. m. The dark, dwarfish natives, seldom five feet high, stand also in the lowest stage of civilisation. Their number in Great Andaman is about 2000; in Little Andaman, from 1000 to 1500. A British settlement was made on North Andaman in 1789, but abandoned in 1796 for Penang. The present capital is Port Blair, on South Andaman, the largest island of the group. The harbour here is one of the finest in the world. Since 1858, the Andamans have been used by the Indian government as a penal settlement for sepoy mutineers and other life-convicts. In 1901 the population of the convict colony was 18,670, of whom 2240 were women. In 1872 Lord Mayo, viceroy of India, was assassinated at Hopetown on Viper Island by a Mussulman convict.

Andelys, Les, a town in the Norman dep. of Eure, 20 miles NE. of Evreux. Chateau Gaillard was built here by Richard Cœur de Lion to command the Seine. Pop. 5509.

Andenne, a town of Belgium, 12 miles E. of Namur by rail; pop. 7903.

Anderab, a town in Afghan Turkestan, on the northern slope of the Hindu Kush Mountains, 80 miles SSE. of Kunduz; pop. 6500.

Andermatt, or Ursern, a Swiss village in the canton of Uri, 18 miles S. of the Lake of Lucerne. Pop. 750.

Andernach (Roman *Autunnacum*), a town of Rhenish Prussia, on the Rhine, 11 miles NW. of Coblenz by rail. It was a residence of the Merovingian kings, and afterwards one of the most flourishing places on the Rhine. A great tower, a fine church, and the ruined castle of the archbishops of Cologne, give it quite a mediæval aspect. Pop. 7781.

Anderson, capital of Madison county, Indiana, on the west fork of White River, 36 miles by rail NE. of Indianopolis. It manufactures engines, carriages, furniture, &c. Pop. (1880) 4126; (1890) 10,741.; (1900) 20,178.

Andersonville, a village in Georgia, U.S., 60 miles SW. of Macon by rail, noted as having been the seat of a Confederate States military prison.

Andes (said to be derived from the Peruvian *anti*, copper, metal), a lofty mountain-system of South America, extending north and south along the whole Pacific coast, and really a continuation of the vast and complicated mountain-system of Western North America, though on the Isthmus of Darien the height of the connecting ridges is less than 130 feet. The mountains of the Fuegian Archipelago, south of the mainland of South America, including Cape Horn and Diego Ramirez, must be held to belong to this system. Without allowing for curves, the Andes extend some 4500 miles. The Patagonian portion of the system is much cut by steep ravines, sometimes partly filled with glaciers, and not seldom occupied by deep arms of the sea. On both east and west sides of the ranges vegetation is luxuriant, due to the excessive abundance of the rainfall. Between lat. 42° and 24° S. the main chain of the Andes recedes from the sea-coast, leaving in Chili a tract of country nowhere exceeding 120 geographical miles in breadth. The mountains here reach a mean elevation of 11,830 feet; one of the peaks, Aconcagua, is the loftiest on the American continent, 22,867 feet. Another, Cima del Mercedario, is 22,312 feet. In this region, both to the north and to the south, there is but one main line of peaks; but between these two parts two high parallel ranges occur, having between them a relatively low plateau. The Bolivian Andes occupy perhaps one-third of the area of the republic, and form a vast arid region of great elevation. Amongst them are Gualtieri, 22,000 feet high, and Sorata and Illimani, both above 21,000. The east and west Cordilleras of Bolivia enclose the land-locked plateau of the Desaguadero, 13,000 feet in height, and having an area of 30,000 sq. m.

In Peru the maritime Cordillera overlooks the sea in a close succession of volcanic cones. Near lat. 10° S. the chain divides into the seaward Cordillera Negra, and the more eastward Cordillera Nevada, with a deep trough or ravine intervening. The central Cordillera of Peru is the chain which bounds the Titicaca basin on the west. The eastern Andes of Peru form a magnificent succession of grand peaks, with only very local evidences of recent volcanic action. Of the Peruvian peaks the highest are Huascan (22,000 feet) and Huandoy (21,088 feet). The lofty wildernesses of the high Peruvian Andes form a cold and wind-swept region known as the Puna. In the SW. of Ecuador the various ridges of the Andes coalesce, immediately to divide again into two main chains, both characterised by intense volcanic activity. According to Whymper Chimborazo is 20,498 feet, Cotopaxi 19,613, and Antisana 19,335. The Colombian Andes are disposed in three main lines. Only a few of the peaks of the Venezuelan Andes rise above the snow-line. One of the plateaus, Assuay, is 14,500 feet high; the lowest notable pass, Planchon, is 11,455 feet high.

The great bulk of the Andean masses is composed of stratified rocks; upheaval, denudation, and direct volcanic action have been leading factors in building the mountains. Volcanic action is still very great in Ecuador, but less so in the other parts of the chain. Gold, silver, copper, mercury, and other metals abound in nearly every part of the Andes. There are three trans-Andean railways—two in Peru, and a more important one, unfinished in 1904, which connects the Chilian and Argentine railways by a rack-rail line with five tunnels, nearly continuous, about 8 miles long and at a height of between 9000 and 10,000 feet. See Conway, *The Bolivian Andes* (1901); Fitzgerald, *The Highest Andes* (1899); Whymper, *Travels amongst the Great Andes of the Equator* (1892).

Andijan, capital of a district in Ferghana, connected by rail with Bokhara; it was destroyed by earthquake in 1902. Pop. 50,000.

Andkhui, capital of a khanate in Afghan Turkestan, between the northern spurs of the Paropamisus and the Amu-Daria (Oxus).

Andorra, a valley republic of the Eastern Pyrenees, between the French dep. of Ariege and the Spanish province of Lerida, part of Catalonia. It is enclosed by mountains, through which its river, the Balira, breaks to join the Segre at Urgel. Area, 171 sq. m.; pop. 5831. Said to have been declared a free state by Charlemagne, Andorra now stands under the common protectorate of France and the Catalonian Bishop of Urgel. The republic is governed by a sovereign council of twenty-four members, chosen by certain heads of houses, and the council elects a president for four years. The Andorrans are good-natured, hard-working mountaineers, hospitable, moral, and devoted to liberty. They speak a dialect of Catalonian. The capital is Andorra la Vieja (pop. 600); San Julian (500) and Canillo (500) are the other towns. See works by Berthet (Paris, 1879) and Deverell (Lond. 1884).

An'dover (*Andeafaran*, 'passage of the river Ande'), a municipal borough and market-town of Hampshire, 66 miles SW. of London. Chartered by Henry I., Richard I., and John, Andover till 1867 returned two members, till 1885, one. The chief trade consists in corn and malt; at Weyhill, 3 miles west, an October fair is held, formerly very important. Pop. 6000.

Andover, a village of Essex county, Massachusetts, 23 miles N. of Boston, with about 7000 inhabitants. Settled in 1643 from its English namesake, it is famous, even in Massachusetts, for its educational institutions, especially the Phillips Academy and the Congregational Theological Seminary.

Andria, a city of South Italy, 30 miles W. of Bari, with a fine cathedral (1046); pop. 46,795.

Andros, (1) an island of the Greek Archipelago, the most northern of the Cyclades, separated from Eubœa by a channel 6 miles broad. It is 25 miles long, 10 miles broad, and 156 sq. m. in area. Pop. 20,562, of whom 1800 are in the chief town, Andros, on a bay of the east coast.—(2) One of the Bahamas (q.v.).

Andujar, a town of Spain, on the Guadalquivir, at the base of the Sierra Morena, 48 miles ENE. of Cordova by rail; pop. 15,116.

Anega'da, a British coral island, the most northerly of the Virgin Islands, lying east of Porto Rico, in the West Indies. Area, 13 sq. m.; pop. 200.

Angara, a tributary of the Yenisei (q.v.).

Angeln, a district of Sleswick, between the Bay of Flensburg and the Schlei, supposed to be the home from which came the Angles who invaded England in the 5th century.

Angermanland, a former division of Sweden, now chiefly comprised in the government of Westernorrland, extends along the Gulf of Bothnia, and is watered by the river Angerman, 200 miles long. The chief town is Hernösand, with a pop. of 6000.

Angermünde, a town of Prussia, on Lake Münde, 43 miles NE. of Berlin by rail; pop. 7833.

Angers (*Onʒzhayr*; anc. *Andegavum*), formerly the capital of the duchy of Anjou, and now of the French dep. of Maine-et-Loire, on the navigable Maine, not far from its junction with the Loire, 214 miles SW. of Paris by rail. Angers was the seat of a university (1246-1685), and of a military college, at which the Earl of Chatham and the Duke of Wellington received part of their education. David, the great sculptor, was a native. The castle was built by St Louis about 1250 on a projecting rock above the river. The fine cathedral is also a 13th-century building. Sail-making, wool and cotton spinning, and weaving are carried on. The neighbouring slate-quarries employ 3000 men. Pop. (1872) 54,454; (1891) 70,508; (1901) 82,400.

Anglesey, or Anglesea (A.S. *Angles Ey*—i.e. 'the Englishmen's island'), an island and county of Wales, separated from the north-west mainland by the Menai Strait (q.v.), which is spanned by the suspension bridge (1826) and by the tubular bridge (1850). The extreme length is 21 miles; the extreme breadth, 19; the coast-line measures about 80; and its area is 302 sq. m., or 193,453 acres. The climate is mild but foggy, especially in autumn; the general aspect of the island, flat and uninteresting, there being very little wood. The island is rich in minerals; the Parys and Mona copper-mines, near Amlwch, were opened in 1768. Lead ore, containing much silver, has also been found. Anglesey, known to the Romans as *Mona*, was one of the chief seats of the Druidical power, which in 61 A.D. was all but destroyed by the Roman general, Suetonius Paulinus. The island was again subdued by Agricola, 76 A.D. Egbert conquered it in the 9th century, and it was finally subdued by Edward I. The market-towns are Amlwch, Beaumaris, Holyhead, Llangefni, and Llanerch-y-medd. The first four united in sending one member till 1885, when they were merged in the county, which returns one member. Pop. (1841) 38,106; (1901) 50,606.

Anglia, East, a kingdom founded by the Angles about the middle of the 6th century, in the eastern part of central England, in what forms the present counties of Norfolk and Suffolk.

Ango'la, a name formerly used loosely of the whole West African coast from Cape Lopez to Benguela, but restricted, since the establishment of the Congo Free State in 1885, to the Portuguese West African possessions, extending from the Congo southward to Cape Frio; or even more narrowly, to the northern section between the Congo and the Coanza. Area, 312,000 sq. m.; pop. 2,000,000. The coast strip is level, barren, extremely hot, and very unhealthy. Beyond is hill-country, reaching a height of 3000 feet. The main rivers are the Kwango, running north to the Congo, and the Coanza and Cunene, running west to the Atlantic. Yams, tobacco,

indigo, rice, cotton, and sugar are freely produced; but under Portuguese mismanagement the wealth of the country is undeveloped or decaying. There is abundance of iron in the mountains; also copper, lead, sulphur, and petroleum are obtained. Angola was long notorious for its great slave-trade. The natives are Congo negroes, and belong to the great Bantu stock. In the 16th century they were mostly converted by the Jesuits to a kind of Christianity, but soon fell back into fetichism. Many of the 3000 white men, mostly Portuguese, are transported convicts, and there are some 30,000 mulattos. The Portuguese under Diego Cam discovered this coast in 1486, but St Paul de Loanda was not built till 1578.

Angora, or Angwireh (anc. *Ancyra*), capital of a Turkish province in the mountainous interior of Asia Minor, 220 miles ESE. of Constantinople. It was a flourishing city under the Persians, and was made the capital of the Roman province of Galatia Prima. The present city has 32,000 inhabitants; its trade is mainly in the hands of the Armenians, who number 9000. It is famous for its breed of goats, with beautiful silky hair, eight inches long.

Angostura, capital of the province of Guayana, in Venezuela, on the right bank of the navigable Orinoco, about 240 miles from its mouth. It is built at a pass (*angostura*), where the river is narrowed by rocks. The town is now more usually called Ciudad Bolivar. Pop. 12,000.

Angoulême, the capital of the French dep. of Charente, and formerly of the province of Angoumois, stands 220 feet above the winding Charente, 83 miles NE. of Bordeaux by rail. It has a fine Romanesque cathedral (1136), and a striking hôtel-de-ville, with which is incorporated the remnant of the ancient castle of Angoulême, where was born the celebrated Marguerite of Navarre, author of the *Heptameron*. Ravaillac was also a native. The old bastions have been converted into fine terrace-walks. There are manufactures of machinery, paper, and wire, and a brisk trade in brandy. Pop. (1866) 24,961; (1891) 34,188; (1901) 37,650.

Angra, the capital of the Azores, a seaport at the head of a deep bay on the south coast of the island of Terceira. Pop. 11,070.

Angra-Pequena, a bay on the south-west coast of Africa, 150 miles N. of the Orange River mouth, on the coast of Great Namaqualand (q.v.). It is the only port of the German South-west African territory; the neighbourhood is a sandy, waterless region, enjoying a healthy climate. In 1883 Angra-Pequena was ceded by a Namaqua chieftain to Lüderitz, a Bremen merchant; and next year it was taken under German protection.

Angri, a town of South Italy, 17 miles NW. of Salerno. Pop. 9110.

Anguilla, or Little Snake, an English West India Island, one of the Lesser Antilles, 160 miles E. of the eastern extremity of Porto Rico. Area, 35 sq. m.; pop. 4500.

Angus. See Forfarshire.

Anhalt, a duchy of the German empire, almost surrounded by the Prussian province of Saxony, which breaks it up into two principal and five smaller portions. Area, 869 sq. m.; pop. (1875) 213,689; (1900) 316,085, nearly all Protestants. Dessau, Zerbst, Bernburg, Köthen, and Ballenstedt are the principal towns. The eastern part is level and fertile; the western part, approaching the Harz Mountains, is hilly and largely covered with wood, and possesses mineral wealth, especially in lead and silver. Anhalt began to be an independent principality in the first half of the 13th century. It was divided into three duchies in the beginning of the 17th century, but in 1863 the whole territory was reunited into one duchy.

Ani, a ruined city of Turkish Armenia, 25 miles SE. of Kars.

Anio, the ancient name of the Teverone, a tributary of the Tiber, which rises in Monte Cantaro, and joins the larger river 3 miles above Rome. Its beautiful cascade at Tivoli (the ancient *Tibur*) is celebrated by the classical poets.

Anjou (*Onzhoo*), a former province in the NW. of France, of about 3500 sq. m. in extent, now forming the dep. of Maine-et-Loire, and small parts of the deps. of Indre-et-Loire, Mayenne, and Sarthe. It lies on both sides of the lower course of the Loire, where it receives the Maine. Its capital was Angers.

Anklam, a town in the Prussian province of Pomerania, on the navigable Peene, 4 miles from its mouth in the Kleines Haff, and 41 SE. of Stralsund by rail. Long a place of commercial importance, a member of the Hanseatic League from the 14th to the 16th century, it manufactures iron, sugar, and soap. Pop. 14,784.

Anko'bar, the capital of the kingdom of Shoa, in Abyssinia, is built 8200 feet above sea-level. Pop. 6000—15,000.

Annaberg, a mining town of Saxony, on the Erzgebirge range, 34 miles S. of Chemnitz by rail. Pop. 16,822.

Annabon. See Annobon.

Annagh, an island of County Mayo, in Achill Sound.

Annam, an 'empire' on the east coast of the Indo-Chinese peninsula, has since 1885 been a French protectorate and part of French Indo-China, which comprises, besides Annam, Tong-king or Tonquin in the north (once a province of Annam), French Cochin-China in the south, and Cambodia on both sides of the lower Mekong. Before the French controversy with Siam in 1893, the western boundary of Annam was generally understood to be the main mountain ranges between the Mekong and the sea. But in 1893 France insisted that the Mekong should be regarded as the frontier; and this demand was, under protest, conceded from Cambodia north to the Laos country, or about 18° N. lat. The area of Annam, as now extended (but without Tonquin or other divisions of Indo-China), is some 50,000 sq. m.; the population, Annamites on the coast, and Mois and Laos in the hills and west of them, is variously stated at from 5,000,000 to 10,000,000.

Annam lies wholly in the torrid zone, yet even during the hot and rainy season, extending over the six months from April to September, the thermometer seldom mounts from a minimum of 70° to beyond 100° F. On account of the moisture, however, the heats in June and July are sometimes almost intolerable. The country, save on the coast and along the Mekong, is mountainous; minerals are believed to abound; coal is worked near Turane. The mountains are covered with valuable timber, and the lower lands are extremely fertile. The chief productions are, besides rice and other cereals, cotton, cinnamon, sugar, tea, coffee, and tobacco. The chief ports are Turane (wholly under French control), Qui-Nhon, and Xuan-Day: Hué is the

capital. The principal imports are rice, cotton cloths and yarns, opium, and paper, for the most part from China and Japan.

The Annamese are mainly of Mongoloid stock. The inhabitants of the mountains are taller, fairer, and stronger than the inhabitants of the plain. The latter are small of stature but well proportioned, indolent but expert. The speech of the Annamese is monosyllabic, like Chinese, from which they have borrowed many words. The mass of the people worship tutelary spirits; Confucianism is in vogue with the more cultivated; the remainder adhere to Buddhism. There are besides about 420,000 Roman Catholics, descendants of immigrants from Macao and Japan (1624), and of Portuguese fugitives from Malacca.

The native prince is retained on the throne, and the interior administration—on the Chinese pattern—is in the hands of Annamite officials, though the French, through the superior council of Indo-China, have supreme authority, and French troops occupy part of the citadel of Hué.

Annamaboe, a seaport on the Gold Coast of Africa, 10 miles E. of Cape Coast Castle. Pop. 5000.

Annan, a seaport of Dumfriesshire, on the river Annan, near its entrance into the Solway Firth, 18 miles ESE. of Dumfries by rail. Edward Irving was a native (marble statue, 1892); and Carlyle, as a schoolboy, led 'a doleful and hateful life' at the academy. A royal burgh, Annan unites with Dumfries, &c. to return one member. Pop. 5805.

Annandale, a district of Dumfriesshire, traversed by the river Annan, which, rising near headstreams of the Tweed and Clyde, flows 49 miles southward to the Solway Firth, at a point 1¾ mile below Annan town. Near its source is a singular hollow called the Marquis of Annandale's (or Devil's) Beef-tub.

Annap'olis, a seaport of Nova Scotia, on an arm of the Bay of Fundy, 95 miles W. of Halifax by rail. Established in 1604 by the French as the capital of their province of Acadia, under the name of Port Royal, it was ceded to Britain in 1713, and changed its name in honour of Queen Anne; not till 1750 was it superseded by Halifax. Pop. 1200.

Annapolis, the capital of Maryland, U.S., on the south bank of the Severn, 2 miles from its entrance into Chesapeake Bay, and 40 miles E. by N. of Washington by rail. Among its edifices are an imposing state-house, St John's College (1784), a Roman Catholic seminary, a naval hospital (1871), and a naval academy (1845). Founded as Providence in 1649, Annapolis was renamed after Queen Anne in 1708. Pop. (1870) 5744; (1890) 7604; (1900) 8525.

Ann Arbor, a flourishing city of Michigan, on the Huron River, 38 miles W. of Detroit by rail. Settled in 1824, and incorporated as a city in 1851, it is the seat of the state university (1837), and has manufactories of carriages, furniture, paper, woollen goods, blinds, and ploughs, with mineral springs and a hydropathic establishment. Pop. (1870) 7363; (1890) 9431; (1900) 14,509.

An'necy, chief town of the French dep. of Haute-Savoie, 22 miles S. of Geneva, and 25 miles NW. of Aix-les-Bains by rail. It stands at the NW. extremity of the Lake of Annecy, which, lying 1426 feet above the sea, is 9 miles long, and flows by the Fier to the Rhone. It has manufactures of linens, cotton-yarn, silks, straw goods, and steel wares. The castle of the Counts of Geneva is now a barrack; and there are a cathedral (1523) and hôtel-de-ville, with a statue near it of the chemist Berthollet. Here Eugene Sue died in exile. Pop. 11,331.

Anniston, a town of Alabama, 63 miles by rail E. of Birmingham, with flourishing iron mines and works. Pop. 10,000.

Annobon, or ANNOBOM, the smallest of the four islands in the Bay of Biafra, the eastern part of the Gulf of Guinea, now belonging to Spain. Area, 6 sq. m.; pop. 1600 negroes, who profess to be Catholics. The island was discovered by the Portuguese on New-Year's Day (*Anno Bom*), 1471.

Annonay (anc. *Annoniacum*), a town in the French dep. of Ardèche, 37 miles S. of Lyons. The chief manufacture is paper, the first established by the father of the aëronauts Montgolfier, who were born here. Pop. 14,000.

Annsborough, a village of County Down, 3 miles W. of Dundrum. Pop. 430.

Ansbach (in England often ANSPACH), a town of Bavaria, on the Rezat, 25 miles SW. of Nuremberg. It manufactures furniture, buttons, bricks, &c. The last margrave of Ansbach, of the Hohenzollern line, gave up his possessions in 1791 to Prussia; and in 1807 Napoleon transferred Ansbach to Bavaria. Pop. 18,057.

Ansonia, a borough within the town of Derby, New Haven county, Connecticut, on the Naugatuck River, 2 miles above its confluence with the Housatonic, and 12 W. of New Haven by rail. It has manufactures of iron, brass, and copper goods, clocks, electrical goods, webbing and knit goods, carriages, and hardware. Pop. 13,000.

Anspach. See ANSBACH.

Anstruther, EASTER and WESTER, two contiguous royal burghs on the coast of Fife, 9 miles S. of St Andrews. Fishing and fish-curing are the staple industries, the harbour (1866–77) being at Cellardyke. East Anstruther was the birthplace of Dr Chalmers, Tennant the poet, and Goodsir the anatomist. With the other St Andrews burghs, they return one member to the House of Commons. Joint pop. 1700; or, with Kilrenny, 4500.

Antanànarìvo, or TANÀNARÌVO, the capital of Madagascar, has a population estimated at 100,000. It is situated on a hill, in an undulating district, at an elevation of 5000 feet above the level of the sea, from which it is distant 110 miles.

Antarctic Ocean, the ocean situated about, or within, the Antarctic Circle. The Great Southern Ocean is that part of the ocean which surrounds the world between the latitude of 40° S. and the Antarctic Circle. The northern portions of this band are often called the South Atlantic, South Indian, and South Pacific, while the southern portions are usually called the Antarctic Ocean. The average depth of the continuous ocean which surrounds south polar land is about two miles; it gradually shoals towards Antarctic land, which in some places is met with a short distance within the Antarctic Circle. Only three navigators, Cook, Weddell, and Ross, have crossed the 70th parallel south. The last in 1841 sailed along the coast as far as 70° S., within sight of high mountain ranges, which here terminated in an active volcano, Mount Erebus, 12,000 feet high. His farther progress was stopped by an icy barrier 150 to 200 feet in height, along which he sailed to the east for 300 miles. The depth off this ice-barrier was 260 fathoms, so that it

was just in the condition to generate those large, flat-topped, tabular icebergs which are the characteristic feature of the Antarctic regions. Where the coast is steep and high, there is no true 'ice-barrier,' the ice being only 6 or 10 feet above the sea, extending many miles from the shore. Ross and D'Urville alone have succeeded in setting foot on land within the Antarctic Circle. This land was of volcanic origin; but there is no doubt a large extent of continental land around the South Pole, for the *Challenger* in 1874 dredged up granitites, mica-schists, sandstones, and other continental rocks close to the ice-barrier. Dr Murray estimates the extent of the Antarctic continent at 3,000,000 sq. m. Vegetation and land animals have not been observed on this land. Whales, grampuses, seals, penguins, petrels, albatrosses, and other oceanic birds abound. Diatoms are very abundant in the surface-waters, and their dead frustules form a pure white deposit called *diatom ooze*, about the latitude of 60°, outside the blue muds which surround the continent. Life is abundant in the surface-waters, and at the bottom of the ocean. The mean temperature both of the air and sea, south of 63° S., is even in summer below the freezing-point of sea-water. The fall of rain and snow is estimated as about equal to a rainfall of 30 inches annually. The ice on the Antarctic continent is stated by some writers to have a thickness of several miles, but there is no reliable information on this point. In 1901–4 a series of expeditions added much to our knowledge of Antarctica. See works by Mackinder (1892), Burn-Murdoch (1894), Cook (New York, 1900), Bernacchi (1901), Borchgrevink (1901), Neumayer (Berlin, 1901), Gerlache (Paris, 1902), and Balch (Philadelphia, 1902).

Anteque'ra (the *Antiquaria* of the Romans), a town in the Spanish province of Malaga, on the Guadalhorce, 65 miles W. of Granada by rail. Held by the Moors from 712 to 1410, it retains some portions of a Moorish castle and of the ancient walls. Pop. 31,600.

Antibes (*On°teeb'*: anc. *Antipolis*), a seaport in the French dep. of Alpes Maritimes, 7½ miles S. of Cannes. Founded by a colony of Greeks from Massilia (Marseilles), Antibes in the Austrian War of Succession was severely bombarded by Browne during a three months' siege (1746). Pop. 8950.

Anticosti, a Canadian island in the Gulf of St Lawrence, which it divides into two channels, is 140 miles long, and 30 broad in the centre. The hills in the interior rise to about 600 feet. Anticosti has two good havens, one at Ellice Bay, near the western end, and the other at Fox Bay, in the NW. The climate is severe; the surface an alternation of rocks and swamps. It is visited by fishermen in the summer, but there are hardly any inhabitants save lighthouse-keepers and a few officials.

Antietam (pron. *Antee-tam*), a narrow but deep river in Maryland, U.S., falling into the Potomac 7 miles above Harper's Ferry. On its banks, near Sharpsburg, on 17th September 1862, the Union troops under McClellan defeated the Confederates under Lee, though at a loss of nearly 13,000 men.

Antig'ua, a West India island, the most important of the Leeward Islands, is 28 miles long and 14 wide; in Boggies Hill attains a maximum altitude of 1328 feet; and has an area of 97 sq. m. Antigua was discovered in 1493 by Columbus, who named it after the church of Santa Maria La Antigua in Seville. It was first settled by a few English in 1632, and was declared a British possession by the Treaty of Breda (1667). Antigua is the seat of an Anglican bishop. It has suffered severely from earthquakes—as in 1689, 1843, and 1874—and from hurricanes. Numerous islets, rocks, and shoals border the shore, so that, generally speaking, access is difficult and dangerous. Antigua produces large quantities of sugar, molasses, rum, tamarinds, arrowroot, and cotton. Pop., including Barbuda, a little over 35,000; of St John, the capital, 10,000.

Anti-Lebanon. See LEBANON.

Antilles, a term applied to the whole of the West India Islands (q.v.) except the Bahamas. The Greater Antilles are Cuba, Jamaica, Hayti, and Porto Rico; the others are known as the Lesser Antilles.

An'tioch, the ancient capital of the Greek kings of Syria, and long the chief city in Asia, lies in a fertile and beautiful plain, on the left bank of the river Orontes, 14 miles from the sea. In the time of Antiochus the Great, and under the Roman emperors of the first three centuries, it contained 500,000 inhabitants, and vied in splendour with Rome itself. It was one of the earliest strongholds of Christianity—indeed, it was here that the name *Christians* was first used. Its downfall dates from the 5th century; and the modern *Antakieh*, which forms a portion of Syria, in the province of Aleppo, has a population of only 17,500, mostly Turks employed in silk-culture, eel-fishing, and in the production of corn and oil. It exhibits almost no traces of its former grandeur, except the ruins of the walls built by Justinian, and of a fortress erected by the Crusaders.—ANTIOCH, in Pisidia, founded also by Nicator, was declared a free city by the Romans in the 2d century B.C. It was often visited by St Paul.

Antip'aros (anc. *Oliaros*), one of the middle Cyclades, in the Ægean Sea, close to Paros. It is 13½ sq. m. in area, and has about 700 inhabitants. Rich lead mines were discovered in 1872. Its wonderful stalactite grotto is not alluded to by any classical writer, but has been well known since 1673. At a depth of 918 feet under the entrance, the chief chamber is reached—312 feet long, 98 wide, and 82 high.

Antisana, a volcano of the Andes, in Ecuador, 35 miles SE. of Quito, 19,335 feet high.

Antiva'ri, a seaport on the coast-district assigned to Montenegro by the Treaty of Berlin in 1878. It was formerly Albanian, and is 18 miles NW. of Scutari. Pop. 1500.

Antofagasta, a port in the Chilian province of the same name. Founded in 1870, it owes its rapid rise to the neighbouring saltpetre deposits, and to the rich mines of Caracoles, with which it is connected by railway. It was taken from Bolivia by Chili in the war of 1879. Pop. 20,100.

Antoninus, WALL OF, or GRAHAM'S DYKE, a Roman rampart erected in 140 A.D., during the reign of Antoninus Pius, from Carriden on the Firth of Forth to near Old Kilpatrick on the Firth of Clyde. It was 36 miles long, and followed the earlier line of Agricola's forts (81 A.D.). See Waldie's *Northern Roman Wall* (1883).

Antrim, a maritime county of Ulster, stands second among the Irish counties in population, but in size only ninth. Its greatest length is 57 miles; its greatest breadth, 28; its extent of sea-coast, 90; and its area, 1192 sq. m. Of this,

rather more than three-fourths is in tillage and pasture; and one per cent. under wood. Off the north coast lie Rathlin Isle and the Skerries; and off the east coast, the Maiden Rocks. The east coast is hilly; and from Larne to Fair Head, parallel ranges stretch SW. into the interior, forming valleys opening seaward, called the Glens of Antrim. The interior slopes towards Lough Neagh. The highest eminences are—Trostan, 1810 feet; and Slievemish, or Slemish, 1782. The principal streams are the Bann, from Lough Neagh to the Atlantic; the Main, running parallel to the Bann, but in the reverse direction, into Lough Neagh; and the Bush, flowing north into the Atlantic. Many peat-bogs occur. Between Ballycastle and the mouth of the Bann, the basalt assumes very picturesque forms; and the Giants' Causeway (q.v.) is one of the most perfect examples of columnar basalt in the world. Fine salt-mines occur at Duncrue and Carrickfergus; small coal-fields near Ballycastle and in the interior; and rich beds of iron ore in Glenravel. The soil is mostly light, and the chief crop is oats. There are some linen, cotton, and coarse woollen manufactures. The towns are Lisburn, Ballymena, Ballymoney, Carrickfergus, Larne, and Antrim (pop. 1820). Belfast, most of which was formerly reckoned as in Antrim, is now wholly without the administrative county. County Antrim returns four members to parliament: Belfast borough, four. Pop. (1841) 351,496; (1891) 427,963; (1901, excluding Belfast) 196,090 —over 99,000 Presbyterians, 41,000 Protestant Episcopalians, 40,400 Roman Catholics.

Antwerp (Fr. *Anvers;* Flem. *Antwerpen*, 'on the wharf'), the chief commercial city of Belgium, on the river Scheldt, 52 miles from the sea, and 27 N. of Brussels. It is the Liverpool of the Continent, and the tonnage of vessels entering its port has increased tenfold within thirty years, until it stands at over 6,000,000 tons annually. The trade and manufactures of Antwerp have so extended, that the large dock and quay accommodation having been found too limited, a new quay, 2 miles in length, and docks, constructed at a cost of nearly £4,000,000, were opened in 1885. The chief exports are flax, sugar, iron, woollen goods, metals, glass, and tallow; the chief imports are wheat, petroleum, wool, cotton, coffee, tobacco. The manufactures consist chiefly of sugar, white-lead, cotton goods, lace, linen-thread, sewing-silk, black silk stuffs, starch, and printers' ink. There are also to be mentioned oil-refining, tobacco-manufacture, the cutting of diamonds and other precious stones, and shipbuilding. The chief public institutions are—the Academy of Sciences, Academy of Painting and Sculpture, a Medical and Surgical School, Naval Arsenal, Museum (with specimens of the pictures of Rubens, Vandyck, Titian, and Matsys), Zoological Gardens, the Flemish Theatre, and the Plantin Museum (1876). The six-aisled cathedral (1352–1518), the noblest Gothic structure in Belgium, is 500 feet in length by 250 in breadth, with a roof supported by 125 pillars, and an exquisite spire, 403 feet high, in which hangs a splendid carillon of 99 bells. The interior is enriched by the two greatest of all the pictures of Rubens, the Elevation of, and the Descent from, the Cross. The Church of St James contains the monument of the Rubens family. The Exchange (1531), a fine building, is said to have been Gresham's model of the old London Exchange. It was burnt in 1858, but rebuilt in the same style, and reopened in 1872. The hôtel-de-ville (1565) is a fine building in the Renaissance style. The old fortifications were demolished in 1860, though Alva's famous citadel (1567) stood till 1874; and since 1851 new fortifications have been erected outside the city, with detached forts to the south-east, rendering Antwerp one of the most strongly fortified places in Europe. Pop. (1846) 88,487; (1891) 232,723; (1904) 291,950.

Antwerp in the beginning of the 16th century was the commercial capital of the world. When in 1576 it was seized by the Spanish soldiery, 8000 persons were murdered, and the city-hall and nearly a thousand buildings burnt. This and the assault of the Duke of Parma in 1585, caused Antwerp to sink into decay. From 1794 till 1814, while it was held by the French, Napoleon attempted to make it a great military and commercial centre. The union of Belgium with Holland in 1815 was very favourable to Antwerp. When the revolutionary party gained possession in 1830, the Dutch commandant, General Chassé, retreated to the citadel, and commenced a bombardment, which destroyed the arsenal. In 1832, 50,000 French under Marshal Gérard appeared before Antwerp, to demand the surrender of the citadel; and after its interior had been reduced to ruins by the French artillery, Chassé capitulated. The city was handed over to the Belgians, and since the treaty of 1839, Antwerp has had a singularly prosperous career. French is the business language, but the majority of the inhabitants speak Flemish.

Anupshahr, a town of India, in the United Provinces of Agra and Oudh, on the Ganges, 73 miles SE. of Delhi; pop. 15,000.

Aonlaganj', or **Aounlah**, a town of India, 21 miles SW. of Bareilly; pop. 14,000.

Aosta (anc. *Augusta Prætoria*), a cathedral city of Italy, on the Dora Baltea, 19 miles from the opening of the great St Bernard Pass, and 80 miles NNW. of Turin by rail. St Bernard was archdeacon of Aosta; and here Anselm, archbishop of Canterbury, was born. Near by are the celebrated baths and mines of St Didier. Pop. 7672.

Apatin', a town of Hungary, on the left bank of the Danube, 49 miles SW. of Theresiopol; pop. 13,973.

Ap'eldorn, a town of Holland, 17 miles N. of Arnheim. The Loo, a royal hunting-lodge, beloved of William of Orange, is near. Paper-making is the staple industry. Pop. 26,283.

Ap'ennines (Ital. *Appennini*, Lat. *Mons Apeninus*), a mountain-chain extending 740 miles uninterruptedly throughout the whole length of the Italian peninsula. It belongs to the system of the Alps. The average height of the entire chain is about 4000 feet, which in the north sinks to 3500 feet, and in the Abruzzi rises to 7000 feet. Here, in Monte Corno, the highest peak of the range known as Gran Sasso d'Italia, they reach an elevation of 9574 feet, and in Monte Velino, of 7916 feet. The Apennines are crossed by thirteen principal passes; and seven of these are traversed by railways. The principal chain exhibits, for the most part, a dreary and barren appearance. It looks like a vast wall, with very few projecting peaks to break its dull monotony. Only in the Abruzzi, and above all, in the marble mountains of Carrara and Seravezza, do the bold and magnificent forms of the Alps appear. Where water is plentiful there is no lack of rich pastures and dense forests; but usually only thin grass and wild scrubby bushes cover the stony slopes. The greater number of the forest brooks, with deep rocky ravines, during summer are dry.

Where the mountains dip down to the sea, as at the Riviera of Genoa and the Gulf of Naples, a rich, peculiarly southern vegetation clothes the declivities. There is no region of perpetual snow; but the summits of the Abruzzi and the lofty peaks of Lunigiana are often covered with snow from October far into May.

Apenrade (*Ah-pen-rah'dā*), a Sleswick-Holstein seaport, 66 miles NNW. of Kiel. Pop. 7361.

Apia (*Ah-pee'a*). See SAMOA.

Apol'da, a town of Saxe-Weimar, 9½ miles NE. of Weimar by rail. It has manufactures of hosiery, amongst the most important in Germany, besides dye-works, machine-works, and bell-foundries. Pop. 20,850.

Appalachians, a great mountain-system of North America, nearly parallel with the Atlantic coast, and extending from the Gulf of St Lawrence SSW. to the west central portion of Alabama. Geologically, it is much older than the Western Cordillera, known as the Rocky Mountain system, but it is in the main much later in geologic date than the Laurentian system, which represents it on the north of the St Lawrence. It is the parent of many of the rivers of the Atlantic States; but several large streams break its continuity; and one, the river Hudson, is a tidal channel which carries even sea-going vessels through the range. The Appalachians consist, in the main, of various parallel ranges, separated by wide valleys. Even the low hill-ranges between the mountains and the sea have much of the same parallelism, and the sea-coast has in a marked degree the same general direction and curvature as the mountains themselves; while, far to the NE., the nearly detached peninsula of Nova Scotia and the island of Newfoundland are traversed by ranges exhibiting the same parallelism and the same general direction as are seen in the Appalachian ranges.

Locally, the Appalachians have various names —e.g. in the Gaspé Peninsula, the Shickshock Mountains, the Franconia Mountains of New Hampshire (where Mount Washington attains 6293 feet); the Green Mountains of Vermont are the Hoosic Range in Massachusetts; the Catskills and Shawangunk Mountains; in Pennsylvania and Maryland, the South Mountain or Blue Ridge, which is regarded as identical with the Unaka or Smoky Mountain Ridge of North Carolina and Tennessee; and west of the South Mountain of Pennsylvania the great Alleghany Ridge (q.v.), which often gives name to the whole system.

Nowhere do the Appalachians reach the snow-line. Their highest points occur in North Carolina, where Mitchell's Peak reaches the height of 6688 feet. The principal coal-beds of this chain occur in Pennsylvania to the NNE., and in the other states southward along the mountains to their termination in Alabama, the chief coal-basins being either among the mountains, or to the westward of them. There are beds of anthracite coal on the eastern slopes of the Appalachians, chiefly in Pennsylvania, west of which the coal becomes bituminous, after we have crossed basins of semi-anthracitic and moderately bituminous coal. This coal region is one of the most productive, extensive, and important anywhere known. Of the metals, by far the most important is iron, of which various ores are largely wrought. Gold occurs chiefly to the eastward of the mountains, and is wrought at various points from Virginia to Alabama. Zinc, lead, and other metals are found in this range, which also affords marbles, slates, and a great variety of building-stones.

Appalachico'la, a river of the United States, rising in Georgia, and flowing through Florida into Appalachicola Bay in the Gulf of Mexico. Reckoning from its remotest sources, it is about 400 miles long, being navigable by steamboats for 70 miles up to the junction of the Chattahoochee with the Flint, where the name of Appalachicola is first given.—APPALACHICOLA is also a cotton-shipping seaport at the mouth of this stream; pop. 3500.

Appenzell' (from *Abbatis Cella*), a double canton in the NE. of Switzerland. It is divided into two divisions—Innerroden and Ausserroden; the former of which is peopled by Roman Catholics; the latter by Protestants, and noted for its dense population. The surface is mountainous, especially in the south, where Mount Sentis attains 8220 feet. The chief river is the Sittern. The canton, once dependent on the Abbey of St Gall, won its independence after a struggle, and joined the seven old cantons in 1452. Area, 162 sq. m.; pop. (1900) 68,780, of whom over 55,000 were in Ausserroden. *Appenzell*, the capital, is situated on the Sittern; pop. 4500. The largest town is Herisau (pop. 14,100).

Appin (*Apthane*, 'abbey lands'), a beautiful coast district of Argyllshire, extending along the east shore of Loch Linnhe, 15 miles NNE. of Oban. It is the country of a branch of the Stewarts.

Appleby, the county town of Westmorland, on the Eden, 13 miles SE. of Penrith. There is a castle, first mentioned in 1088, the keep of which, called Cæsar's Tower, is still in tolerable condition. Appleby was disfranchised in 1832, but received a new municipal charter in 1885. Pop. 1776.

Appleton, a city of Wisconsin, U.S., 185 miles N. of Chicago, and 120 miles from Milwaukee by rail. It stands on the Grand Chute Rapids of the Fox River, which, with a descent of 30 feet in 1½ mile, affords immense water-power for flour, paper, and woollen mills. There are also manufactures of machinery. Lawrence University (1847) is a Methodist institution. Pop. (1880) 8005; (1890) 11,869; (1900) 15,085.

Appomattox Courthouse, a village of Virginia, 20 miles E. of Lynchburg. Here Lee, on April 9, 1865, surrendered the army of Northern Virginia, 27,805 men strong, to Grant.

Apsheron, a peninsula on the west coast of the Caspian Sea, belonging to the Russian government of Baku. Its enormous petroleum industry is noticed at Baku (q.v.).

Apt (*Apta Julia*), a cathedral town in the French dep. of Vaucluse, 30 miles E. of Avignon; pop. 4378.

Apu'lia (modern *Puglia*), the south-eastern part of Italy as far as the promontory of Leuca, comprising the three provinces of Bari, Foggia, and Lecce, with an area of 8540 sq. m., and a pop. of 2,054,000.

Apu're, a navigable river of Venezuela, which rises near the western boundary among the Eastern Cordillera, and flows nearly 1000 miles eastward to the Orinoco.

Apu'rimac, a river of Peru, also called *Tambo*, which, after a northward course of 500 miles, helps to form the Ucayali, and finally joins the Amazon. It gives name to a province with an area of 8200 sq. m., and a pop. of 180,000.

Aq'uila, the capital of an Italian province, on the Alterno, near the loftiest of the Apennines, 64 miles SE. of Terni by rail. It was built by the Emperor Frederick II. from the ruins of the ancient *Amiternum*, a town of the Sabines, and birthplace of Sallust the historian. In 1703 it was almost destroyed by an earthquake, in which 2000 persons perished. It is a bishop's see, and a busy place, with a large trade in saffron. Pop. 24,720.

Aquilei'a (also *Aglar*), a decayed town of Austria, at the head of the Adriatic, 22 miles NW. of Trieste; pop. 1000.

Aquita'nia, the Latin name of a part of Gaul, originally including the country between the Pyrenees and the Garonne, peopled by Iberian tribes and by Celtic settlers.

Arabgir' (anc. *Anabrace*), a town of Asiatic Turkey, in the province of Sivas, not far from the Euphrates, and on the caravan road from Aleppo to Trebizond. Pop. 30,000, one-fourth Armenians, the rest Turks.

Arabia, the great south-western peninsula of Asia. Its greatest length from NW. to SE. is about 1800 miles; its mean breadth, about 600; its area, 1,230,000 sq. m.; and its population conjectured to be 5,000,000. It is bounded on the N. by the highlands of Syria and the plains of Mesopotamia; on the E., by the Persian Gulf and the Gulf of Omân; on the S., by the Arabian Sea; and on the W., by the Red Sea and the Suez Canal. Midway between Mecca and Medina runs the tropic of Cancer. Ptolemy is supposed to be the author of the famous threefold division into *Arabia Petræa*, in the NW.; *Arabia Felix*, to the south of Mecca; and *Arabia Deserta*, in the interior. Modern divisions are: the *Sinaitic Peninsula* (see SINAI), between the Gulfs of Suez and Akaba; the *Hedjâz* ('the Barrier'), the larger and northern strip to the east of the Red Sea; *Yemen*, the southern and smaller strip to the east of the Red Sea; *Hadramaut*, the region along the southern coast; *Omân*, the extreme south-eastern end of the peninsula; *El-Hasa*, along the Persian Gulf; *Nejd*, the central highlands of Arabia.

In shape, Arabia is an irregular parallelogram, broadest at the southern end; in character, it is mainly African. The vast central plateau rises from a height of 2500 feet in the N. to 7000 feet in the SW., and is bounded by western and southern mountain chains, the former attaining, to the south of Mecca, a height of 8500 feet. Between the mountains and the sea is a low hot strip of land, partially fertile, of varying width. There is a desert in the north of the interior, the mountainous country of Nejd near the very centre, and to the south of Nejd another very sterile sandy desert (Dahna). Hedjâz and Yemen extend from the Red Sea indefinitely towards the interior, and consist partly of the *Tehâma*, or low country, along the sea, and partly of the mountain district beyond. Mecca and Medina, with their seaports Jiddah and Yembo, are in Hedjâz. Yemen is on the whole well watered, has rich and fertile valleys, and contains one-fifth of the whole population of Arabia. Yemen possesses two very important commercial towns, Mocha and Loheia, situated on the coast of the Red Sea. Hadramaut resembles the Hedjâz in character. Omân is mainly mountainous, is partly very fertile, and possesses the good harbour of Muscat. It has considerable trade, and some manufactures of cotton, silk, and arms. Hasa is comparatively level and fertile. Large portions of Arabia are perfectly arid; nowhere does a river reach the sea all the year round; but the more fertile portions are so extensive as to constitute two-thirds of the total area: one-third of the whole may be accounted desert and uninhabitable.

Politically, Hedjâz, Yemen, and El-Hasa are really three Turkish provinces; the Sinaitic Peninsula is in Egyptian hands; England exercises much influence in Hadramaut through her possession of Aden; the Sultan of Omân is independent, and in alliance with England; Nejd, the seat of the once powerful Wahâbi State, is independent. The Emîr of Shomer or Shammar pays a small annual tribute to the Sherîf of Mecca, in recognition of Turkish supremacy.

The Arab is of medium stature, muscular make, and brown complexion. Independence looks out of his glowing eyes; by nature he is quick, sharp-witted, imaginative, and passionately fond of poetry. Courage, temperance, hospitality, and good faith are his leading virtues; but these are often marred by a spirit of rapacity and sanguinary revenge. His wife or wives do the work, keep the house, and educate the children. Arabian life is either *nomadic* or *settled*. The wandering tribes, or Bedouin, who have, however, their allotted winter and summer camping-grounds, and a strong attachment to their own mode of life, entertain notions of the rights of property differing seriously from those regulating the West; yet even their most marauding tribes are not without a traditional code of law and honour, the only law recognised among them; the enforcing of it is left to every tribesman. The settled tribes, styled Hadesi and Fellahs, are despised by the Bedouin, who scorn to intermarry even with the few artisans that accompany every tribe. The Bedouin are several times outnumbered by the settled population, and therefore must not be regarded as normal Arabs, who are adventurous, commercial, and willing to become sailors. Yet mountain and desert barriers and patriarchal anarchy make Arabia the 'anti-industrial centre of the world.' The export of coffee, dates, figs, spices, and drugs, though still considerable, is said to be only a shadow of the old commerce which existed before the circumnavigation of Africa. The government is patriarchal, and the chief men of the various tribes have the title of Emîr, Sheikh, or, in a religious sense, Imâm.

Before the rise of Mohammed the history of the peninsula is obscure and confused; one bond of union amongst the tribes, constantly at war with each other, was the Kâaba, a small rude temple of unknown antiquity, where the idols of the tribes, over 360 in number, were kept. The grand epoch in Arabian history, the Hegira (Hedjra), is Mohammed's flight in 622 A.D. from Mecca to Medina, where he gathered his first body of adherents, and commenced actively the establishment of his doctrines by the sword and otherwise. Now for the first time the Arabian tribes became united under one sceptre, and were powerful enough to erect new empires in three quarters of the world—in Palestine, Mesopotamia, and Persia; in Egypt and the north of Africa; and in Spain. The dominion of the Arabs, from the time of Mohammed till the fall of the califate of Bagdad in 1258, or even to the expulsion of the Moors from Spain, is an important period in the history of civilisation. The Arabian literature became the vehicle of a characteristic culture, and Arabic scholars were the main cultivators of philosophy and science—including mathematics, astronomy, medicine, &c.—in the middle ages.

But the movements that had so much effect on the destinies of other nations left Arabia itself in a neglected and exhausted condition, and the peninsula was broken up into several distinct and unimportant principalities. In the 16th and 17th centuries the Turks, Persians, Dutch, and Portuguese took possession of parts of the country. The native orthodox Moslem Wahâbi empire was founded in Central Arabia about 1760, shattered in 1812 by Mehemet Ali of Egypt, and again restored. And now the country is politically distributed as above described.

See works by Pococke, Niebuhr, Burckhardt, Burton, Palgrave, Welsted, and Doughty and Lady Anne Blunt.

Arabian Gulf. See RED SEA.

Arabian Sea, that part of the Indian Ocean which lies between India on the east and Arabia on the west. Its two great arms are the Red Sea proper and the Persian Gulf.

Aracan. See ARAKAN.

Arad, a town of Hungary, on the Maros, an affluent of the Theiss, 95 miles SE. of Buda-Pesth, and 74 E. of Szegedin by rail. It carries on a large trade in corn, spirits, wine, and tobacco, and is one of the greatest cattle-markets in Hungary. Pop. 56,260.—NEW ARAD, across the river, has 5000 inhabitants.

Ar'afat, MOUNT, a granite hill (260 feet), 15 miles SE. of Mecca, visited by the faithful, and believed to be the spot where Adam again met Eve, after a punitive separation of 200 years.

Ar'agon, once a kingdom, now divided into the three provinces of Saragossa, Huesca, and Teruel, in the NE. of Spain. Area, 17,980 sq. m.; population, 913,000. It is bounded on the north by the Pyrenees, and watered by the Ebro. Aragon was conquered by the Moors in the beginning of the 8th century, recovered from them and united with Catalonia (1137), and was united with Castile through the marriage of Ferdinand of Aragon with Isabella, heiress of Castile (1469). The chief towns are Saragossa, Calatayud, Huesca, and Teruel.

Arago'na, a town of Sicily, 6 miles NNE. of Girgenti by rail. Pop. 12,000.

Araguay', a large river of Brazil, flowing 1000 miles northward, till, at San Joao, it joins the Tocantins, which again, after a northerly course of 300 miles more, mingles its estuary with that of the Amazon.

Ar'akan, long the most northerly division of British Burma, is a narrow strip of territory on the Bay of Bengal. Its length is 400 miles, its breadth varies from 90 miles in the north to about 15; and the area is 14,526 sq. m. A range of mountains, nearly parallel with the line of coast, the highest point 7000 feet above sea-level, separates Arakan from Pegu and Upper Burma. Rice is the chief article of exportation; the others are cotton, tobacco, sugar, hemp, indigo, betel-nuts, and timber, especially teak. The imports consist mainly of British manufactures. Pop. 787,518.

Aral, LAKE, separated by the plateau of Ust-Urt from the Caspian Sea, is the largest lake in the steppes of Asia. It has an area of about 24,000 sq. m.; is fed by the Jaxartes and Oxus (the present Sir-Daria and Amu-Daria); has no outlet; and is generally shallow, its only deep water (225 feet) being on the west coast. Its level is 117 feet above that of the Caspian, which is 84 feet below the surface of the Black Sea. Like other lakes which are drained only by evaporation, it is brackish. Fish, including sturgeon, carp, and herring, are abundant. The lake is dotted with multitudes of islands and islets; and navigation is difficult. The area now occupied by the Sea of Aral has been dry land twice within historical times—the Jaxartes and the Oxus then running south of the Sea of Aral to the Caspian. This was the case during the Greco-Roman period, and again during the 13th and 14th centuries A.D.

Aran, SOUTH ISLES OF, Ireland, are three small islands lying NE. and SW. across the entrance to Galway Bay. Total area, 11,287 acres. They rise to a height of from 200 to 354 feet on the west side, ending in cliffs facing the Atlantic. Most of the land is rudely cultivated. Inishmore, the chief island, is still known as *Aran-na-naomh*, or 'Aran of the Saints.' Pop. 3100. See Burke's *South Isles of Aran* (1887).

Aranjuez (*Â-rân-hoo-ayth'*; Lat. *Ara Jovis*), a town of Spain, on the Tagus, 30 miles SSE. of Madrid by rail. Its palace was long a favourite spring-resort of the royal family, from Charles V. downwards. Pop. 12,700.

Ar'arat, a general old name for the district through which the Aras flows, and never the name by which the Mount of Ararat has been known to the people around it. Associated, however, as the mountains of this district are in Genesis, viii. 4, with the landing-place of the ark after the flood, the name has been, naturally enough, appropriated to the highest peak, which in Armenian is called Massis or Massis Ljarn; in Tartar and Turkish, Aghri-Dagh, or curved mountain; and in Persian, Koh-i-Nuh, or Noah's mountain. The twin mountains of Ararat form an elliptical mass, 25 miles long, by 13 broad, and rising, Great Ararat to 16,969 feet, Little Ararat to 12,840 feet above the sea-level; the two summits 7 miles apart. In 1828 the Czar Nicholas annexed the territory around Erivan; and Little Ararat is now the meeting points of the Russian, Turkish, and Persian empires. On the 20th of June 1840, dreadful shocks of earthquake were felt, and great masses of the mountain were thrown into the plain. Tournefort made a partial ascent of the mountain in 1700; and several ascents have been made since 1829. See Bryce's *Transcaucasia and Ararat* (2d ed. 1878).

Aras (anc. *Araxes*), the chief river of Armenia, formed by the junction of the Bingol-Su and the Kaleh-Su, and itself, after a course of 500 miles, joining the Kur (anc. *Cyrus*), which descends from the Caucasus through Georgia, about 75 miles from its mouth. Their united waters turn suddenly to the south, and fall by three mouths into the Caspian.

Araucania, the country of the Araucos or Araucanian Indians, in the south of Chili. The Chilian province of Arauco, lying between the Andes and the Pacific Ocean, and bounded on the north by Concepcion, on the south by Valdivia, was formed in 1875, with an area of 8100 sq. m., and a pop. (1903) of 71,500. A large part of Arauco and the more southerly province of Valdivia is occupied by Indians, who have mostly submitted to Chilian authority. The Araucanians are a fierce and warlike people, now numbering more than 50,000.

Arau're, a town of Venezuela, 60 miles ENE. of Truxillo. Pop. 5000.

Aravalli, a range of mountains in Western India, extending 300 miles north-eastward through

Rajputana. The highest summit is Abu (q.v.), 5650 feet.

Arbe'la, now Erbil or Arbil, a small town of Assyria, east from Mosul, gave name to Alexander's final defeat of Darius, 331 B.C.

Arbigland, an estate, the birthplace of Paul Jones, on the coast of Kirkcudbrightshire, 13 miles S. of Dumfries.

Arbirlot, a Forfarshire parish, 3 miles W. by S. of Arbroath. Archbishop Gladstanes and Dr Guthrie were ministers.

Arbo'ga, a town in Sweden, on the small river Arboga, by which, with the aid of a canal, the lakes Hielmar and Mälar are united, 101 miles WNW. of Stockholm by rail. Pop. 5823.

Arbois, a town in the French dep. of Jura, 7 miles NE. of Poligny by rail. Pop. 4040.

Arbroath', or **Aberbroth'ock**, a seaport of Forfarshire, at the mouth of the Brothock Burn, 17 miles ENE. of Dundee. Here in 1178 William the Lion founded a Tyronensian abbey in which he was buried (1214), and which was destroyed by the Reformers in 1560. The picturesque ruins of its cruciform church, which measured 276 by 160 feet, present a noble west doorway and a rose-window, 'the round O of Arbroath.' The chief industries are flax-spinning, engineering, and the manufacture of boots, sail-cloth, and linen fabrics. The new harbour, begun in 1841, admits vessels of 400 tons; the old harbour was converted into a wet-dock (1871–77). The chief exports are grain, potatoes, fish, and paving-flags; the chief imports are coal, flax, hemp, jute, and hides. Arbroath is a royal burgh, and with Montrose, &c., returns one member. Arbroath is the 'Fairport' of Scott's *Antiquary*. Pop. (1831) 13,795; (1901) 22,546. See works by Miller (1860), Hay (1876), and J. Adam (1886).

Arbuthnott, a Kincardineshire parish, 2½ miles WNW. of Bervie. Dr Arbuthnott was a native.

Arcachon (*Ar'ca-shon'*), a bathing-place dating from 1854, in the French dep. of Gironde, 34 miles SW. of Bordeaux by rail. The fine broad sands are admirably adapted for bathing; and the place is sheltered by sand-hills, covered with extensive pine-woods. The climate is always temperate, and the rainfall is but 32 inches. Scientific oyster-culture is practised here on a large scale. Pop. 10,300.

Arcadia, the central, mountainous part of the Peloponnesus (or Morea) in Greece, treated in poetry as the home of primitive simplicity, peace, and innocence.

Archaig, a loch of Lochaber, Inverness-shire, 10 miles N. of Fort William. It is 12 miles long, and sends off the Archaig River 1¼ mile to Loch Lochy.

Archangel, the chief city of a Russian government, 40 miles above the junction of the Dwina with the White Sea. It is the seat of an archbishop, and the chief commercial city for the north of Russia and Siberia, and is frequented by much shipping—especially British—from June to October, the port being clear of ice only during that period. The harbour is a mile below the town, at the island of Solombaly; and 12 miles below are a government dockyard and merchants' warehouses. The chief articles of traffic are fish, flax, oats, linseed, tar, pitch, rosin, train-oil, skins, furs, timber, wax, iron, tallow, bristles, caviare. The manufactures include cordage, canvas, linen, leather, beer, and sugar. The town, which owes its name to a monastery of St Michael, and which is connected by river and canal with a great part of European Russia, is the oldest seaport in the empire, dating its rise from a visit paid by the English seaman, Chancellor, in 1553. Pop. 19,540.—The government has an area of 331,505 sq. m., and a pop. of 350,000.

Archipel'ago, an Italian coinage, first met with in 1268, and signifying 'the chief sea,' was applied originally to that part of the Mediterranean which separates Greece from Asia (the Ægean Sea of the ancients); but is now extended to any sea, like it, thickly interspersed with islands, or rather to the group of islands themselves. All archipelagoes fall naturally into two groups, the oceanic and the continental. The islands in the Greek Archipelago consist principally of two groups, called Cyclades and Sporades; the first from their *encircling* the sacred island of Delos, the second from their being *scattered* in a wavy line. The former lie to the east of Southern Greece, while the latter skirt the west of Asia Minor. The numerous islands which stud this sea range in size from the merest barren rocks to Crete, with an area of 3326 sq. m. Most are of volcanic origin, with high bluffs rising abruptly from the sea. Of the Cyclades, all belonging to Greece, the principal are: Syra, Delos, Tenos, Andros, Cythnos, Thera, Naxos, Melos, and Paros. The chief islands of the Sporades are; Carpathos, Rhodes, Cos, Patmos, Icaria, Samos, Chios, Lesbos, Lemnos, Imbros, Samothrace, and Psyra. These all belong to Turkey, and constitute a separate vilayet of the empire, except Samos, which is autonomous, and tributary only; but the following, off Eubœa (Negropont), and many smaller islands, belong to Greece: Scyros, Icos, Scopelos, and Sciathos.

Arcis-sur-Aube (*Ar'see-sür-Ob*), a town of 2841 inhabitants, in the French dep. of Aube, on the navigable Aube, 22 miles N. of Troyes by rail. It was the birthplace of Danton, and near it the allies defeated Napoleon, March 20–21, 1814.

Ar'cole, a village on the left bank of the Adige, in Northern Italy, 15 miles ESE. of Verona. Here Napoleon defeated the Austrians, 15–17th November 1796.

Arcos de la Fronte'ra, a town on the Guadalete, in the Spanish province of Cadiz, 20 miles ENE. of Xeres. It was so called from its standing on the frontiers of the old Moorish kingdom of Granada. Pop. 16,910.

Arcot (*Aru-Kadu*, 'six deserts'), a city of British India, in the presidency of Madras, on the Palar, 5 miles from Arcot railway station, and 65 WSW. of Madras. In 1751 Clive captured Arcot; and having taken it, was in turn besieged for seven weeks. Pop. 12,000.

Arctic Ocean. The Arctic Ocean lies to the north of Europe, Asia, and North America, and surrounds the North Pole; it is usually defined as the water area within the Arctic Circle. Physiographically, the Norwegian Sea and Greenland Sea, situated between Norway and Greenland, belong to the same basin as the Arctic Ocean. If the Arctic Ocean be regarded as lying wholly within the Arctic Circle, then it is almost land-locked between that circle and the parallel of 70° N. It communicates with the Pacific by Behring Strait, and with the Atlantic through Davis Strait and the wide sea between Norway and Greenland. The area of the ocean is about 5,500,000 sq. m., and into it there drain about 8,600,000 sq. m. of land. The coasts of Europe and Asia are low, and have several deep indenta-

tions, the principal being the White Sea and Gulf of Obi. The shores of North America are skirted by a most irregular assemblage of islands, forming numerous gulfs, bays, and channels. The principal rivers from Asia are the Lena, Yenesei, and Obi; from Europe, the Onega, Dwina, and Petchora; from America, the Mackenzie. The Arctic highlands are covered with an enormous depth of snow and ice. In some places this results in the formation of great glaciers, one of the most remarkable of which is the Humboldt Glacier, in 79° N. lat., on the west coast of Greenland. There are, however, no large, flat-topped tabular icebergs, like those of the southern hemisphere, within the Arctic Ocean; and this of itself is good evidence that there is no expanse of land towards the North Pole. The whole ocean is covered by immense ice-fields from 5 to 50 feet in thickness. During winter these are bound together by the severe frost, but these continuous masses break up during the summer months into floes and floe-bergs. Sometimes vast spaces of water and long lanes are formed between the floes and ice-fields, and these have, doubtless, given rise to the notions regarding an open Polar Sea which at one time prevailed. When these great floating ice-fields come together, the margins where they collide are piled up on each other, and thus is produced the well-known hummocky ice-floes. When this hummocky ice is jammed against a shallow shore, and becomes fixed for long periods of time, the appearances are produced to which Nares gave the name of 'Palæocrystic Sea.' In the more open parts of the ocean the ice is, however, always in motion. Immense quantities of field and hummocky ice pass down each year between Spitzbergen and Greenland, and Greenland and Iceland. Parry reached a latitude of 82° 45′, Markham reached 83° 20′, and Lockwood (of Greely's expedition, 1882) 83° 24′, the most northerly point yet attained. In 1850 M'Clure entered Behring Strait, and brought his crew home by Davis Strait, thus discovering the *North-west Passage*. In 1878 and 1879 Nordenskiöld sailed from the Atlantic to the Pacific along the northern shores of Europe and Asia, thus discovering the *North-east Passage*. In 1893 Nansen set forth on his novel and adventurous expedition; hoping that his ship would be carried by the current, after being frozen in the ice, from the shores of Asia across or near the North Pole, and ultimately out into the open sea again off the coasts of Greenland. The ocean appears to be shallow to the north of Europe and Asia, the depth 500 miles to the north of the Lena being only 38 fathoms; but between Spitzbergen and the north of Greenland there is a deep opening into the frozen sea, where the depth is 2500 fathoms. Whales, seals, and walruses are now a much less plentiful source of wealth than they used to be. In winter the temperature of the air is sometimes as low as − 47° F., and in summer is usually a little above the freezing-point.

See books on Arctic exploration or special expeditions by Kane (1853), M'Clintock (1859), Blake (1874), Markham (1874, 1878, and 1881), Payer (1876), Nares (1878), Nordenskiöld (1881), De Long (1882), Gilder (1883), Greely (1886), Nansen (1897), Peary (1898), and Dittmar (1901).

Ardahan, a village of about 300 houses in the portion of Turkish Armenia ceded in 1878 to Russia, 35 miles NW. of Kars.

Ardalân, a province in the west of Persia, embracing the basin of the Shirwan Rûd. Area, 6000 sq. m.; pop. 150,000. Capital, Kermanshah (q.v.).

Ardchattan, an Argyllshire parish on Loch Etive, with a ruined priory (1231).

Ardebil, a town of Persia, 110 miles E. of Tabriz; pop. 16,000.

Ardèche, a mountainous dep. in the south of France, takes its name from a tributary of the Rhone, and includes part of ancient Languedoc. In the NW. of the dep., the Cevennes culminate in the volcanic Mont-Mezène (5752 feet). Iron, coal, antimony, lead, marble, and gypsum are wrought. Area, 2136 sq. m.; pop. 350,000. The capital is Privas.

Ardee', a town in the west of County Louth, Ireland, on the river Dee, 12 miles inland. The ancient castle, built about the year 1200, is used as the town-house; and there is a handsome convent. Pop. 1880.

Ardennes, an extensive hill-country and forest, occupying the SE. corner of Belgium, between the Moselle and the Meuse, but extending also into France and Rhenish Prussia. The average height of the hills is less than 1600 feet; but in the east they attain 2100. The *Arduenna Silva* of the Romans extended over a still wider area. See a work by Lindley (1887).—Shakespeare's Forest of Arden is a district in Warwickshire, extending from the Avon to near Birmingham.

Ardennes, a French dep. bordering on Belgium. Mézières is the capital, but Sedan is the chief town. Area, 2020 sq. m.; pop. 314,923.

Ardglass, a coast-town of County Down, 6 miles SSE. of Downpatrick. Pop. 504.

Ardlam'ont Point, Argyllshire, at the W. entrance to the Kyles of Bute. Ardlamont House, the old seat of the Lamonts, became famous through a 'not proven' murder trial (1893).

Ardmore', a watering-place in County Waterford, 7 miles ENE. of Youghal.

Ardnamurchan Point, a rugged headland of Argyllshire, the most westerly point of the mainland, with a castle-like lighthouse (1849).

Ardoch, Perthshire, 12 miles NNE. of Stirling, has a Roman camp, the most entire in Britain.

Ardoye, a town of Belgium, 17 miles S. of Bruges; pop. 6082.

Ardrish'aig, a seaport of Argyllshire, at the entrance of the Crinan Canal, 2 miles SSW. of Lochgilphead. Pop. 1258.

Ardross'an, a seaport and watering-place in Ayrshire, 1 mile WNW. of Saltcoats, and 32 miles SW. of Glasgow by rail. It dates from 1806, and the harbour is one of the safest and most accessible on the west coast of Scotland. A new dock was formed in 1887–92. The chief exports are coal and pig-iron. On a hill above the town stands a fragment of Ardrossan Castle, said to have been surprised by Wallace. Pop. (1851) 2071; (1891) 5294; (1901) 5950.

Ardvreck Castle. See ASSYNT.

Areci'bo, a town on the north coast of the Spanish West Indian island of Porto Rico, 45 miles W. of San Juan. Pop. 10,000.

Arenberg (*Aremberg*), from 1644 till 1820 a small sovereign duchy of Germany, lying between Jülich and Cologne; now part of the district of Coblenz, Rhenish Prussia.

Ar'endal, a town of Norway, near the mouth of the Nidelf in the bay of Christiania. It is built partly on piles, partly on rock, and has been called 'Little Venice.' Its bay forms an excellent harbour. Pop. 11,150.

Arequipa (*Ar-e-kee'pâ*), a name given to a moun-

tain in the west Cordillera of the Peruvian Andes, and then to a city at its foot, and to the southern dep. of Peru. The mountain, also called Mitsi, is volcanic, and has a height of 18,500 feet. Its neighbourhood is subject to earthquakes. The city, in a rich valley, 7700 feet above the sea, is the third largest in Peru, with 35,000 inhabitants. The dep. has an area of 27,744 sq. m., and a pop. of 260,282.

Arezzo (anc. *Arretium*), the chief city of an Italian province, near the confluence of the Chiana with the Arno, 38 miles ESE. of Florence. The Piazza Grande, built by Vasari, is remarkable; and the Gothic cathedral (begun 1277) has a splendid marble altar by Pisano. The city produces silk, and manufactures cloth, combs, and pottery. Natives were Petrarch, the poet Aretino, the painter Spinello Aretino; Guido of Arezzo, inventor of the musical scale; the botanist Cesalpino; Pope Julius III.; and Vasari. Pop. 15,816.

Argaum', a village in Berar, India, between Ellichpur and Aurungabad. Near it, on 28th November 1803, two months after Assaye, Wellesley again defeated the Mahrattas.

Argenta (*Ar-jen'ta*), a town of Central Italy, 21 miles SE. of Ferrara by rail; pop. 3000.

Argentan (*Ar-zhon^{g}-tan^{g}*), a Norman town in the French dep. of Orne, on the river Orne, 42 miles SSE. of Caen by rail; pop. 5728.

Argenteuil (*Ar-zhon^{g}-tuh'yee^{l}*), a town in the French dep. of Seine-et-Oise, on the Seine, 6 m. NW. of Paris. Its ruined priory was founded in 656, and was by Charlemagne turned into a nunnery, of which Heloise became abbess. Pop. 15,799.

Argentine Republic, or ARGENTINA, a federal republic of South America, taking its name from the river La Plata ('River of Silver'). It has an area of 1,125,086 sq. m., including the unsettled territories on the north and the south, but the organised and settled provinces occupy less than one-half this area. The whole country is more than ten times larger than Great Britain and Ireland taken together. The republic is made up of fourteen provinces and a number of territories. On the west, the Andes divide this republic from Chili; Bolivia bounds the country on the north, while Paraguay, Brazil, Uruguay, and the Atlantic Ocean form the eastern limit. The great island-group of Fuegia, on the south, belongs partly to this republic and partly to Chili.

Except for the sub-Andean foot-hills, and a few other local and unimportant hilly or mountainous tracts, nearly all the country consists of vast plains or pampas. The northern plain region (the Chaco) is in part densely wooded; but most of the Pampas country is open, presenting wide ranges of treeless pasture, varied by patches of huge thistles and other coarse plants. In the Patagonian region there are extensive districts completely covered with stones and shingle, interspersed with clumps of thorny brushwood, and having in the hollows many strongly saline ponds or lakes.

The climate in the extreme north is very hot, for it lies north of the tropic of Capricorn. The more remote southern territories have an extremely bleak, windy, and disagreeable climate, but are not really so cold as might be expected from their relatively high latitude. But the country in general enjoys an equable, temperate, and healthful climate. The people of the country are mostly Spanish in their language and descent, although there are many Italians, French, and other European immigrants. The Gauchos, or herdsmen of the plains, are a hardy and spirited, but ignorant race, often of partial Indian descent. Some of the Indians of the remote districts have become skilled in the rearing of flocks and herds. Agriculture has of late been rapidly extended. Wheat, maize, flax, and linseed are exported; but the chief staples of export are skins, hides, hair, bones, bone-ashes, horns, phosphorus, ostrich-feathers, wool, tallow, dried and salt beef, beef-extract, fresh meat (frozen), and live animals. The greater part of the republic is well watered and highly fertile, but there are extensive regions of waste land. Sugar-culture thrives in the NW. and north. Wines, spirits, and dried fruits are extensively produced; a valuable product of the north is *maté*, or Paraguay tea. The rivers Paraná and Uruguay, with their large tributaries, are important channels of trade. The mineral resources of the country are comparatively undeveloped. The principal seaport is Buenos Ayres, the capital and largest city. Among the other large towns are Cordoba, Rosario, La Plata, Mendoza, Tucuman, Corrientes, Salta, and Santa Fé. The commerce of the country (imports £25,000,000; exports £36,000,000) is mainly with Great Britain, Germany, the United States, and France.

The population of the country in 1869 was 1,736,922; in 1902 it was officially estimated at 5,025,000 (4·5 to the sq. m.), of whom 500,000 were of Italian birth, 200,000 Spanish (very many of them Basques), 95,000 French, 22,000 English, 18,000 German, and 15,000 Swiss. Much of the increase is due to immigration (from 60,000 to 90,000 annually). The religion is Roman Catholic. The government is closely modelled upon that of the United States. In 1892 the length of railway lines open for traffic was 7140 miles, with a projected extension across the Andes to meet the Chilian railways. The river La Plata was visited by the Spaniards in 1516, and the country was colonised in 1535. In 1810 the colonists founded a local provisional government. A sanguinary war for independence followed, which did not cease till 1824. Spain acknowledged the independence of the country in 1842. Since 1890 financial troubles and political turmoil have seriously injured the well-being of what was long the best governed and most prosperous of South American states.

See Mulhall, *Handbook of the River Plate* (1884); M. F. Paz Soldan, *Geografia Argentina* (1885); Lady F. Dixie, *Across Patagonia* (1880); Rumbold, *The Great Silver River* (2d ed. 1890); Turner, *Argentina and the Argentines* (1892); Hudson, *The Naturalist in La Plata;* and the recent British and American *Consular Reports.*

Ar'gölis, the north-eastern peninsula of the Morea of Greece, lying between the Bays of Nauplia and Ægina. Together with Corinth, it forms one of the thirteen provinces of the kingdom of Greece, with an area of 1442 sq. m., and a pop. of 160,000. Its capital is Nauplia.

Argos'toli, a seaport of the Ionian Islands, the capital of Cephalonia, is the seat of a Greek bishop, and has a good harbour. It was almost destroyed by earthquake in 1867. Near it are the 'sea-mills of Argostoli,' two holes in the rocky coast, into which the sea pours with a force sufficient to drive two mills. Pop. 9871.

Argyll'shire, a county in the west of Scotland. Its greatest length is 115 miles; its greatest breadth, 55; and its extent of coast-line as much as 2289 miles, owing to the numerous sea-lochs. Next to Inverness, it is the largest county in Scotland, its area being 3213 sq. m., of which

623 belong to the islands. The chief islands are Mull, Islay, Jura, Tyree, Coll, Lismore, and Colonsay, with Iona and Staffa. The chief peaks are Bidean nam Bian (3766 feet) and Ben Cruachan (3689); the sea-lochs, Lochs Moidart, Sunart, Linnhe (branching off into Lochs Leven and Eil), Fyne, and Long; the streams are the Orchy and Awe; the fresh-water lakes are Lochs Awe and Lydoch. Lead occurs at Strontian (where the mineral Strontianite was discovered), at Tyndrum, and in Islay and Coll; roofing-slates in Easdale and Ballachulish; coal near Campbeltown; fine marble in Tyree, &c.; and excellent granite near Inveraray. The total percentage of cultivated area is only 5·7. Sheep and cattle rearing is the chief occupation. Whisky is manufactured in Campbeltown and Islay. Towns and villages are Inveraray, Campbeltown, Oban, Dunoon, Lochgilphead, Tarbert, and Tobermory. The county returns one member to parliament. Pop. (1831) 100,973; (1901) 65,849—34,428 Gaelic-speaking.

Argyrokastron (the Turkish *Ergeri*), a town of Albania, in the province of Janina, near the Dryno, an affluent of the Viosa. Pop. 9000.

Aria'no (*Arianum*), a cathedral city of Italy, 2800 feet above the sea, and 84 miles NE. of Naples by rail. Pop. 17,522.

Ari'ca, a seaport of Tacna, the most southerly department of Peru. It was stormed and taken by the Chilians in 1880, was retained (with Tacna) by treaty for ten years, and was still in Chilian hands in 1905. Pop. (once 30,000) 4000.

Arichat (*A-ree-shat'*), a seaport on the south side of Isle Madame, Nova Scotia, with a harbour for the largest vessels. It is the see of a Roman Catholic bishop. Pop. 2000.

Ariége, a dep. in the south of France, lying along the northern slopes of the Pyrenees. Area, 1890 sq. m.; pop. (decreasing) 200,000.—The river Ariége rises in the Pyrenees, and flows 93 miles to the Garonne near Toulouse.

Arin'os, a river in the south-west of Brazil, which, after a north-west course of 700 miles, joins the Tapajos, itself an affluent of the Amazon.

Arizona, till 1906 a territory of the United States, bounded N. by Utah, E. by New Mexico, S. by the republic of Mexico (Sonora), and W. by California and Nevada. Its western boundary is mostly formed by the Colorado of the West. This river traverses the NW. part of Arizona in a deep and narrow water-worn channel (the Grand Cañon), more than 300 miles long, and nowhere less than a mile below the surface of the surrounding country. Arizona had an area of 112,920 sq. m.; it was thus nearly as large as Italy. It is in general a region of high plateaus, traversed by various mountain-ranges, presenting abundant evidence of not remote volcanic action. In the SW. the country has a desert character, and in all parts the rainfall is decidedly limited—14·21 inches annually at Fort Defiance. In various parts there are extensive lava-beds. The whole region lies in the drainage basin of the Colorado, the chief affluents being the Gila, the Bill Williams, and the Colorado Chiquito. The water-supply over large areas of Arizona is mainly derived from deep natural wells and 'water-holes.' It is believed that fully 10,000,000 acres of ground might be profitably irrigated. The country is in general extremely healthful; but in the SW. the summer heat is excessive, and malarial fevers are not unknown upon the bottom-lands of the Lower Colorado. Maize, barley, and wheat are the leading products. Arizona is an important seat of gold and silver mining. Copper is also mined and smelted very largely. Coal has been obtained. Rock-salt, lead, and other valuable mineral deposits are found in almost every part of the country. The principal towns are Phœnix, the capital, and Tucson. Some interesting old Indian towns, or pueblos (Moquis), still remain, with their remarkable native semi-civilisation. This region was first visited by Spaniards in 1570. After 1821 the country was a part of Mexico until 1848, when most of it passed to the United States, the transference being completed in 1853 by the 'Gadsden Purchase.' The territory was organised in 1863. In 1870 the population was 9658; in 1900, 122,900. In 1906, including the adjoining territory of New Mexico, it was made a state of the Union. Total area, 235,380 sq. m.; pop. (1900) 318,210. See New Mexico.

Arkaig. See Archaig.

Arkan'sas (formerly pron. *Ar'kansaw*), a state of the American Union, is bounded on the N. by Missouri, on the E. by Missouri, Tennessee, and Mississippi, on the S. by Louisiana, and on the W. by Texas and the Indian Territory. Area, 53,850 sq. m.—about that of England without Wales, of which some 800 sq. m. is water-surface. The southern limit is the parallel of 30° N. lat., and the northern boundary for the most part is on the parallel of 36° 30′. The Mississippi River washes nearly all the eastern border of the state. The extreme east and west limits are respectively 89° 40′ and 94° 42′ W. long. Nearly all the country is well timbered. Along the eastern border of the state lies a strip of rich alluvial and swampy land, limited westward by Crowley's Ridge. A similar low and wet tract is traversed by the lower Arkansas River. The southern half of the state contains great areas of yellow and loamy land of Tertiary age, interspersed thinly with tracts of red clays and hills of iron-ore. West of the Crowley's Ridge region is a considerable breadth of gray silty prairies. In the west of the yellow Tertiary loams are large patches of 'black prairie' of Cretaceous age. The west and central portions of the state form a broken hill-region of Tertiary origin. Great prairies of red loam and clay soil prevail in the W. and NW. Towards the north is the Ozark mountain-region, a broken country of high hills and ridges. The soils, though of extremely various character, are mostly good throughout the state. The coal-measures very extensively underlie the surface, and coal crops out at many points; but thus far it has not been much wrought. Silver-bearing galena and zinc appear to be abundant, and iron-ores exist in vast amounts. The villages of Hot Springs in Garland county, and Eureka Springs in the NW., are celebrated health-resorts. The novaculite, or hone-stone, of this state is extensively wrought and exported. The Mississippi, Arkansas, Red, White, St Francis, Ouachita, and other navigable rivers afford cheap transport. Agriculture is the leading pursuit in Arkansas, and cotton is the great staple of production. Maize is also very largely produced, and considerable quantities of oats and wheat are harvested. Live-stock, wool, tobacco, pork, fruit, and dairy products are marketed. Although malarial fevers and severe heat are to be encountered in the marshy and flat alluvial districts, the larger portion of the country has an agreeable and healthful climate. In quality, variety, and accessibility, the timber

of this state is hardly surpassed. The mineral resources of the state have been but little utilised. Lying outside the great currents of immigration, Arkansas has, until very recent years, preserved to a remarkable degree the character of a frontier country. Even the large extent of river navigation for a long time served to hinder the development of the country, since it discouraged the construction of railways; and the old system of slave labour and of large holdings of land was not favourable to rapid material development. This region formed a part of the French colony of Louisiana, and was purchased, together with the rest of that colony, by the United States in 1803. The earliest French settlement was made at Arkansas Post in 1685. Arkansas was organised as a territory in 1819, and became a state in 1836, and seceded in 1861.

The principal towns are Little Rock, the state capital (pop. 40,000), Pine Bluff (12,000), and Fort Smith (11,000); Hot Springs (9500) is a health-resort. Pop. of Arkansas (1820) 14,255; (1860) 435,450; (1880) 802,525; (1890) 1,128,179; (1900) 1,311,564, of whom upwards of 366,000 were of African or mixed descent.

Arkansas City, a manufacturing town in the state of Kansas, on the Arkansas River, 51 miles by rail S. by E. of Wichita. Pop. (1880) 1012; (1890) 3547; (1900) 6140.

Arkansas River, next to the Missouri the Mississippi's chief affluent, is 1514 miles long (800 navigable for steamers); rises in the Rocky Mountains, at an altitude of 10,000 feet, on the borders of Utah, and joins the 'Father of Waters' at Napoleon, 275 miles above New Orleans. Its chief tributary is the Canadian River.

Arkinholm. See LANGHOLM.

Arklow, a seaport of Wicklow, 49 miles S. of Dublin, at the mouth of the lovely Avoca. There are ruins of the castle of the Ormonds, destroyed by Cromwell in 1649, and traces of an ancient monastery. Pop. 4000.

Arko'na, the NE. promontory of the island of Rügen, in the Baltic. Its chalk cliffs, rising 177 feet, are topped with a lighthouse (1827), itself 78 feet high. Here stood a famous fortification long impregnable, and the temple of the Wend deity Swantewit, destroyed by Waldemar I. of Denmark in 1168.

Arlberg, a crystalline mountain mass of Austria amongst the Alps, which forms the boundary between the Tyrol and Vorarlberg ('the land before or beyond the Arlberg'). The difficult pass over this ridge, from Bludenz to Landeck and Innsbruck, is 5300 feet high; but a railway, with a main tunnel 6720 yards long, through the Arlberg Alp was opened in 1884.

Arles (Roman *Arelate*), a town in the French dep. of Bouches du Rhone, on the principal branch of the Rhone, 15 miles from the sea, and 53 miles NW. of Marseilles. Its Roman remains include baths, a palace of Constantine, an aqueduct, and an amphitheatre for 25,000 spectators. The cathedral (7th century) has a splendid doorway. Arles manufactures silk, hats, tobacco, brandy, soap, glass bottles, and railway wagons. Pop. 13,876.

Arlon (*Arlon'*), a town of Belgium, 27 miles WNW. of Luxemburg by rail. Pop. 7684.

Armadale, a police-burgh of Linlithgowshire, with chemical works, 2¼ miles W. by S. of Bathgate. Pop. 3990.

Armagh', the capital of County Armagh, 33 miles SW. of Belfast, is situated on a gentle eminence, whence its *Ard-Magha*, 'high field.' The cruciform 12th-century cathedral occupies the site of one founded by St Patrick in the 5th century. A new Roman Catholic cathedral (1904) occupies the principal height to the north, and the primate's palace that to the south. There are a college, a celebrated observatory, public library (1771), and barracks for 200 men. The chief manufacture is linen-weaving. Armagh, from 495 to the 9th century, was the metropolis of Ireland, renowned as a school of theology and literature. Till 1885 it returned one member. Pop. 7500.

Armagh, a small inland county in Ulster, Ireland. Its greatest length is 32 miles, and breadth 20. Area, 512½ sq. m., about one-half under tillage. Slieve Gullion, in the SW., attains 1893 feet. The country bordering upon Lough Neagh is low and boggy, and the Louth plain extends into the south end of Armagh. The principal rivers are the Callan, Tynan, Upper Bann, and Blackwater. The soil is fertile, with a good deal of bog. Besides agriculture, linen and cotton weaving are the chief industries. The county returns three members of parliament. The chief towns are Armagh, Lurgan, Portadown, and part of Newry. Pop. (1841) 233,024; (1891) 143,056; (1901) 125,392, of whom 45 per cent. were Catholics, and 32 Episcopalians.

Armagnac (*Ar-mân-yac*), a district in the south of France, a part of Gascony now mostly included in the dep. of Gers. The soil is fertile, and its wine and brandy (*Eau d'Armagnac*) are well known.

Armenia, a high tableland in the upper valleys of the Euphrates, Tigris, Aras, and Kur, some 500 miles long, by nearly the same breadth. In ancient times an independent country, it repeatedly recovered its independence down to the middle ages, although with varying boundary. It is now, however, distributed between Russia, Turkey, and Persia, and stretches, in its utmost extent, from Asia Minor on the W. to the Caspian Sea on the E., and from the Caucasus on the N. to the Murad Su on the S. The interior consists mostly of pastoral plateaus, 2700 to 7000 feet above sea-level, crowned by conical heights or traversed by mountain-chains, and culminating in Mount Ararat, 16,969 feet high. A chain of mountains, stretching from Ararat to the confluence of the two head-waters of the Euphrates, divides Armenia into a northern half and a southern half. The mountain-system of Armenia is mostly volcanic, a fact still evidenced by the hot mineral springs, such as the sulphur springs of Tiflis, and by earthquakes. The Murad Su and the Kara Su form the head-waters of the Euphrates; whilst the Shett, rising to the south of Lake Van, and an arm of the Diarbekr, rising in the Alinjik Dagh, constitute the head-waters of the Tigris. Other rivers are the Aras, the Kur, and the Tchorak. Of lakes, there is Van in Turkish, Goktcha or Sevan in Russian, and Urmia in Persian Armenia. Armenia is rich in metals, possessing mines of silver, lead, iron, arsenic, alum, rock-salt, and especially copper. The climate is distinguished into a region of rains, with subtropical climate, embracing parts of the valley of the Kur and the Upper Tigris; a region of perpetual snow, and an intermediate region of very various grades. The plateaus—volcanic, dry, and singularly bare of wood—have a very severe climate; the winters long and inclement, and the summers short.

The ancients distinguished *Armenia Major*, the

larger and eastern half, bordering on Media and the Caspian Sea, on Mesopotamia and Assyria, from *Armenia Minor* to the west of the Euphrates. Turkish Armenia comprises, besides the old Armenia Minor, the vilayets of Van, Bitlis, Darsim, Erzerum, with parts of Diarbekr and Charput. The Sasun (q.v.) district was the scene of great atrocities by Kurds and Turks in 1893–94. Russian Armenia, formerly Persian, forms the NE. part of old Armenia Major, and includes the governments of Erivan, Elizabetpol, and Kars, with parts of Tiflis. In this Russian division of Armenia are situated the three old monasteries—Etchmiadzin (q.v.), Haghpad, and Sanahine. Persia holds the SE. corner of Armenia Major in the province of Azerbijan.

The Armenians, whose national character is almost as strong as is that of the Jews, belong to the Iranian group of the Indo-Germanic family. The Armenians, at the present day, are to be found in almost all Turkish provinces; in Russia, Persia, and India; in the great commercial cities of the Mediterranean; in the Austrian empire; at London, Manchester, and other capitals of Western Europe, occupying posts as money-changers, bankers, and merchants, though also as artisans and porters. Their number in Armenia itself is estimated at 1,000,000 at the most; in Persia and adjacent territories, 100,000; in European Turkey, 400,000; in Russia, 500,000; in India, 5000; in Africa, 5000; in Transylvania, Hungary, and Galicia, 16,000. Their total number is calculated at not more than 2,500,000. Among the foreign invaders domesticated in Armenia are the Turks, mostly engaged in agriculture; the nomadic Kurds; in the SE., the Tartars; Nestorians occupying the mountains of the Persian frontier, and speaking a Syriac dialect; Georgians, in the north. Greeks, Jews, and Gypsies are also scattered throughout Armenia. The Armenians themselves are at home mostly shepherds and tillers of the soil. The Armenian church differs from the Greek church in being monophysite (attributing one nature only to Christ). Some Armenians are 'united' (i.e. to the Roman Catholic Church).

See Curzon, *Armenia* (1854); Norman, *Armenia* (1878); Tozer, *Turkish Armenia* (1881); Creagh, *Armenians, Koords, and Turks* (1880); Hepworth, *Through Armenia on Horseback* (1898); H. F. B. Lynch, *Armenia* (2 vols. 1901); and works named at ARARAT.

Armentières, a manufacturing town in the French dep. of Nord, on the Lys, 12 miles WNW. of Lille by rail. Pop. 26,500.

Armisticio, a territory of Venezuela, with an area of 7040 sq. m., bounded on the S. and W. by the United States of Colombia.

Armor'ica, an old name of Brittany (q.v.).

Arnhem, the capital of the Dutch province of Guelderland, on the Rhine, 38 miles ESE. of Utrecht. The manufactures include tobacco, woollen and cotton goods, soap, and paper. Sir Philip Sidney died here in 1586; in 1813 the town was taken by the Prussians. Pop. (1891) 51,105; (1903) 60,150.

Arnhem Land, a name formerly applied to a region in northern Australia (belonging to the colony of South Australia), so called from the ship of the Dutch navigators who discovered it in 1618.

Arno, next to the Tiber the most considerable river of Central Italy, rises on Mount Falterona, an offset of the Apennines, at 4444 feet above sea-level, and 25 miles N. of Arezzo. It flows 140 miles westward to the sea, 11 miles below Pisa, where it once had its embouchure. At Florence it is 400 feet wide, but is fordable in summer. Of its rapid and destructive inundations the most memorable were those of 1537 and 1740.

Arnold, a town of Notts, 5½ miles N. by E. of Nottingham, with lace and stocking manufactures. Bonington was a native. Pop. 8769.

Arnsberg, a town of Westphalia, on the Ruhr, 36 miles E. of Hagen by rail. Here were held the famous Vehmgerichte. Pop. 9131.

Arnstadt, the chief town in the principality of Schwarzburg-Sondershausen, on the Gera, 10 miles S. of Erfurt. Dating back to 704 A.D., it is now a manufacturing town, with weaving, glove-making, brewing, &c. Pop. 14,818.

Arnswalde, a Prussian town, 41 miles SE. of Stettin, between three lakes. Pop. 8378.

Arokszallas, a town of Hungary, 44 miles NE. of Pesth. Pop. 12,794.

Arolsen, the capital of the principality of Waldeck, on the Aar, 14 miles SSW. of Warburg. Its castle (1720) contains West's 'Death of Wolfe.' The sculptor Rauch and the painter Kaulbach were natives. Pop. 2620.

Aroo'stook, a river which, rising in the north of Maine, falls into the St John in New Brunswick, after a course of about 120 miles.

Arpi'no (anc. *Arpinum*), the birthplace of Cicero and Marius, on an eminence midway between Rome and Naples. Pop. 5145.

Ar'quà, an Italian village with 1000 inhabitants, 12 miles SW. of Padua, in the Euganean Hills. Here Petrarch died (1374).

Arrabida, a monastery, cave, and place of pilgrimage, W. of Setubal (q.v.) in Portugal.

Arracan. See ARAKAN.

Arragon. See ARAGON.

Arrah, a town of Bengal, 320 miles NW. of Calcutta by rail. Here in 1857 a dozen Englishmen, with 50 Sikhs, held out for eight days against 3000 sepoys. Pop. 46,998.

Arran, an island of Buteshire, in the mouth of the Firth of Clyde, 5¾ miles SW. of Bute, 10 W. of Ayrshire, and 3 E. of Kintyre, from which it is separated by Kilbrannan Sound. It is 19 miles long and 10½ broad, with an area of 168 sq. m., about a seventh part being cultivated. Pop. (1821) 6541; (1901) 4819. The general aspect of Arran is mountainous and heathy, and in the north the jagged peaks are singularly grand. All around the coast is the low platform of an ancient sea-margin, with lofty cliffs on the S. and SW., from which the country rises abruptly. The highest point is Goatfell (Gaelic *Gaoth Bheinn*, 'wind mountain'), which rises 2866 feet. From its sides slope the romantic glens of Rosa and Sannox, and at its base to the SE. opens Brodick Bay. South of this, round a bluff headland, is Lamlash Bay, the chief harbour of Arran, and the best on the Firth of Clyde, sheltered by Holy Island, once the seat of a monastery. A picturesque mass of columnar basalt, 1030 feet high, succeeds. Farther south lies Whiting Bay, near which are two cascades 100 and 50 feet high. At the SE. point of Arran is Kildonan Castle, opposite which is the small isle of Pladda, crowned by a lighthouse. Large caverns occur in the cliffs of the S. and SW. coast. In one of these, the 'King's Cave,' in the basaltic promontory of Drumadoon, Robert the Bruce hid himself. Shiskine Vale, opening into Drumadoon

Bay, is the most fertile part of Arran. Loch Ranza, a bay in the north end of Arran, runs a mile inland, and is a herring-fishing rendezvous. There are only rivulets in Arran; one of them tumbles over a precipice 300 feet high. Almost the whole island belongs to the Duke of Hamilton, whose seat is Brodick Castle. Many antiquities occur, such as cairns, standing stones, and stone circles. Lochranza Castle, now in ruins, was once a residence of the Scots kings. See D. Landsborough's *Arran* (2d ed. 1875), and J. Bryce's *Geology of Arran* (4th ed. 1875).

Arranmore, or North Arran, a Donegal island, 4 miles long by 3 wide, and 745 feet high.

Arras, the capital of the French dep. of Pas-de-Calais, on the navigable Scarpe, 120 miles N. of Paris. A fortress of the first rank, it has a cathedral (1755–1833) and a beautiful Gothic hôtel-de-ville (1510), whose belfry, 246 feet high, was rebuilt in 1835. There are manufactures of lace, hosiery, beet-sugar, &c.; and its tapestry was formerly so famous that in England the name *arras* was given to all such hangings. Arras was the capital of the Celtic Atrebates (whence the name), and subsequently of Artois. It did not finally become French till 1640. Robespierre was a native. Pop. (1872) 21,447; (1891) 25,701; (1901) 25,850.

Arrochar, a village at the head of Loch Long, 17 miles N. of Helensburgh by rail.

Arroyo Molinos, a village in Estremadura, Spain, where Lord Hill routed the French, 28th October 1811.

Arru Islands, a group of over eighty islands in the Dutch East Indies, lying west of New Guinea, with a united area of 2650 sq. m., and a population of 15,000. The largest island is Tanna-Besar (77 miles long by 50 broad). The surface is low, the coasts are steep and inaccessible, on the east side fringed with coral reefs. The soil is covered with the most luxuriant vegetation.

Arsamas, a Russian town, 60 miles S. of Nijni-Novgorod; pop. 11,497.

Ars-sur-Moselle, a town of Alsace-Lorraine, on the Moselle, 6 miles SW. of Metz by rail; pop. 4620.

Arta (Turkish *Narda*, the ancient *Ambracia*), capital of a division of Thessaly, ceded to Greece by Turkey in 1881 (area, 395 sq. m.; pop. 31,178). The town stands on the Arta (the ancient *Arachthus*), 8 miles from its mouth in the Gulf of Arta (the ancient *Ambracian Gulf*), an arm of the Ionian Sea between Greece and Albania. It is the see of a Greek archbishop. Pop. 7328.

Arthur's Seat, a lion-shaped hill, immediately east of Edinburgh, rising 822 feet. The ascent is easy, and the prospect from the top unrivalled. Arthur's Seat is supposed to derive its name from the British king.

Artois (*Ar-twah'*), an old province in the north of France, bounded by Flanders and Picardy, and almost corresponding with the modern dep. of Pas-de-Calais. Its capital was Arras.

Artvin, a town of Russian Armenia, on the Charuch, 34 miles S. of Batum; pop. 8000.

Aru. See Arru.

Arun, a Sussex river, flowing 37 miles to the English Channel at Littlehampton.

Ar'undel, an ancient municipal borough (till 1867 also parliamentary) of Sussex, on the navigable Arun, 5 miles from its mouth, and 10 miles E. of Chichester. Arundel Castle, the seat of the Fitzalans, Earls of Arundel, from 1243 to 1580, and since then of the Howards, comprises a circular Norman keep, 100 feet high, and a modern Gothic edifice dating from 1791. It has stood three great sieges, in 1102, in 1139, and in 1644. There are a cruciform parish church (1387) and a splendid R. C. church (1873). Pop. 3644.

Aruwimi, an important tributary of the Congo, entering the latter from the north in 1° 10′ N. lat., 23° 30′ E. long. It was explored for 100 miles by Stanley in 1883, and by it Stanley advanced to the relief of Emin Pasha in 1887.

Arve (*Arv*), a Swiss stream rising in the Col de Balme, one of the Savoy Alps, and flowing 62 miles through the Vale of Chamouni and the canton of Geneva to the Rhone.

Arveyron, a small tributary of the Arve, in Savoy, is the outlet of the famous *Mer de Glace*, in the Vale of Chamouni, from which it issues in a torrent through a beautiful grotto of ice, 40 to 150 feet high.

Asben. See Aïr.

Ascension, a solitary island nearly in the middle of the South Atlantic, 685 miles NW. of St Helena, in 7° 57′ S. lat., and 14° 21′ W. long. It is said to have received its name from having been discovered by a Portuguese navigator on Ascension-day, 1501. It is 7½ miles long, 6 broad, and 35 sq. m. in area. First occupied by the English in 1815, in connection with Napoleon's detention on St Helena, it is now used only as a sanatorium, having ceased since 1887 to be a coaling depôt. Like St Helena, it is of volcanic origin, one of the peaks of a submarine ridge which separates the north and south basins of the Atlantic. It rises in the Green Mountain to a height of 2870 feet. Several astronomers and savants have visited Ascension, from Halley in 1677, to Darwin, Sir Wyville Thomson, and Mr Gill. Pop., with Kroomen, about 450. See Mrs Gill's *Six Months in Ascension* (1879).

Asch, a town of Bohemia, 14 miles NW. of Eger, with thriving silk, cotton, and woollen manufactures; pop. 19,209.

Aschaffenburg (*Ashaffenboorg'*), a Bavarian town of Lower Franconia, on the Main, at the Aschaff's influx, 25 miles SE. of Frankfort. The castle of Johannisburg, a Renaissance pile of 1605–14, overlooks the whole town. Paper is the staple manufacture. Pop. 18,630. The Romans built a fortress at Aschaffenburg, which in 1814 was ceded to Bavaria by Austria. Near it the Prussians defeated the Austrians, July 14, 1866.

Aschersleben (*Asherslay'ben*), a town of Prussian Saxony, on the Eine, 32 m. SW. of Magdeburg. Population, 28,500, largely occupied in manufactures of woollens, linens, sugar, &c.

As'coli (anc. *Asculum Picenum*), a city of Italy, on the Tronto, 83 miles S. of Ancona by rail. It has a fine cathedral, and it suffered much from an earthquake in 1878. Pop. 15,199.—Ascoli (anc. *Asculum Apulum*) is another episcopal city, 19 miles S. of Foggia. Pop. 6478. Pyrrhus here defeated the Romans, 279 B.C.

Ascot Heath, a circular race-course in Berkshire, nearly 2 miles long, 29 miles WSW. of London, and 6 SW. of Windsor. The races, which take place early in June, were instituted in 1711.

Ashanti, or Ashantee, a negro kingdom of Western Africa, included since 1896 in the British protectorate, and attached to the Gold Coast colony, behind which it lies. It is a hilly country; its rivers are the Volta, Prah,

and Assinee. Population estimated at from 1,000,000 to 3,000,000, of whom a fifth are warriors. The country proper is one continuous forest; the land in the neighbourhood of the towns is carefully cultivated, and extremely fertile, producing maize, millet, rice, yams, tobacco, sugar, cocoa, the pine-apple, gums, dye-woods, and timber. The principal exports are gold-dust and palm-oil. The capital is Coomassie (q.v.); Kpando, near the Volta, is an important centre of trade, and so is Salaga or Paraha. In 1700 Coomassie was made the capital by Osai Tutu, who conquered various neighbouring states, and became a sort of feudal sovereign over a large district. In their course of conquest over the Fantees, the Ashantis became involved in war with the British (1807–26), and were finally driven from the sea-coast; and in 1873–74 an army under Wolseley took Coomassie. King Prempeh, after a spell of raiding, was forced in 1896 to accept the British protectorate; and a rebellion was suppressed after a third expedition to Coomassie, which is now connected by rail with the Gold Coast ports. See works by Bowdich (1819; new ed. 1873), Brackenbury (1874), Reade (1874), Stanley (1874), Weitbrecht (1875), Reindorf (1895), and Freeman (1898).

Ashbourne, a market-town of Derbyshire, 13 miles NW. of Derby. Its church (1241) has a spire 212 feet high ('the Pride of the Peak'); the grammar-school dates from 1585. Prince Charles Edward was here in 1745, and here Moore wrote great part of *Lalla Rookh*. Pop. 4040.

Ashburnham, a Sussex parish, 5 miles W. of Battle, with the seat of the Earl of Ashburnham.

Ashburton, a small town in the south of Devonshire, on the borders of Dartmoor, 9½ miles NNW. of Totnes by rail. Till 1868 it returned a member to parliament. Pop. of parish, 2662.

Ashburton River, an unnavigable stream of Western Australia, rising in the mountains west of the Great Desert, and flowing 400 miles northwestward into Exmouth Gulf. Its lower course was explored by Sholl in 1866, its upper by Giles in 1876.

Ashby-de-la-Zouch, a town of Leicestershire, 18 miles NW. of Leicester. It owes its suffix to the Norman family of La Zouch. Their ruined castle, celebrated in Scott's *Ivanhoe*, and rebuilt in 1480 by Sir William Hastings, crowns a height to the south of the town. Mary, Queen of Scots, was imprisoned here. Leather is the staple industry. Pop. 4750.

Ashdod (New Test. *Azotus*, now *Esdud*), a village on the Mediterranean, 21 miles S. of Jaffa. Once a chief city of the Philistines, it is now a miserable place with a pop. of 300.

Ashdown, the seat of Lord Craven, in West Berkshire, 3½ miles NW. of Lambourn. Here, in 871, Ethelred and Alfred gained the great victory of Æscdun over the Danes.

Ashe, the Duke of Marlborough's birthplace, 3 miles SW. of Axminster, Devon.

Asheville, capital of Buncombe county, North Carolina, 70 miles by rail NW. of Spartanburg, with a number of tobacco factories. Pop. (1880) 2616; (1890) 10,235; (1900) 14,694.

Ashford, a market-town of Kent, 14 miles SW. of Canterbury, and 56 SE. of London. It is a railway junction, and the seat of the South-eastern Railway workshops. Eastwell Park lies 3 miles N. Pop. 13,500.

Ashiestiel, a Selkirkshire mansion, on the Tweed, 5½ miles WSW. of Galashiels. Scott lived here 1804–12.

Ashingdon, a parish of South Essex, 2¼ miles N. of Rochford. Here, in the battle of Assandun (1016), the sixth fought in the year, Canute defeated Edmund Ironside.

Ashland (1), a post-borough of Schuylkill county, Pennsylvania, 119 miles NW. of Philadelphia by rail. It depends principally upon its rich mines of anthracite coal; but it has also foundries, machine-shops, and several mills. Pop. (1890) 7346; (1900) 6438. (2) Capital of Ashland county, Wisconsin, on Lake Superior, 391 miles by rail NW. of Milwaukee. It has a busy trade in lumber, is a terminus of five railways, and has grown up since 1880. Pop. 13,500.

Ashraf, a town in the Persian province of Mazanderan, near the south coast of the Caspian Sea, 56 miles W. of Astrabad. A favourite residence of Shah Abbas the Great, it still contains over 800 houses.

Ashridge Park, Earl Brownlow's seat, on the Bucks and Herts border, 3½ miles N. of Berkhampstead.

Ashtabula, a rapidly increasing town of the state of Ohio, U.S., on the Cleveland and Erie Railway, 3 miles from Lake Erie, and 49 miles NE. of Cleveland. Pop. (1880) 4445; (1900) 12,950.

Ashton-in-Makerfield, a township in South Lancashire, 4 miles S. of Wigan. Pop. (1881) 9824; (1891) 13,379; (1901) 18,687.

Ashton-under-Lyne, a town of Lancashire, 6½ miles E. of Manchester. It was enfranchised in 1832, and returns one member. A great seat of the cotton manufacture, it suffered severely during the cotton famine (1861–65). The population is also employed in bleaching, dyeing, and calico-printing, in collieries, and in the manufacture of machines, bricks, &c. Among the buildings are the town-hall (1841), the infirmary (1860), and the old parish church, with tombs of the Assheton family, from whom the town got its name. Pop. (1851) 29,791; (1901) 51,080, of whom 43,890 were within the municipal borough.

Asia, the largest of the divisions of the world, occupies the northern portion of the eastern hemisphere in the form of a massive continent which extends beyond the Arctic Circle, and by its southern peninsulas nearly reaches the equator. Apparently Asia was a local name given to the plains of Ephesus, gradually extended to the Anatolian peninsula, and later on to the whole of the continent.

Viewed in their broad features, Europe and Asia constitute but one continent, extending from west to east, and having the shape of an immense triangle, the angles of which are Spain in the west, the peninsula of the Tchuktchis in the north-east, and that of Malacca in the south-east. The Arctic Ocean in the north, the Pacific in the east, and the Indian Ocean, continued by its narrow gulf, the Red Sea, which nearly reaches the Mediterranean, enclose the continent of Asia. This immense mass of land touches the latitude of 77° 34′ N. in Cape Tchelyuskin, while Cape Burros, at the extremity of the peninsula of Malacca, and 5350 miles distant from the former, falls short by 1° 15′ of reaching the equator. Cape Baba, in Asia Minor, advances as far west as the 26th degree of longitude, and the utmost NE. extremity of Asia—East Cape, 5990 miles distant from Cape Baba—protrudes to the 190th degree (12 hours 40 minutes) to the east of Greenwich. The area covered by Asia and its

islands is 17,255,890 sq. m.—that is, almost exactly one-third of the land-surface of the globe (32 per cent.). It is one-half larger than Africa, and more than four times larger than Europe. Geographically, Europe is a mere appendix to Asia, and no exact geographical delimitation of the two continents is possible. The low Urals are not even an administrative frontier: European Russia extends over their eastern slope. Caucasus is Asiatic in character; but, to separate it from Europe, one must resort to the old dried-up channel of the two Manytch rivers, which, at a geologically recent epoch connected the Black Sea with the Caspian. Asia Minor—also Asiatic in character—so closely approaches Europe that the Sea of Marmora and its narrow river-like straits seem almost an artificial boundary. The line of separation from Africa is better defined by the narrow Red Sea; but Arabia participates so largely in the physical features of Africa that it is in a sense intermediate between the two continents. In the south-east, the numberless islands of the Dutch Indies—relics of a sunken continent—appear as a bridge towards Australia. And in the extreme north-east, Asia sends out a peninsula to meet one of the Alaskan peninsulas in America, from which it is separated only by a shallow and narrow channel, Behring Strait. Although the coasts of Asia are much more indented by gulfs and peninsulas than those of Africa or America, still it stands in this respect much behind Europe, and the length of its coast-line is reckoned at 33,000 miles in all (Europe having one of 50,000 miles); besides, about one-fifth of its shores is washed by the ice-bound Arctic Ocean, or by the foggy and icy Sea of Okhotsk. Its peninsulas are massive too, and, as a rule, little indented. Three immense offsets continue the continent of Asia into more tropical latitudes—Arabia, India, and the Indo-Chinese Peninsula. Asia Minor protrudes between the Black Sea and the Mediterranean. In the Pacific there are only three large peninsulas—Corea, Kamchatka, and that of the Tchuktchis.

The islands of Asia are very numerous, and cover an aggregate of no less than 1,023,000 sq. m. (nearly 6 per cent. of Asia's surface). The coasts of Asia Minor are dotted with islands. Cyprus and Ceylon are important. In Eastern Asia, a narrow strip of islands, some large like Sumatra (177,000 sq. m.) and Java, others mere reefs, extend in a wide semicircle, under the name of Andaman and Sunda Islands, from Burma to Australia, separating the Indian Ocean from the shallow Java Sea and the Malay Archipelago. This last—an immense volcanic region inhabited by the Malay race—comprises the huge Borneo, the ramified Celebes, and the numberless small islands of the Moluccas, the Philippines, &c.; connected northward with the Chinese coast by the island of Formosa, which, like Hainan, may almost be considered part of the Chinese mainland. The Loo-choo (Liu-kiu) Islands and the Japanese Archipelago, the latter joining Kamchatka by the Kuriles, continue farther NE. the chain of islands. Saghalien is close to the continent. In the Arctic Ocean also are some unimportant islands.

Asia is at once the largest and the highest of all continents. Not only has it a number of mountains which exceed by five and six thousand feet the loftiest summits of the Andes; it has also the highest and the most extensive plateaus. If the whole mass of its mountains and plateaus were uniformly spread over its surface, the continent would rise no less than 2800 to 3000 feet above the sea. High plateaus are the predominant feature of Asia's orographical structure: they occupy nearly two-fifths of its area. One of them—that of Western Asia, including Anatolia, Armenia, and Iran—extends in a south-easterly direction from the Black Sea to the valley of the Indus; while the other—the high plateau of Eastern Asia, still loftier and much more extensive—stretches NE. from the Himalayas to the north-eastern extremity of Asia. These vast regions, mostly unfit for human settlement, and over wide areas mere dry deserts, divide Asia into two parts—the lowlands of Siberia and the Aral-Caspian depression to the north, and the lowlands of Mesopotamia, India, and China to the south. The highest parts of the East Asian plateau are in Tibet, varying from 18,000 feet to 10,000 feet in height. This highest plateau of the earth is girdled by the highest chain of mountains, the Himalayas—a typical 'border-ridge' which has one foot on the high plateau, and the other in valleys ten to fifteen thousand feet deeper, where the palm and vine grow freely. This immense chain of snow-clad peaks, which in Europe would reach from Gibraltar to Greece, raises its lofty summits above 20,000 feet; its lowest passes are 15,000 feet high, and Gauri-sankar or Mount Everest—the highest mountain of the globe—has its snow-cap at a height of 29,000 feet, that is, 5½ miles above the sea.

In the north-west, the Tibet plateau joins another much smaller, but very high plateau—that of Pamir ('the roof of the world'), of which the Tagarma peak reaches a height of 25,800 feet. Farther north and north-east of the Pamir is a wide, intricate complex of several high chains, known under the general name of Tian-shan (q.v.). The great Khan-tengri rises there to 24,000 feet.

On the north, the plateau of Tibet is bordered by a succession of lofty chains (Kuen-lun, Altyntagh, Nañ-shan), reaching more than 20,000 feet in their highest parts. These chains separate it from the great central depression which is occupied by Eastern Turkestan in the west, and by the Desert of Gobi in the east. This great depression—including the Han-hai, or 'dried-up sea,' of the basin of the Tarim—has an altitude of from 3000 to 4000 feet in the west, and 2200 feet in its lowest part—the depression of Lake Lob-nor. It has no outlet. The dry and barren ridge called Eastern Tian-shan, and two other ridges running NW., separate the Han-hai depression of Central Asia from the trenches of Uruntsi and Urungu, which descend west to the lowlands of Siberia. Beyond the great depression the plateau rises again, and reaches an average height of from 4000 to more than 5000 feet in the upper basin of the Yenisei and Selenga. To the north-west, the plateau is bordered by the snow-clad Sailughem ridge of the Altai (8000 to 9000 feet), which is broken by the depression in which Lake Baikal lies. A broad zone of alpine tracts more than 150 miles wide and 2000 miles long—the Altai, the Kuznetskiy Ala-tau, the Baikal, Lena, Olekma, and Vitim mountains—fringes this plateau in the west.

The hilly tracts of Asia are not confined to the plateaus and their border-ridges. The Caucasus, an immense wall of snow-clad mountains, stretches NW. to SE. for nearly 800 miles along the border of the Armenian plateau, from which it is separated by the broad valley of the Kura. It reaches 18,560 feet in the Elborous (Elburz) peak. The Urals, from 2000 to 4000 feet high, which separate Europe from Asia, are a broad

belt of hilly tracts, stretching as a whole from north to south.

The interior of the Indian peninsula is again occupied by the wide plateau of the Deccan, having an average height of from 1500 to 3000 feet, bordered in the west by the Western Ghats (7870 feet high) and the Cardaman Mountains, and in the east by the much lower and broader Eastern Ghats. The Pedrotallagalla peak in Ceylon rises 8330 feet.

The whole of North-western Asia is occupied by an immense lowland—Siberia—which joins in the south the wide Aral-Caspian depression. This lowland, whose level is less than five or six hundred feet high, does not touch the alpine regions which fringe the great plateau of East Asia. It is separated from them by a belt of elevated, undulating plains. On the northern coast of the Caspian, the Aral-Caspian depression descends even below the level of the sea. The wide space between the great plateaus of Western and Eastern Asia and that of the Deccan, watered by the Indus and the Ganges, is again an immense lowland, covering no less than 400,000 sq. m., and supplying the means of existence to 125 millions of inhabitants. Another wide lowland, Mesopotamia, or the broad valley of the Tigris and Euphrates, was a cradle of civilisation from the remotest antiquity. The predominant feature of Asia's hydrography is the existence of very wide areas having no outlet to the sea. On the great plateau of Eastern Asia the region of the Han-hai and Gobi is watered only by the Tarim, which falls into the rapidly drying marshes of Lob-nor. If we add to this wide area the drainage basins of Lake Balkhash with its tributaries, the Ili and other smaller rivers; the great Lake Aral, with the Syr-daria (Jaxartes) and Amu-daria (Oxus), as also the numerous rivers which flow towards it or its tributaries, but are desiccated by evaporation before reaching them; and finally the Caspian with its tributaries, we find an immense surface of more than 4,000,000 sq. m. —that is, much larger than Europe—which has no outlet to the ocean. Four inland drainage areas more must be added to the above—the plateaus of Iran and Armenia, two separate areas in Arabia, and one in Asia Minor.

The drainage area of the Arctic Ocean includes all the lowlands of Siberia, its plains, and large portions of the great plateau. The chief rivers flowing north to the Arctic Ocean are the Obi, with the Irtish; the Yenisei, with its great tributary the Angara, which brings to it the waters of Lake Baikal; and finally the Lena, with its great tributaries, the Vitim, Olekma, Vilui, and Aldan.

Three great rivers enter the Pacific, and all three are navigable for thousands of miles: the Amur, composed of the Argun and Shilka, and receiving the Sungari (a great artery of navigation in Manchuria), the Usuri, and the Zeya; the Hoang-ho; and the Yang-tse-kiang, the last two taking their rise on the plateau of Tibet. The Cambodia or Mekong, the Salwen, and the Irawadi, rising in the eastern parts of the high plateau, water the Indo-Chinese Peninsula. Rising on the same height, the Indus and the Brahmaputra flow through a high valley in opposite directions along the northern base of the Himalayas, until both pierce the gigantic ridge at its opposite ends, and find their way in opposite directions to the sea. The Tigris and Euphrates, both rising in the high plateau of Armenia, flow parallel to each other.

A succession of great lakes, or rather inland seas, are situated all along the northern slope of the high plateaus of Western and Eastern Asia. The Caspian, 800 miles long and 270 wide, is an immense sea, its level now 85 feet *below* the level of the ocean; Lake Aral has its level 157 feet above the ocean; farther east we have Lake Balkhash (780 feet), Zaisan (1200 feet), and Lake Baikal (1550 feet). Three large lakes, Urmia, Van, and Goktcha, and many smaller ones, lie on the highest part of the Armenian plateau.

Volcanoes play an important part in Asia's geology; more than 120 active volcanoes are known in Asia, chiefly in the islands of the south-east, the Philippines, Japan, the Kuriles, and Kamchatka, and also in a few islands of the Sea of Bengal and Arabia, and of Western Asia. Numerous traces of volcanic eruptions are found, not only in these same regions, but also in Eastern Tian-shan, in the north-western border-ridges of the high Siberian plateau, and in the south-west of Aigun in Manchuria. Earthquakes are frequent, especially in Armenia, Turkestan, and around Lake Baikal.

Asia is exceedingly rich in a great variety of mineral products. There are gold-mines of great wealth in the Urals, the Altai, and Eastern Siberia; and auriferous sands are found in Corea, Sumatra, Japan, and the Caucasus Mountains. Silver is extracted in Siberia; platinum in the Urals; copper in Japan, India, and Siberia; tin in Banca; mercury in Japan. Iron ore is found in nearly all the mountainous regions, especially of Asia Minor, Persia, Turkestan, India, China, Japan, and Siberia; but iron mining is still at a rudimentary stage. Immense coal-beds are spread over China and the islands of the Pacific (Hainan, Japanese Archipelago, Saghalien), Eastern Siberia, Turkestan, India, Persia, and Asia Minor. They cover no less than half a million square miles in China alone; but the extraction of coal is as yet very limited. Graphite is found in Siberia. The diamonds of India, the sapphires of Ceylon, the rubies of Burma and Turkestan, the topazes, beryls, &c. of the Urals and Nertchinsk, have a wide repute. Layers of rock-salt are widely spread, and still more so the salt lakes and springs. The petroleum wells of the Caspian shores rival those of the United States. Mineral springs are widely spread over Asia; those of Caucasus and Transbaikalia already attract a number of patients.

Even Eastern Europe has quite a continental climate. Still more continental is the climate throughout Asia, with the exception of a part of its coast regions. On account of the immense area of Asia, great differences of climate are met with, and therefore the meteorologists subdivide the continent into several very different climatic regions, of which Eastern Siberia, dry, and in winter very cold, includes Verkhoyansk, the coldest spot of the Eastern Hemisphere; while India, the Indo-Chinese Peninsula, and adjoining islands have a tropical climate, with abundant periodical rains. Asia Minor has of all Asiatic regions the most moderate and agreeable climate. During the winter, Asia, as a whole, with the exception of India, the Indo-Chinese Peninsula, and South-western Arabia, enjoys a temperature much lower than that of corresponding latitudes elsewhere; while in July, throughout all Asia, except on the coasts of the Kara Sea, Kamchatka, and the Manchurian littoral, the temperature is higher than under the same latitudes elsewhere.

The aggregate population of Asia is estimated at 891 millions, being thus more than one-half of the entire population of the globe. This popula-

tion gives, however, only an average of 49 inhabitants per sq. m. It is very unequally distributed, and reaches 557 per sq. m. in some provinces of China—denser than in England (540 per sq. m.)—and 470 in some parts of North-western India. Nearly one-tenth is almost quite uninhabited.

The inhabitants of Asia belong to five different groups: the so-called Caucasian (Fair type) in Western Asia and India; the Mongolian in Central and Eastern Asia, as also in the Indo-Chinese Peninsula; the Malay in Malacca and the Indian Archipelago; the Dravidas in South-eastern India and Ceylon; and the Negritos and Papuas in the virgin forests of the Philippine Islands and Celebes. A sixth great division comprises the stems which inhabit North-eastern Asia—the Hyperboreans. The Europeans reckon about six millions (Russians) in Caucasus, Turkestan, and Siberia; some 100,000 (British) in India; and 75,000 in the Dutch Indies.

The four great religions which are professed by the great majority of mankind—the Jewish, Buddhist, Christian, and Mohammedan—had their origin in Asia. At present the inhabitants of Asia belong chiefly to the Buddhist religion, which—inclusive of the followers of Lamaism, the moral philosophy of Confucius, and the teachings of Lao-tse, who all accept more or less the Buddhist ritual—has no less than 530 to 560 millions of followers—i.e. nearly one-third of mankind. The old faith of Hinduism has no less than 207 millions of followers in India. Most of the inhabitants of Western Asia, as also of part of Central Asia, follow the religion of Islam; they may number about 90 millions. The Christians number about 20 millions in Armenia, Caucasus, Siberia, and Turkestan. Many of the Ural-Altaians continue to maintain their ancient faith, Shamanism. Jews are scattered mostly in Western and Central Asia. A few fire-worshippers—Guebres or Parsees—who are found in the west of India and Persia are the sole remnant of the once wide-spread religion of Zoroaster.

The chief political divisions of Asia, with their approximate areas and population (mostly estimated), are as follows:

States and Territories.	Area in sq. m.	Population.
Siberia	4,824,570	5,731,552
Caucasus	182,500	9,251,945
Transcaspia (with Caspian)	400,070	372,193
Russian Turkestan	1,541,500	7,349,491
Khiva and Bokhara	114,600	2,930,000
Asiatic Turkey	729,410	16,953,530
Arabia	968,200	3,741,222
Persia	636,400	9,000,000
Afghanistan	240,000	4,000,000
Kafiristan and Hindu Kush	20,000	1,000,000
Beluchistan	106,800	840,000
India (with Burma)	1,560,160	295,038,950
Nepal, Bhutan, &c.	89,600	5,300,000
Ceylon	25,360	3,576,990
French and Portuguese India	1,800	847,484
Siam	280,650	6,000,000
Malacca States	31,500	676,138
French Indo-China	225,620	20,000,000
Chinese Empire	4,218,400	399,700,000
Corea	84,250	10,000,000
Macao	10	75,000
Hong-kong	30	207,200
Japan	148,500	46,450,000
Dutch East Indies	568,900	35,200,000
Philippines, &c. (U.S. and Ger.)	116,260	8,342,000
British Borneo and Labuan	30,150	175,000
Native Borneo	62,940	645,000
Cyprus	3,580	237,022
	17,211,760	891,730,717

The amount of cereals—rice, millet, wheat, barley, oats, &c.—supplied by the rich cornfields of China, Indo-China, Japan, and even Turkestan—may be best judged by the density of population in the better-watered parts of these countries, and by the rapidly increasing amounts of corn exported, especially from India; while in Southern Siberia, the Altai, and the Middle Amur, Russian settlers raising wheat, rye, oats, barley, melons, &c. on the virgin soil of the prairies enjoy a welfare hardly known in Russia. The crops of cotton in India and Asia Minor helped Europe to meet the cotton crisis of 1863; and those of Bokhara and Transcaucasia gave an impulse to the growing cotton industry of Russia. Tea is the chief crop of Southern China, Assam, India, and Ceylon; and coffee is largely grown in Arabia, India, Ceylon, and the Dutch colonies. The silkworm culture is widely spread in Asia Minor, Persia, Turkestan, India, China, and Japan. The sugar-cane is largely raised in Southern and South-eastern Asia. Oleaginous plants, indigo and other dye plants, jute, spices, the cinchona-tree, and opium-producing plants are extensively cultivated; as also fruit-trees in Western Asia and Turkestan. The cocoa-palm, the bread-tree, and the gutta-percha tree are also grown in tropical Asia.

On the inland steppes and plateaus of Asia, numberless herds of horses, horned cattle, and sheep furnish all the necessaries of life to the nomad or half-nomad Mongolian inhabitants of these regions, and supply the European trade with a yearly increasing amount of hides, wool, and tallow. The forests of the far north and north-east afford the means of existence to nomad and Russian hunters. Both supply the trade with rich furs; while the rivers of Siberia and Manchuria provide food for the nomad Ostiaks, Gols, and Ghilyaks. And the Behring and Okhotsk Seas of the Northern Pacific, and their islands, supply the civilised world with some of the finest furs.

The plateaus, the deserts, and the mountainous regions of Asia, thickly clothed with impenetrable forests and intersected by deep gorges and valleys, are so many obstacles to the communication between different parts of the continent. The roads of Asia, except those of China and India, and a few main lines elsewhere, are mostly mere footpaths or tracks marked in the deserts, with wells far apart, and bleached with the bones of camels. Caravans of camels are therefore the chief means of transport for goods and travellers in the interior; donkeys, yaks, and even goats and sheep are employed in crossing the high passages of the Himalayas; horses are the usual means of transport in most parts of China and Siberia, and in the barren tracts of the north the reindeer, and still farther north the dog, are made use of. Fortunately, the great rivers of Asia (especially China and Siberia) provide water communication over immense distances.

Railways are only beginning to make their appearance in Asia. In India they already represent a total length of 26,000 miles. Russia, too, has spread her railways right across Asia to the shores of the Pacific. China decided in 1886 to open its territory to railway-construction, and in 1905 had nearly 3000 miles open, and concessions given for about 2500 more. Japan has over 4000 miles open. There are also railways in Burma, Siam, and Turkey in Asia. All the chief ports in the south and south-east of Asia are already in regular steam communication with Europe and the United States.

Telegraph communications are in a much more advanced state than the roads. St Petersburg is connected by telegraph with the mouth of

the Amur, Vladivostok, and Port Arthur; while another branch, crossing Turkestan and Mongolia, runs on to Tashkend, Peking, and Shanghai. Constantinople is connected with Bombay, Madras, Singapore, Saigon, Hong-kong, and Nagasaki in Japan; and Singapore with Java, Australia, and so with New Zealand. India has nearly 60,000 miles of telegraphs; China, 14,000 miles; and Japan, 17,000 miles, with 2200 miles of submarine cables.

Hitherto Asia has supplied Europe chiefly with raw materials—gold, silver, petroleum, teak and a variety of timber-wood, furs, raw cotton, silk, wool, tallow, and so on; with the products of her tea, coffee, and spice plantations; and with a yearly increasing amount of wheat and other grain. Steam-industry, although but a very few years old, threatens to become a rival to European manufacture. Indian cottons of European patterns and jute-stuffs already compete with those of Lancashire and Dundee. The silks, printed cottons, carpets, jewellery, and cutlery of particular districts in India, China, Japan, Asia Minor, and Persia, far surpass in their artistic taste many like productions of Europe; and the export of these articles is increasing.

Central Asia is a term, in its geographical sense, used of the region lying between the Altai Mountains and the Persian Gulf, and includes part of Siberia, all Turkestan, Afghanistan, Beluchistan, and part of Persia. An earlier usage —that of Humboldt—gave this name to the khanates of Bokhara and Tartary. In Russian official language, Central Asia is an administrative division of the empire lying to the SW. of Siberia, and comprising, with part of what used to be called Siberia, the recent Russian annexations in Turkestan. Russian Central Asia is divided into the governments of Akmolinsk, Semipalatinsk, Turgai, Uralsk, Semirechinsk, Sir-daria, Zarafshan, Amu-daria, the Trans-Caspian territory, and Ferghana. The total area is given at 1,201,000 sq. m., and the pop. at 4,390,000. For the physical geography of the region, see Asia; see also Turkestan, Siberia, Khokand, &c.

Asiago, a town of North Italy, 22 miles N. of Vicenza, on a ridge. Pop. 2016.

Asia Minor (Asia the Less) is the name usually given to the western peninsular projection of Asia, forming part of Turkey in Asia. The late Greek name for Asia Minor is Anatolia—*Anatolé*, 'the East,' whence is formed the Turkish *Anadōli*. Asia Minor includes the whole peninsula, with an area of 220,000 sq. m. It constitutes the western prolongation of the high tableland of Armenia, with its border mountain-ranges. The interior consists of a great plateau, or rather series of plateaus, rising in gradation from 3500 to 4000 feet, with bare steppes, salt plains, marshes and lakes; the structure is volcanic, and there are several conical mountains, one of which, the Ergish-dagh (Argæus), with two craters, attains a height of 11,830 feet. The plateau is bordered on the north by a long train of parallel mountains, 4000 to 6000 feet high. These mountains sink abruptly down on the north side to a narrow strip of coast. Similar is the character of the border ranges on the south, the ancient Taurus, only that they are more continuous and higher, being, to the north of the Bay of Skanderoon, 10,000 to 12,000 feet. Between the highlands and the sea lie the fertile coast-lands. Of the rivers the largest is the Kizil Irmak (Halys), which, like the Yeshil Irmak (Iris), and the Sakaria (Sangarius), flows into the Black Sea; the Sarabat (Hermus) and Meinder (Mæander) flow into the Ægean. Here the forest-trees and cultivated plants of Europe are seen mingled with the forms characteristic of Persia and Syria. The central plateau, which is barren, has the character of an Asiatic steppe, more adapted for the flocks and herds of nomadic tribes than for agriculture; while the coasts, rich in all European products, fine fruits, olives, wine, and silk, have quite the character of the south of Europe, which on the warmer and drier south coast shades into that of Africa.

The inhabitants, some 7,000,000 in number, comprise the dominant race, the Osmanli Turks, who number about 1,200,000; allied to these are the Turkomans and Yuruks. There are also hordes of nomadic Kurds, with the robber tribes of the Lazes in the north-east. The Greeks and Armenians are the most progressive elements in the population, and have most of the trade; while the Greeks monopolise the professions, the ownership of the land is largely passing into the hands of Greeks, Armenians, and Jews.

Here, especially in Ionia, was the early seat of Greek civilisation, and here Alexander the Great and the Romans successively contended for the mastery of the civilised world. Since the conquest by the Turks (about 1300 A.D.), the ancient civilisation of the country and its prosperity have been sadly brought to ruin. After the Russo-Turkish war of 1877 Great Britain made a secret engagement to guarantee the Asiatic dominions of the Porte, and to assume an indefinite protectorate over Asia Minor.

Asirgarh, a strong fortress in the Central Provinces, 300 miles NE. of Bombay, stands on an isolated mountain, 850 feet above the base.

Askabad, a town of Russian Turkestan, the political centre of Transcaspia, situated on the Transcaspian Railway, 290 miles SE. of Mikhailovsk, the seaward terminus, and 232 WNW. of Merv. It was occupied by the Russians in 1881.

Askeaton, a town in the county, and 15 miles WSW. of the town, of Limerick. Pop. 679.

Askja (*Ask'ya*; 'basket'), the largest volcano in Iceland, rises near the centre of the island. Its vast circular crater, over 23 sq. m. in area, and about 17 miles in circumference, lies at a depth of over 700 feet within a mountain built up to a height of 4633 feet above the sea. A great eruption in 1875 first called attention to Askja.

As'olo, a walled town 35 miles NW. of Venice, with memories of Caterina Cornaro, queen of Cyprus, and Robert Browning. Pop. 955.

Aspatria, a Cumberland village, with an agricultural college, 7¾ miles NE. of Maryport.

Aspe (*Asp*), a romantic valley (pop. 12,000) in the Western Pyrenees, close to the Spanish frontier. It was formerly a republic under the protection of the princes of Béarn.—(2) A town of Spain, 25 miles W. of Alicante. Pop. 7910.

Aspern, a small village of Austria, on the Danube's left bank, nearly opposite Vienna. Here on May 21–22, 1809, Napoleon was defeated by the Austrians under Archduke Charles.

Aspinwall, or Colon, a seaport of the republic of Panama, but practically a United States colony, is situated at the Atlantic extremity of the Panama Railway (1849–55), and of the unfinished inter-oceanic Panama Canal, on the island of Manzanilla in Limon Bay, 8 miles NE. of the old Spanish port of Chagres, and 47 NW. of Panama by rail. In 1870 the Empress Eugénie presented the town with a statue of Columbus, after whom

it is named officially Colon. The name Aspinwall it derives from a New York merchant, the originator of the Panama Railway; the company having founded the town in 1850. Pop. 4500.

Aspromonte (*As-pro-mon'tay*), a rugged mountain (6907 feet) of Italy, near Reggio, overlooking the Strait of Messina. Here Garibaldi was defeated and captured, 28th August 1862.

Assab Bay, an Italian trading station on the west coast of the Red Sea, 40 miles NW. of the Strait of Bab-el-Mandeb. The district around it (area, 243 sq. m.; pop. 1300) was sold in 1870 by some Danakil chieftains to an Italian steamship company for a coaling station, and in 1880 was taken over by the Italian government.

Assal', a large salt-lake, nearly 600 feet below sea-level, in Adal, East Africa, 9 miles from the coast of the Bay of Tajurrah.

Assam', from 1874 to 1905 a separate province at the NE. extremity of British India, with an area of 46,341 sq. m.; but in 1905 made part of the new joint province of Eastern Bengal and Assam (see BENGAL). A series of valleys, watered by the Brahmaputra and some sixty lesser rivers, it is very fertile, and abounds in wood; the tea-plant is indigenous. Since 1840, when its commercial cultivation was begun, 600,000 acres have been taken up for tea; some three-fourths of the tea grown in India is the produce of Assam. The other products are rice, mustard, gold, ivory, amber, musk, iron, lead, petroleum, and coal. Scarcely a fourth of the fertile area is cultivated. There is steamboat and railway communication with Calcutta. In 1826, at the close of the first Burmese war, Assam was ceded to the British, but it was only in 1838 that, in consequence of the misgovernment of the native rajah, the entire country was placed under British administration. The towns of any size are Gauhátí (12,000) and Sebságar (6000). A majority of the people are Hindus. A striking feature of Assam is the abundance of tigers, rhinoceroses, leopards, bears, buffaloes, and elephants; the snakes are most destructive to human life. Pop. (1872) 4,124,972; (1881) 4,881,426; (1891) 5,476,833; (1901) 6,126,343.

Assa'ye, an Indian village in the extreme north-east of the Nizam's dominions, 43 miles NE. of Aurungabad. Here, on 23d September 1803, Wellesley, afterwards Duke of Wellington, with 4500 men, defeated 50,000 Mahrattas.

Assen, a town of NE. Holland, 17 miles S. of Groningen by rail. Pop. 11,200.

Assiniboia, till 1905 a Canadian district within the limits of the North-west Territories, formed by an order in Council in 1882. It was bounded on the south by the United States frontier, on the east by Manitoba, and on the north by the former district of Saskatchewan, and had an area of 89,535 sq. m. It contained the towns of Regina (now the capital of the new province of Alberta) and Fort Pelly. The climate is subject to extremes, ranging from 58° F. below zero in winter to 106° above it in summer. In 1905 the new provinces of Saskatchewan and Alberta were formed, and Assiniboia was divided between them, Saskatchewan getting the greater portion.

Assin'iboine, a river of British North America, rising in 51° 40′ N. lat. and 105° E. long., and, after a course of 400 miles, at Winnipeg joining the Red River (q.v.), which discharges its waters into Lake Winnipeg. Its tributaries are the Little Souris, Qu'appelle, Rapid River or Little Saskatchewan, White Sand River, and Beaver Creek.

Assi'si, a town of Central Italy, on a steep hill, 14 miles SE. of Perugia by rail. It is the birthplace of St Francis, who founded here in 1209 the mendicant order that bears his name. The monastery (1229) has two Gothic churches, one surmounting the other, with frescoes and paintings by Cimabue, Giotto, &c.; beneath, in a Doric crypt (1818), are the relics of St Francis. Assisi also possesses a cathedral. Pop. 6705.

Assiut. See SIOUT.

Assmannshau'sen, a village on the Rhine, 3 miles below Rüdesheim, famous for its red and white wine.

Assos, a ruined town on the Gulf of Edremid, whose still imposing remains were successfully excavated, in 1881–83, by the American Institute of Archæology.

Assouan' (also *Eswan;* the ancient *Syene*) is the southernmost city of Egypt proper, on the right bank of the Nile, and beside the first or lowest cataract. Near are the islands of Philæ and Elephantine. On the left bank are catacombs. There are some remains of the ancient city. In the neighbourhood are the famous syenite quarries from which so many of the huge obelisks and colossal statues were cut to adorn the temples and palaces of ancient Egypt. Here is the great dam erected (1899–1902) in connection with Egyptian irrigation. Pop. 12,000.

Assumption. See ASUNCION.

As'synt, LOCH, a beautiful fresh-water lake of Sutherland, 6¼ miles E. of Lochinver. Lying 215 feet above sea-level, it measures 6¾ miles by ¾ mile. To Ardvreck Castle, on a north-eastern promontory, the Marquis of Montrose was brought a prisoner in 1650.

Assyria, the northernmost of the three great countries that occupied the Mesopotamian plain. It was bounded on the N. by the Niphates Mountains of Armenia; on the S. by Susiana and Babylonia; on the E. by Media; and on the W., according to some, by the Tigris, but more correctly by the watershed of the Euphrates, for many Assyrian ruins are found to the west of the Tigris. It was thus about 280 miles long from N. to S., and rather more than 150 broad from E. to W. This plain is diversified by mountain-chains on the north and east, and watered by the Tigris and its affluents, between two of which—the Zab rivers—lay the finest part of the country, called Adiabené. As it was the boundary-land between the Semitic people and Iran, it became the scene of important political events. Its extraordinary fertility enabled it to support a large population. The high degree of prosperity and civilisation reached by its inhabitants in very early times is attested not only by ancient writers, but by the extensive ruins of mighty cities, by the canals and contrivances for irrigation, and by the numerous proofs—furnished by recent excavations—of an acquaintance with the arts and sciences. The ruins of many cities are grouped around Nineveh; while lower down, the Tigris exhibits an almost unbroken line of ruins from Tekrit to Bagdad. Under the Mohammedans this fine country is now almost a desert. Nineveh (q.v.) was the capital. There are indications that this Semitic state was founded as far back as 2330 B.C.; its king was certainly powerful about 1320 B.C.; Tiglath-pileser (1140) was its first great prince; after some centuries of decay the empire was again a great power under Shalmaneser II. (858). In the 7th century B.C. the empire was greatly decayed, and Babylon independent: finally

Nineveh was taken in 605, and Assyria became a province of Media. The Assyrian language was akin to Hebrew and Phœnician. On the topography and archæology, see books by Botta, Oppert, Layard, George Smith, Perrot and Chipiez, Sayce, Maspero, Rogers (1901).

Asterabad'. See ASTRABAD.

Asti (*Asta Pompeia*), a city of Piedmont, lies on the Tanaro, 35 miles ESE. of Turin. The *vino d'Asti* is a kind of sweet muscatel, effervescing like champagne. Pop. 17,340.

Aston, the name of upwards of 60 English towns, villages, townships, or parishes, the best known being beside Birmingham (q.v.).

Astoria, originally a fur-trading station in Oregon, U.S., on the left bank of the Columbia, founded by the Pacific Fur Company in 1811, and named from its chief proprietor, John Jacob Astor. It was a main point in the American claim to the territory of Oregon (q.v.). There are upwards of 50 large salmon-tinning establishments in the neighbourhood. The lumbering industry is also important. Pop. (1881) 2803; (1891) 6184; (1900) 8381.

Astrabad', a decayed town in the north of Persia, at the foot of the Elburz Mountains, 30 miles SE. of the Caspian. Pop. (1808) 75,000; (1904) 18,000.

Astrakhan', a barren government in the SE. of European Russia, watered by the Volga, and washed on the SE. by the Caspian Sea. Area, 91,327 sq. m.; pop. 1,003,500.—ASTRAKHAN, the capital, is situated on a high island in the Volga, 41 miles from its mouth in the Caspian Sea. The Kreml, or fortress, and the White Town alone have houses of stone; the suburbs contain wooden buildings only. Lengthwise through the middle of the city runs a canal which connects the Kutum arm of the Volga with the main stream. Of nearly 40 Greek churches, the finest is the cathedral (1696), on the highest point in the Kreml. Pop. 113,710, consisting of Russians, Armenians, Tartars, and Persians. Almost the entire commerce with Persia and Transcaucasia passes through the city. Its great markets attract every year many thousands of merchants, and its three bazaars are among the busiest marts in Europe or Asia. The city is connected by steamers with all parts of the Caspian, and is the principal harbour of that sea. The industries are shipbuilding, dyeing, silk manufacture, &c.; the sturgeon and other fisheries are amongst the greatest in the world.

Astrolabe Bay, a large inlet of the sea on the northern coast of the eastern portion of New Guinea, opposite the end of New Britain.

Astu'rias, or OVIEDO, a northern province of Spain, washed on the north by the Bay of Biscay. Area, 4091 sq. m.; population, 628,000. The chief towns are Oviedo (q.v.), the capital, Gijon, Aviles, Llanes, and Luarca.

Asuncion (Span. *As-soon-thee-oan'*), capital of the republic of Paraguay, on Paraguay River, has connection by steamers with Buenos Ayres, and by a railway of 45 miles with Paraguari. Founded in 1537 on the Feast of the Assumption, it has a cathedral (1845) and a trade in leather, tobacco, sugar, manioc, and maté or Paraguay tea. Pop. (1857) 40,000; (1886) 24,838; (1901) 51,700.

Atacama', a northern province of Chili, with an area of 30,400 sq. m., and a population of 70,000. Silver and copper are largely mined, and gold is also found in considerable quantities. Capital, Copiapo; pop. 9916.—The *Desert of Atacama* till the war of 1879 belonged also partly to Bolivia. Its silver and saltpetre works have to some extent peopled its solitudes.

At'bara, a tributary of the Nile, rises in Abyssinia near Lake Tzana, flows mainly northwest, and after receiving the larger Takazze, joins the Nile below Berber—being its only tributary below the junction of the White with the Blue Nile. For some months its course is almost dry.

Atchafalay'a, an outlet of the Red River or of the Mississippi, but receiving very little of the waters of the latter except in time of flood. It runs nearly southward to Chetimaches Lake, and after passing through it, reaches the Gulf of Mexico by Atchafalaya Bay after a course of about 220 miles.

Atcheen (also *Acheen* or *Atchin*; called by the Dutch *Atjeh*), until 1873 an independent state in the north-west part of Sumatra, now a province of the Dutch Indies, with an area of 20,501 sq. m., and a pop. of 290,700. The natives in appearance, dress, character, and manners, are distinct from the rest of the inhabitants of Sumatra, being of darker colour and lower stature, and more active and industrious. The capital is Kota Radja or Atcheen, in the northwestern extremity, on a stream navigable by boats, 4½ miles from its port Oleh-leh, with which, since 1876, it has been connected by a railway. Pop. 10,000.

Atchison, a city of Kansas, U.S., on the Missouri's left bank, 333 miles above St Louis. Nine railway lines converge here; and the city has flour-mills, an iron-foundry, machine-shops, manufactures of furniture, carriages, and wagons. Pop. (1870) 7054; (1880) 15,106; (1900) 15,722.

Ateshga ('place of fire'), a spot on the peninsula of Apsheron, on the west coast of the Caspian Sea. Many Guebres or Persian Fire-worshippers still visit it, and bow before the holy flames which issue from the bituminous soil.

Ates'sa, a town of South Italy, 23 miles SSE. of Chieti. Pop. 5086.

Ath, or AATH, a fortified town in the province of Hainault, Belgium, on the navigable Dender, 32 miles SW. of Brussels. Pop. 11,000.

Athabas'ca (locally *La Biche*, 'red-deer or elk river'), a river and lake in the North-west Territory of the Canadian Dominion, forming part of the great basin of the Mackenzie. The *river* rises in the Rocky Mountains, in a little lake at the foot of Mount Brown, one of the highest points in the range, and flows over 600 miles NE. and NW., until it unites with the Peace River, from beyond the Rocky Mountains, to form the Slave River, which, again, after passing through Great Slave Lake, takes the name of the Mackenzie (q.v.). *Lake* Athabasca receives nearly all its waters from, and has its sole outlet in, the Athabasca River, which traverses not its length but its breadth, and that not in its middle, but at its extremity. It is 230 miles long, and from 14 to 30 broad. It was discovered in 1771 by Samuel Hearne, and named by him Lake of the Hills.—ATHABASCA, formerly one of the four divisions of the Canadian North-west, defined in 1882, between British Columbia and a line to the east of the Athabasca River, and between the parallels 55° and 60° N. lat. In 1905 it was about equally divided between the newly formed provinces of Alberta and Saskatchewan.

Athboy, a market-town of County Meath, on

the river Athboy, 7 miles NW. of Trim. Pop. 613.

Ath'elney, Isle of ('island of nobles'), a marsh at the junction of the rivers Tone and Parret, in the middle of Somersetshire, 7 miles ENE. of Taunton. Here Alfred hid himself from the Danes in 878.

Athenry, in County Galway, 10 miles NW. of Loughrea. Pop. 850.

Athens, anciently capital of the Greek state of Attica and centre of Greek culture, now capital of the modern kingdom of Greece, 4½ miles from its harbour of Piræus, on the Gulf of Ægina. The city, which takes its name from Athena, 'goddess of science, arts, and arms,' and its own patron divinity, was originally built on the Acropolis, a conspicuous limestone rock rising 500 feet above the Attic plain, and afterwards spread out on the plain below; while the Acropolis became the citadel and subsequently the site of a group of beautiful temples of the time of Pericles (5th century, B.C.). The ruins of the Parthenon, the Erechtheum, the temple of Nike Apteros ('Wingless Victory'), and the Propylæa, still remain to testify to the former glory of the Acropolis. Of the other ancient buildings the most notable are the Theseum (also of the Periclean period, and still almost perfect), and the fragments of the vast temple of Zeus (begun in 530 B.C. and finished by the Roman Emperor Hadrian), with the theatre of Dionysus, &c. Not far from the Acropolis rose the hill Lycabettus (911 feet), and the hillocks or ridges of the Pnyx and the Areopagus or Mars Hill. At a greater distance the plain is bounded by Hymettus (3368 feet), Pentelicus (3641), and other ranges. Athens was fabled to have been founded by the hero Cecrops. The most brilliant period of its history was when, after the Persian wars (5th century, B.C.), Athens took the lead amongst the Greek states, became powerful by land and sea, was adorned by Pericles with her most glorious buildings, and brought Greek literature and Greek philosophy to their highest development. Its decline dates from the disastrous conclusion of the Peloponnesian war (403 B.C.). It was plundered and ruined by Sulla in 87 B.C.; and neither under Byzantine nor Turkish rule ever attained any prosperity. In the days of her glory Athens had some 100,000 free inhabitants and twice as many slaves; when after the liberation of Greece Athens was made the capital of the new kingdom (1834), it was a wretched village of a few hundred houses. Since then it has had a prosperous growth, looks like a well-built German town, and had in 1904 a pop. of 115,000, with a fine royal palace, many handsome private residences, a university with 50 professors and more than 1000 students, and a good deal of miscellaneous trade by way of the Piræus. It is connected by rail also with Corinth, and the Athens-Larissa line is to bring Greece into railway communication with the rest of Europe. See, besides works on Greece, ancient and modern, Dyer's *Ancient Athens* (1873).

Athens, a name applied to more than twenty places in the United States. (1) In Georgia, 92 miles WNW. of Augusta. It contains several cotton factories, and is the seat of the university of Georgia (1801). Population, above 11,000.—(2) In the south of Ohio, on the Hocking River, is the seat of the Ohio University (1804). Pop. 3200.

Atherstone, a market-town of Warwickshire, 14 miles N. of Coventry by rail. Drayton was born close by. Pop. 5300.

Atherton, a township of Lancashire, 13 miles WNW. of Manchester. Pop. (1871) 7581; (1891) 15,833; (1901) 16,211.

Athlone, a town of Ireland, on the Shannon, chiefly in Westmeath, but partly in Roscommon, 80 miles W. of Dublin by rail. The chief manufactures are felt-hats, friezes, linens, and stays. The Shannon is crossed by a fine bowstring and lattice iron bridge of two arches, 175 and 40 feet span. Till 1885 Athlone returned one member. Its castle, founded in King John's reign, in the war of 1688 was unsuccessfully besieged by William III., but was afterwards taken by General Ginckell. The fortifications cover 15 acres, and contain barracks for 1500 men. Pop. 6617.

Ath'ole, a district in the north of Perthshire, occupying a great part of the southern slopes of the Grampians.

A'thos (Gr. *Hagion Oros*, 'Holy Hill'), the most eastern of the three tongues of the Chalcidice Peninsula on the Ægean Sea, connected with the mainland by a low and narrow isthmus, about a mile across. The length of the peninsula is about 31 miles; its breadth varies from 3 to 6 miles. At the southern extremity, a solitary peak rises abruptly to a height of 6346 feet above the sea. Xerxes cut a canal through the isthmus, traces of which still exist. This peninsula is the seat of twenty large monasteries, besides numerous hermitages and chapels. The entire number of monks is about 6000. They enjoy complete autonomy, subject to paying the Turkish government an annual tribute of about £3500. Caryes, the principal place in the peninsula, is picturesquely situated in the midst of vineyards and gardens, and has 1000 inhabitants. Here the market is held; but no female, even of the lower animals, is permitted on Athos. In the middle ages, Athos was the centre of Greek learning and Christian-Byzantine art. Now learning is at a very low ebb; scarcely more than two or three monks of tolerable education can be found in a monastery. The libraries are neglected, though containing several beautiful (but not important) manuscripts. See works by Curzon (1849; 6th ed. 1881), Athelstan Riley (1887), and Brockhaus (Leip. 1891).

Athy', the chief town of County Kildare, on the Barrow, here joined by the Grand Canal, 45 miles SW. of Dublin by rail. Pop. 3600.

Atitlan, a Central American lake, in Guatemala, 24 miles long, and 8 to 10 miles broad. It seems to occupy the crater of an extinct volcano, and is of great depth. It has no visible outlet. High cliffs surround it, and on its southern bank rises the volcano of Atitlan (12,538 feet), at whose foot lies the little Indian town of Santiago de Atitlan, with a pop. of 9000.

Atlanta, a flourishing city of the United States, capital of Georgia, is situated 1100 feet above sea-level, 294 miles NW. of Savannah, and 7 miles SE. of the Chattahoochee River. Seven railroads centre at it. Atlanta has an extensive and rapidly increasing trade in cotton, dry goods, horses and mules, and especially tobacco. Public buildings are the custom-house, state-house, opera-house, the Atlanta University for the education of coloured young men and women, Clark Theological School (coloured Methodist), and two medical colleges. In September 2, 1864, the city was captured by the Union troops under General Sherman, and the entire business portion destroyed by them on leaving it a month later. Since the restoration of peace, however, its prosperity has been uninterrupted and its growth

rapid. Atlanta was settled in 1840; was incorporated as the village of Marthasville in 1842; as Atlanta, in 1847. Pop. (1850) 2572; (1870) 21,879; (1890) 65,533; (1900) 89,872.

Atlantic City, a fashionable American health-resort, on a narrow, sandy island off the coast of New Jersey, 60 miles SE. of Philadelphia by rail. Pop. (1870) 1043; (1890) 13,055; (1900) 27,838.

Atlantic Ocean (so called either from Mount Atlas or from the fabulous island of Atlantis), separating the Old from the New World, Europe and Africa being on the E., and North and South America on the W. Its greatest width is about 5000 miles, but between Brazil and the African coast the distance is only about 1600 miles. It is in open communication with both the Arctic Ocean and Antarctic or Southern Ocean. The North Atlantic, stretching from 70° N. to the equator, has an area of 14,000,000 sq. m. It communicates with many inclosed or partially inclosed seas, such as the Caribbean Sea, Gulf of Mexico, and Hudson Bay on the west, the Baltic, North Sea, Mediterranean, and Black Sea on the east. The South Atlantic from the equator to 40° S. has an area of 10,100,000 sq. m.; if it be supposed to extend through the great Southern Ocean as far as the Antarctic circle, its area is 16,700,000 sq. m.

Towards the centre of the North Atlantic, between Africa and North America, and in the centre of the South Atlantic, between Africa and South America, there are anticyclonic areas of high atmospheric pressure (over 30 inches), out of which winds blow in all directions to surrounding regions where the pressure is less. The positions of these high-pressure areas and the winds that blow out from them, determine the great oceanic currents and the positions of the Sargasso seas, for the winds everywhere determine and control the movements of the surface waters. The SE. and NE. trades drive the heated surface waters of the tropics before them, and eventually produce the Equatorial current, which on reaching Cape St Roque bifurcates, one branch becoming the Brazil current of the South Atlantic, the other and larger branch passing on to the Caribbean Sea and Gulf of Mexico, finally issuing from the latter by the Strait of Florida, forming the Gulf Stream (q.v.), the greatest and most important of all oceanic currents. A cold Arctic current passes southward along the shores of Greenland, and unites off Cape Farewell with the Davis Strait current, forming the Labrador current, which passes along the west coast of America, and passes beneath the Gulf Stream to the south of the banks of Newfoundland. Icebergs are carried as far south as 40° N. in the northern and as far north as 38° S. in the southern hemisphere. In the equatorial regions, the surface water has generally a temperature ranging from 70° to 84° F.; the temperature decreases as the depth increases. The warm water is a relatively thin stratum, the greater part of ocean water having a temperature below 40° F. It is ice-cold in the Atlantic at the bottom even beneath the equator. The water of the Atlantic contains the least salt towards the poles and in the equatorial belt of calms. The saltest water (density over 1·0275) is found in the centre of the trade-wind regions. The salinity of the deeper waters is considerably below the average of the surface. The average depth of the Atlantic is between 2 and 3 miles (2200 fathoms). A low submarine ridge runs down the centre, from north to south, with an average depth of about 1700 fathoms over it. On either side of this ridge there are, both in the North and South Atlantic, depths of between 3000 and 4000 fathoms. The greatest depth yet met with is just north of the Virgin Islands (4561 fathoms). The surface waters from equator to poles swarm with all kinds of pelagic plants and animals, many of which emit phosphorescent light, producing what is known as luminosity of the sea. In the centre of the North Atlantic, in the so-called Sargasso Sea, there are enormous floating banks of gulf weed (*Sargassum bucciferum*), on which a large number of peculiar animals live. Life has been found to exist at all depths in the Atlantic, but it becomes less abundant as greater depths and a greater distance from continental shores are reached. There are relatively few oceanic islands. Iceland, the Azores, St Paul's Rocks, Ascension, and the Tristan da Cunha group all rise from the central elevation, and are all of volcanic origin. Jan Mayen rises from the deep water of the Norwegian Sea. The coral group of Bermudas rises from the deep water of the Western North Atlantic. Off the west coast of Africa are the Canaries, Cape Verds, and Madeira. In the South Atlantic, to the west of the central ridge, are Fernando Noronha and Trinidad, and to the east of the central ridge, St Helena. There are numerous continental islands, such as the British Isles, Newfoundland, the West Indies, the Falklands, and others. The most civilised nations of the world inhabit the shores of the Atlantic, and it is the great commercial highway of the world. It has been sounded in all directions, and the nature of its bed is so well known that telegraph cables can be laid across it with great certainty of success. In the neighbourhood of some continental shores, and around some of the volcanic cones which rise from the floor of the ocean, there are occasionally very steep slopes; but as a rule, the bed of the ocean is a widespread, gently undulating plain.

Atlas, the great mountain-system of Northwestern Africa, stretching north-eastward from Cape Nun in Morocco to Cape Bon in Tunis, a distance of 1400 miles. It is not properly a mountain-chain, but rather a very irregular mountainous mass of land, that attains its greatest height (13,000 feet) in Miltsin—27 miles SE. of the city of Morocco, whilst in Algeria the elevation is only 7673 feet, in Tunis 4476, and in Tripoli 3200. The slopes on the north, west, and south are covered with vast forests of pine, oak, cork, white poplar, wild olive, &c. The valleys are well watered and capable of cultivation with great profit.

Atra'to, a river of Colombia, rising on the Western Cordillera at an altitude of 10,560 feet, and running 305 miles northward through low swampy country, till it falls by several mouths, interrupted by bars, into the Gulf of Darien. It is navigable by steamers for fully 250 miles, being 750 to 1000 feet wide, and 8 to 70 feet deep. A route, surveyed by the United States government in 1871, proposed to connect the Atrato and the Jurador, flowing into the Pacific, by a canal 48 miles long.

Atrauli (*Atrowli*), a town of British India, in the United Provinces, 16 miles NE. of Aligarh. Pop. 18,000.

Atrek, a river of Persia, rising in Khorasan, and flowing nearly 350 miles westward to the Caspian Sea, from Shatt downwards along the boundary with the Russian empire.

At'tica, one of the political divisions or states

of Hellas or ancient Greece, of which Athens was the capital. Its area was about 640 sq. m.; rather smaller than that of Lanarkshire. To-day Attica and Bœotia together form a nomarchy or government of Greece, with an area of 2472 sq. m., and a pop. of 315,000.

Attleborough, a market-town of Norfolk, 16 miles SW. of Norwich. It had a college of the Holy Cross (1387). Pop. of parish, 2302.

Attleborough, a post-village in Massachusetts, U.S., 31 miles SW. of Boston by rail. Pop. 11,350.

Attock, a town of the Punjab, on the left bank of the Indus, here spanned by a great railway bridge (1883). A fort was established here by the Emperor Akbar in 1581, to defend the passage of the river, but it is no longer a position of strength. The situation, however, of Attock is important, whether in a commercial or in a military view, it being at the head of the steamboat navigation of the Indus, 940 miles from its mouth. Pop. 4000.

Attrek. See ATREK.

Aubagne (*O-bân'*), a town in the French dep. of Bouches-du-Rhône, on the Huveaune, 10½ miles E. of Marseilles by rail. Pop. 5498.

Aube (*Oab*), a dep. in the north-east of France, occupying the southern part of the old province of Champagne and a small portion of Burgundy. The western part belongs to the basin of the Seine; the eastern to that of the Aube, which rises near Mount Saule, on the plateau of Langres, and flows 140 miles north-westward by La Ferté, Bar, and Acris, to the Seine. Area, 2310 sq. m. Pop. 246,000.

Aubenas (*Oab-na*), a town of SE. France, dep. Ardèche, 50 miles NNE. of Alais by rail. It is built on a height rising 688 feet above the river Ardèche, and has a fine old castle. Pop. 5671.

Aubervilliers (*O-ber-veel-yay'*), in the Seine dep., 5 miles N. of Paris. Pop. 28,000.

Auburn, or LISSOY, a Westmeath village, 7 miles NE. of Athlone. Goldsmith's father was rector here, and it is his 'deserted village;' the name 'Auburn' was taken from his poem.

Auburn, several places in the United States. (1) In the state of New York, 173 miles W. by N. of Albany. The outlet of Owasco Lake flows through the town, furnishing a water-power which is employed in manufactures of agricultural machinery, wool, cotton, silk, carpets, iron, &c. The state prison, founded here in 1816, with over 1000 inmates, has since 1823 been conducted on the 'silent' or 'Auburn' system. There are also a state asylum and a state armoury. Pop. (1870) 17,225; (1880) 21,924; (1900) 30,345.—(2) A town of Maine, on the west bank of the Androscoggin River, opposite Lewiston, and 35 miles N. of Portland by rail. It has manufactures of cotton, furniture, and boots and shoes. Population, above 13,000.

Aubusson (*O-büs-son²*), a town in the French dep. of Creuse, in the rocky gorge of the river Creuse, 47 miles ENE. of Limoges. Pop. 6248.

Auch (*Oash*), capital of the French dep. of Gers, on the river Gers, 44 miles S. of Agen by rail. The *Augusta Auscorum* of the Romans, it is built on a hill, whose summit is crowned by the cathedral (1489–1662), rich in stained glass and carved woodwork. Pop. 9500.

Auchendrane, a seat 4 miles S. of Ayr, the scene of Scott's *Ayrshire Tragedy*.

Auchenheath, a Lanarkshire collier village, 2½ miles N. of Lesmahagow. Pop. 640.

Auchensaugh, a Lanarkshire hill, 2½ miles SSE. of Douglas, where in 1712 the Cameronians founded the Reformed Presbyterian Church.

Auchinblae, a Kincardineshire village, 5½ miles NNE. of Lawrencekirk. Pop. 450.

Auchinleck, an Ayrshire village, 15 miles E. of Ayr by rail. Pop. 2168. The parish contains Auchinleck House (locally called 'Place Affleck'), the seat of the Boswells.

Auchmithie, a Forfarshire fishing-village, 3½ miles NNE. of Arbroath. It is the 'Musselcrag' of Scott's *Antiquary*. Pop. 353.

Auchmuty, a Fife village, on the Leven, 1¼ mile W. of Markinch. Pop., with Balbirnie Mills, 419.

Auchterarder, a Perthshire village, 14½ miles SW. of Perth by rail. Pop. 2276, largely employed in the woollen manufacture. The opposition to the presentee to Auchterarder parish originated (1834) the struggle which ended in the formation of the Free Church in 1843.

Auchtergaven, a Perthshire parish, 7½ miles N. by W. of Perth. The poet Robert Nicoll was a native.

Auchtermuchty, a Fife royal burgh, 10¼ miles WSW. of Cupar. Pop. 1387.

Auckland, the northern provincial district of New Zealand, includes fully half of North Island, and is about 400 miles long by 200 wide at its widest. The coast-line of nearly 1200 miles is very long in proportion to the area. Volcanic action has deeply left its mark on the surface of Auckland; and the warm lake and geyser scenery of the region about 90 miles SE. below the Bay of Plenty is amongst the most remarkable in the world. The 'Hot Lake' district covers an area 120 miles long by 10 to 15 wide, and includes hot springs, cisterns of hot water, and mud volcanoes; at Rotorua is an admirably equipped bathing-house and sanatorium. The other lakes are Tarawera, Rotoiti, and Rotomahana. The wonderful pink and white terraces near Tarawera Lake were destroyed by a volcanic eruption in 1886. Pop. (1875) 79,104; (1881) 99,451; (1891) 133,267; (1901) 175,870.

Auckland, the largest city in the North Island of New Zealand, on a peninsula 7 miles wide on the Hauraki Gulf. It stands on the south side of Waitemata Harbour, one of the finest harbours in New Zealand; and its splendid wharves and graving-docks offer the most complete facilities for shipping. Auckland is distant from Sydney 1315 miles; from Melbourne, 1650. It possesses also a harbour on the western side of the island in Manukau, only 6 miles across. It has a university college and cathedral, and the foundation stone of a Free Library and Art Gallery was laid in 1885. Shipbuilding, sugar-refining, rope-spinning, and brick-making are among the industries. Pop. (1881) 16,675; (1901) 34,220. Founded in 1840, and named after Lord Auckland, governor-general of India, the town was capital of New Zealand till 1865.

Auckland Islands, a group of islands about 180 miles to the south of New Zealand. The largest of them measures 30 miles by 15. It has two good harbours, and is covered with the richest vegetation. The Auckland Islands are valuable chiefly as a whaling station, but are not peopled. They were annexed by Great Britain in May 1886.

Aude (*Oad*), a maritime dep. in S. France, part formerly of Languedoc. Area, 2438 sq. m.; population, 313,500. The southern part is occupied by spurs of the Pyrenees, attaining 4037 feet

in the Pay de Bugarach; but the greater portion belongs to the valley of the lower Aude (130 miles), falling into the Mediterranean. The chief town is Carcassonne (q.v.).

Audenshaw, a town of Lancashire, 5 miles E. from Manchester. Pop. 7220.

Audh. See OUDH.

Audley, a town of Staffordshire, 5 miles NW. of Hanley, with coal and iron works. Pop. 13,700.

Audley End, Essex, 1½ mile SW. of Saffron Walden, the seat of Lord Braybrooke.

Auerstädt (*Ow'er-stet*), a village of Prussian Saxony, 10 miles W. of Naumburg. Here, in October 1806, the French defeated the Prussians.

Aughnacloy, a Tyrone town, on the Blackwater, 10 miles SW. of Dungannon. Pop. 974.

Aughrim. See AGHRIM.

Augsburg, a city of Bavaria, capital of the province of Swabia, is situated in the angle between the rivers Wertach and Lech, 37 miles WNW. of Munich. It has a noble street, the Maximilian Strasse, adorned with three bronze fountains (1593–1602); and the principal edifices are the Renaissance town-house (1620), with its splendid 'Golden Hall;' the Perlach Tower, dating from the 11th century; the former episcopal palace, where, on 25th June 1530, the Protestant princes presented the Augsburg Confession to Charles V.; the grand old mansion of the merchant-princes, the Fuggers; the 'Three Moors,' one of the most interesting hostelries in Germany; and the Gothicised Romanesque cathedral (994–1421), with its bronze doors and early glass-paintings. The industry of Augsburg is once more vigorous. Cotton is now the staple manufacture, besides woollens, paper, tobacco, machinery, gold and silver wares, brewing, printing, lithography, and bookselling. Pop. (1871) 51,270; (1900) 89,500; of whom 66 per cent. were Catholics. The Emperor Augustus in 12 B.C. here founded the 'colony' of *Augusta Vindelicorum*, which in 1276 became a free city of the empire, and which was the centre of German art as represented by the Holbeins, Burgkmair, Altdorfer, &c. The discovery of the Cape route to India, and of America, dried up the sources of Augsburg's prosperity. It ceased to be a free city on the abolition of the German empire in 1806, and was taken possession of by Bavaria.

Augusta, or AGOSTA, a fortified seaport of Sicily, 11 miles N. of Syracuse by rail. Pop. 12,210. Near it, in 1676, the French under Duquesne gained a great naval victory over a Spanish and Dutch fleet under De Ruyter.

Augusta (1), the capital of Maine, U.S., on the Kennebec, 63 miles NNE. of Portland by rail. A dam, 17 feet high, affords considerable water-power; there are several cotton and other mills; and in 1886 a new system of waterworks was introduced. Augusta contains a U.S. arsenal; and at Togus, 4 miles distant, is one of the national institutions for disabled soldiers. Pop. (1880) 8665; (1900) 11,683. (2) The third city of Georgia, U.S., on the Savannah River, 231 miles from its mouth, but only 132 from Savannah by rail. It is the head of steamboat navigation on the river, which is here spanned by three bridges, connecting the town with Hamburg, S.C., and which is crossed by a stone dam, 1720 feet in length, from which a canal, 8 miles long and 150 feet wide, supplies water both for domestic use and for the cotton and other mills. Augusta is the seat of the Medical College of Georgia (1832). Pop. (1860) 12,493; (1880) 21,891; (1900) 39,540.

Augustenburg, a village of 600 inhabitants on a bay of the island of Alsen (q.v.). Its castle (1776) was formerly the residence of the Dukes of Holstein-Sonderburg-Augustenburg.

Augusto'vo, a town of Russian Poland, on the Netta, a feeder of the Bug, 138 miles NE. of Warsaw. Pop. 13,094.

Augustus, FORT. See FORT AUGUSTUS.

Aulapolai', or ALLEPPI, a seaport, with a lighthouse, in Travancore state, Madras, 33 miles S. of Cochin. Pop. 25,000.

Auldearn, a Nairnshire village, 2¾ miles ESE. of Nairn. Near it Montrose won his fourth victory, 9th May 1645. Pop. 313.

Aumale (*O-mâl'*), an unimportant town of 1966 inhabitants, in the French dep. of Seine-Inférieure, on the Breste. Since 1547 it has given the title of duke to various families.—AUMALE, a town of Algeria, 57 miles SE. of Algiers, is a strong military post. Pop. 3706.

Auray (*O'ray*), a port in the French dep. of Morbihan, 20 miles E. of Lorient by rail. Here is a large deaf and dumb institute; and 2 miles north is the famous place of pilgrimage of St Anne of Auray. Pop. 5517.

Aurich (*Ow'rihh*), in the Prussian province of Hanover, almost in the centre of East Friesland, 16 miles NE. of Emden by rail. Pop. 6399.

Aurillac (*O-reel-yac*), capital of the French dep. of Cantal, on the Jourdanne, 116 miles SW. of Clermont. Pop. 14,756.

Aurora (1), a city of Illinois, U.S., on Fox River, at the junction of several railroads, 39 miles WSW. of Chicago. It has machine-shops, flour-mills, manufactories of woollens, cottons, watches, corsets, silver ware, carriages, and extensive railroad workshops. Pop. (1860) 6011; (1880) 11,873; (1900) 24,147.—(2) A city of Missouri, 270 miles SW. of St Louis, in a mining region. Pop. 6500.

Aurungabad, the name of at least four places in India, the most important being in the state of Hyderabad, on the Doodna, a tributary of the Godavery. It has a ruined palace of Aurungzebe, and the mausoleum of his daughter. Pop. 36,850.

Auskerry, an Orkney island, 2½ miles S. of Stronsay. Pop. 7.

Aussee, a town in the Salzkammergut of Styria, at the confluence of three mountain-streams, which form the Traun, 23 miles SE. of Ischl by rail. Situated 2171 feet above the level of the sea, it has mineral springs and baths and pretty villas, and is visited by some 6000 strangers annually. Pop. 1569.

Aussig, a town of Bohemia, on the Elbe, here joined by the Biela, 66 miles NNW. of Prague. It has large chemical works. Pop. 37,270.

Austerlitz (Czech *Slavkov*), a town of Moravia, on the Littawa, 12 miles ESE. of Brünn. Pop. 3500. Here, on 2d December 1805, Napoleon defeated the Russians and Austrians.

Austin, the capital of Texas, U.S., on the Colorado River, 166 miles W. by N. of Houston. It has a State Capitol (1887) and a State University. Austin was named after the founder of the state of Texas. Pop. 22,500.

Australa'sia is a term etymologically equal to *Southern Asia*, but used to indicate Australia and the adjoining islands—Tasmania, New Zealand, Papua or New Guinea, New Caledonia, the New Hebrides, New Ireland, and New Britain. The term would thus exclude the Malay Archipelago, Micronesia, and Polynesia proper; but some authors include these great groups of

islands also, making the name therefore equivalent to *Oceania*. Popularly, on the other hand, it means the 'Australian Colonies' of Great Britain, including Tasmania, New Zealand, Fiji, &c.

Australia, by far the largest island on the earth's surface, and with or without adjoining islands, reckoned one of the continents, lies between 10° 39′ and 39° 11½′ S. lat., and between 113° 5′ and 153° 16′ E. long. It has a length from west to east of about 2400 miles; and a breadth from north to south of 1971 miles; with a total area of 2,944,628 sq. m., about one-fourth less than that of Europe, or more than twenty-five times that of Great Britain and Ireland. By the shortest route, its nearest point is 11,000 miles distant from England. It is separated from New Guinea by Torres Strait, 90 miles broad, and from Tasmania by Bass Strait, 140 miles wide; on the NW., W., and S., it is washed by the Indian Ocean; and on the E., by the South Pacific. This island-continent is, above all other continents, exceedingly compact, with an almost unbroken outline on the east and west. Parallel with the east coast, at a distance of about 60 miles, stretches for 1200 miles the Great Barrier Reef. The name Australia in its present signification was suggested by Captain Flinders, and came into use about 1817.

The island is mainly a plateau with a precipitous face outwards, and at most places bounded by a strip of lower-lying land between that face and the sea-coast. The eastern edge of the plateau averages 2000 feet in height, the western but 1000 feet; while there is in all directions an inclination towards a central depression somewhat south and east of the actual centre of the continent. One great river, the Murray, Australia's only great river, drains by means of its many large tributaries—Darling, Murrumbidgee, &c.—the whole of the south portion of the eastern half of the plateau, most of Victoria, New South Wales, the south of Queensland, and the east of South Australia; and in the SE. corner is the principal mountain range, the Australian Alps (highest points Mount Townsend, 7350 feet, and Mount Kosciusko, 7308) continued northwards into New South Wales by the Blue Mountains, the Liverpool Range, &c. There is no drainage into the interior in the western part of the plateau, which is but slightly inclined: and here the slight and irregular rainfall collects in salt marshes, which sometimes in flood greatly extend their area. Next to the Murray, the most important rivers are the Fitzroy and the Burdekin in Queensland. By far the best part of the continent for European settlement and European agriculture is the south-east—Victoria, New South Wales, and part of South Australia—both on and outside of the plateau. Queensland is rich and fertile, but tropical and sub-tropical. The northern coast strip is largely covered with tropical forests. A portion only of Western Australia is available for agriculture or pastoral occupation. Considerable areas of the interior are hopeless, irreclaimable, almost impassable sandy desert; but much of the interior area, covered with scrub and prickly plants, might under irrigation become available for human occupation.

The foundation of the plateau is granite, sometimes replaced by palæozoic slates and schists inclined so as to stand almost on edge. Above both are in east and south-east coal-bearing areas, of both mesozoic and palæozoic age. The central depression is of cretaceous age. The higher edges of the plateau are all volcanic, craters, ash cones, and ash beds being still very conspicuous in many places. Gold, discovered in New South Wales in 1851, has since been found in all the Australian colonies, especially Victoria, Queensland, and New South Wales. In 1851–91, Australia produced about 100,000,000 oz. valued at over £350,000,000. Of late years the gold produce has much fallen off. There are rich silver-mines in New South Wales, copper-mines in South Australia, and tin-mines in Queensland. There are great coal-fields in New South Wales and Queensland; and iron has been found in several colonies. Lead, bismuth, antimony, diamonds, and various kinds of precious stones form part of Australia's mineral wealth.

In proportion to its size, Australia, lying mostly within the temperate zone, enjoys on the whole an equable climate, although subject to great occasional irregularities; in general, hot and dry, and remarkably salubrious. Within the tropics, it has its rainy season in summer (November to April); south of the tropics, almost exclusively in winter. The principal mountains, both for extent and height, lying to the east or windward side, receive by far the heaviest tribute of moisture brought by the winds from the Pacific; and, as a rule, the amount of rainfall on the east side is in inverse proportion to the distance from the east coast. The west side has far less rain than the east, and there the rainfall is proportionate to the proximity to the west coast. What moisture is left in the winds after their passage across the highlands, the intense heat rising from the central plains tends to dissipate, instead of allowing it to condense into rain. South Australia, Victoria, and in a less degree, New South Wales, are exposed to hot winds from the interior which rapidly raise the temperature of the lands they visit to 115° or higher, and are followed by an equally sudden fall. Melbourne has a mean temperature of 58°; Sydney, 63°; Adelaide, a little higher; Perth, about the same as at Sydney. Captain Sturt found the mean temperature of the interior for three months over 101° F. in the shade, and the drought such as to unloosen the screws of his boxes, split his combs into thin laminæ, make the leads drop out of his pencils, and his finger-nails become brittle as glass; the season was, however, an exceptional one, and good pastoral country exists within a short distance of what he described as the 'Stony Desert.' The east highlands have a greater proportion of snow than their latitude and height would argue. At 5000 feet of altitude, in certain situations, snow lies all the year round, and many of the higher mountains are covered with snow all the winter.

The worst feature in the climate of Australia is the total uncertainty and inequality of the rainfall in all parts of the continent, menacing the whole country with almost equally distressing alternations of drought and flood. Droughts sometimes completely wither up vegetation over large tracts of land, to the destruction of many thousands of cattle. The ordinary drought itself renders almost all the rivers of Australia, with the exception of the Murray proper, merely intermittent; shrunk for months together into straggling water-holes, with or without some connecting thread of stream. As *rivers*, they really cease to exist for a longer or shorter period every year. Even the Murray is only navigable at certain seasons of the year. The rainy season, on the other hand, swells these pools into terrific floods, inundating the country, and often most seriously

destroying property. Most successful irrigation colonies have been established at Mildura in Victoria, and Renmark in South Australia, both utilising the waste waters of the River Murray. Water for the use of stock in summer is extensively stored in dams, and large tracts of country with no surface-water have been made available for settlement by sinking wells. In some districts where the conformation is favourable, artesian wells have proved a success.

The vegetation of Australia is altogether unique, standing at a long interval from that of all other quarters of the globe; but it is exceedingly abundant in species. These, it is calculated, number about 10,000—considerably more than are to be found in all Europe. A peculiarity of Australian vegetation is the abundance of 'scrub'—the 'mallee,' 'mulga,' &c. The highlands are rich in wood, such as that of the gum-trees of the genus Eucalyptus, growing to a height of 250 feet, with a girth of 12 to 20 feet; one felled giant measuring as much as 480 feet. Then in the south and west, and even a little into the interior, though less abundantly there, are the valuable shea-oaks, beef-woods, or Casuarinas. The 'wattles' or acacias, abounding everywhere in the country, and comprising over 300 species, are also a most characteristic feature of Australia, with lovely yellow blossoms, and generally fragrant. The Australian bush is fragrant all the year. Australia affords so wide a variety of climate and soil that most European trees and plants have been successfully introduced. The Scotch thistle has become a serious nuisance.

The zoology of Australia is even more peculiar than its botany. The mammalia of other lands are totally wanting here, except some rats and mice, and the dingo or wild dog, while the marsupials or pouch-bearing mammalia of Australia have but the opossums of America to represent them in any other part of the world. The largest of the marsupials are the kangaroo, hare kangaroo, and rat kangaroo. The fruit-eating bat, or flying-fox, is found. Then there are opossums and phalangers. The wombat is the largest of the marsupials, next to the kangaroo. The ant-eater of Western Australia is of the size of a squirrel. The ornithorhynchus, platypus, duck-mole, or water-mole, having no teeth or marsupial pouch, has broad webbed feet, a horny mandible like a duck-bill, and is oviparous. Australia favours the acclimatisation of animal as well as plant life, and the rabbit has proved so prolific as to require special public efforts for its suppression. The camel has done excellent service in the work of exploration.

The birds, if not quite so unique and strange a feature of Australia as are its mammalia, excel those of all other temperate lands for beauty of plumage and fineness of form. Passing over the splendid parrots and cockatoos, we note for their singularity of figure or brilliancy of feather, the regent-bird, rifle-bird, fly-catcher, and lyre-bird. Notable are also honey-suckers, brush-turkeys, the bower-birds, the emu and cassowary, and the Podargi, of enormous mouth—'more-porks,' as they are called, from their singular cry. Altogether, Australia has 650 distinct species of birds to muster against Europe's 500. Of reptiles, Australia has no less than 140 different kinds, its largest lizard measuring from 4 to 6 feet. Nor does Australia want for snakes. Though destitute of both the vipers and pit-vipers, it makes up for this by the Elapidæ (a family including the Indian cobras), constituting two-thirds of the snakes of Australia, all poisonous, though only five kinds are fatally so. The black snake of Australia measures from 5 to 8 feet long. Australia abounds, moreover, in insects, beautiful and peculiar. English singing and game birds have been largely introduced. The common sparrow has multiplied to such an extent that it has become a pest. Axis deer and Angora goats have been acclimatised.

Almost as much as its botany and zoology, the human natives of Australia are isolated and peculiar, separated by a wide remove from the Papuans, the Malays, and the Negroes. Of a dark coffee-brown complexion, rather than actually black, the Australian stands not much short of the average European in height, but is altogether of much slimmer and feebler build; his legs, in particular, are very lean and destitute of calves (a defect common to dark races). His head is long and narrow, with a low brow prominent just above the eyes, but receding thence in a very marked degree. The nose, proceeding from a narrow base, broadens outwardly to a somewhat squat end. The face bulges into high cheek-bones. The mouth is big and uncouth, the upper jaw projecting over the lower, but with fine white teeth. The whole head and face, and indeed the whole person, is covered with a profusion of hair, which, when freed of its usually enclogging oil and dirt, is soft and glossy. The intellect of the Australian, directed almost exclusively to the means of procuring food, operates wholly within the range of the rudest bodily senses; but inside that elementary sphere, displays no little nimbleness and skill. He is unsurpassed in tracking and running down his prey; and his weapons, though of the most primitive kind, are well adapted to assist him in that purpose, whilst his rude culinary and domestic apparatus manifests equal skill. His language, within its very circumscribed sensuous sphere, is fairly expressive and complete; and in the facility with which he learns to chatter foreign languages is noteworthy. Outside this circle, however, all is blank to the Australian. In summer the natives roam about naked, and sense of shame seems almost wholly undeveloped in them. Morality is entirely reduced to the notion of property, wives being one item in a man's chattels the stealing of which has a definite punishment attached to it. Yet the 'black fellows' are capable of loyal affection and gratitude. Without doubt they have often murdered Europeans, but in many cases this was but more or less legitimate reprisal for prior atrocities committed by the convicts or other reckless Europeans. None of them have fixed habitations; caves may be taken advantage of, but usually the best habitation they have is a screen of twigs and bushes, covered with foliage or turf; sometimes, however, logs of wood and turf serve for a few days' or weeks' shelter. By way of food the Australian devours the kangaroo, emu, opossum, wombat, lizards, snakes (of which the head is rejected), frogs, larvæ, white ants, moths, which are usually roasted, fire being produced by rubbing together two pieces of stick. His boomerang is an ingenious throw-stick, and is skilfully used even for knocking down birds on the wing. There is no government among this people outside that of the family, and no laws except traditionary rules about property. In the way of religion they have little save their terror of ghosts and demons, and some superstitious traditional rites applicable to certain epochs in a man's life, more particularly at his burial. Their

marriage customs are curious, the fundamental principle being exogamy, the custom which prohibits a man from marrying a woman of his own tribe. They cannot usually count beyond five. Like almost all other savages, the native Australians are rapidly vanishing before the advance of civilisation. In the settled districts some of them are usefully employed as shepherds and stockmen, but the majority prefer nomadic habits. The intermittent use of European clothing induces consumption, while the diseases and vices they acquire from Europeans are another potent factor of their destruction. The lowest estimate of their number, prior to European settlement among them, gives over 150,000; they are now calculated at less than half that figure.

Some old 15th and 16th century maps show, where the north of Australia is, a territory of various outline named *Java Major*, or Java the Greater; and it seems probable that after Magellan's death his followers sighted Western Australia in 1522. The present Torres Strait refers to the presence of Torres there in 1606. Dirk Hartog Island in the west carries us back to Dirk Hartog and the year 1616. Arnhem Peninsula is a reminiscence of the Dutch vessel *Arnhem*, which in 1618 explored the coast of that land. The Dutch ship, *Guldene Zeepaard*, in 1627 sighted a large part of the south coast from Cape Leeuwin eastwards. The Gulf of Carpentaria was named, probably by Tasman, after Carpentier, governor of the Dutch Indies, 1623-27. All the early explorers brought back a forbidding report of desolate shores thinly occupied by brutal savages. In 1688 Australia was first seen by British eyes in the person of Dampier, who gives name to an archipelago in the NW. Near a century later (1770) we find Captain Cook at this island-continent, on his course of circumnavigation of the globe, exploring the whole eastern coast from Gipps Land on the SE. (in Victoria) to Cape York; and the exploration of the whole coast of Australia was completed by the *Beagle* (in which Charles Darwin sailed), 1837-43.

Inland exploration began with the first British occupation of New South Wales in 1788, but for the first twenty-five years was confined inside the Blue Mountains, to a district of some 50 miles inland. In 1813, however, that barrier was passed, and the valley of the Fish River and Bathurst Plains were brought within the limits of civilisation. Two years later (1815) the Lachlan River (tributary of the Murrumbidgee) was lighted on. Important later explorations were those of Hume and Sturt (1819–28), Mitchell (1835), Eyre (1839–40), Sturt (1844–45), Leichardt (1843–46), M'Donall Stuart (1862, across the continent from south to north), Burke and Wills (disastrous, same date), Gregory (1861), Jardine (1864). Later still, using the trans-continental telegraph of 1872 as a basis, were the expeditions of Giles, Warburton, and Forrest; and those of Hodgkinson, Giles, Favenc, Hann, Crawford, Stockdale, Carrington, Lindsay, Tenison-Woods, Milman, and Tietkins. These expeditions seem to demonstrate that much of the interior of Australia, between the west of the overland telegraph line and the east of the narrow hilly border of Western Australia, is little better than desert—unmitigated sand, dense scrub, or porcupine grass. A considerable area in the east of Western Australia is yet unexplored; as also are the adjoining parts of the Northern Territory of South Australia, and the interior of Cape York Peninsula.

The first European settlement in Australia was made in 1788 at Botany Bay under Captain Phillip, but was almost immediately transferred to the adjoining Port Jackson, close to where Sydney now is; it comprised in all 1030 persons, of whom 757 were convicts. In 1825 Moreton Bay (now Queensland) was settled as a part of New South Wales, attaining in December 1859 the position of a separate colony. The settlement of Western Australia (the Swan River Settlement, as it was then called) dates from 1829. It continued to be a penal settlement from 1851 to 1868. Port Phillip (now Victoria), then a part of New South Wales, was first colonised in 1835, and on 1st July 1851 was constituted an independent colony. The colonisation of South Australia by British emigrants dates from 1836.

Especially after the discovery of gold in 1851, Australia advanced in all departments of material well-being at a rate surpassing that of any other country on the globe. In 1801 the settlement at and about Sydney had increased to 5547 persons; in 1835 the European settlers of Australia (including Tasmania) amounted to 80,000. By 1851 the population had risen to 350,000. The discovery in that year of the gold-fields caused a sudden and enormous inrush of immigrants from all parts of the world; now Australia alone has over 3,800,000, and Australasia 4,600,000. The population is, of course, almost all of European origin, the predominating element being British. The British-born are no longer the most numerous element in the colonial populations, the native-born being now over three-fourths. Chinese and Germans number about 30,000 and 38,500 respectively; there are many Polynesians ('Kanakas') in Queensland; not to speak of Scandinavians, Americans, and French. The largest cities are Melbourne, capital of Victoria; Sydney, of New South Wales; Adelaide, of South Australia; Brisbane, of Queensland; Ballarat, in Victoria, and Sandhurst, also in Victoria.

The Commonwealth of Australia, comprising the five Australian 'states' (heretofore colonies) and Tasmania, was sanctioned by the British Parliament on July 9, 1900, and proclaimed in Sydney on January 1, 1901. The Executive is vested in the Governor-general (representing the sovereign), assisted by an Executive Council of seven ministers of state, who must be members of the Federal Parliament. The Legislature consists of the Governor-general, a Senate, and a House of Representatives. The Senate, corresponding to the House of Lords in Britain, has 36 members (6 from each state) elected for six years, half of them being renewed every three years; in certain circumstances it may be dissolved by the Governor-general and entirely re-elected. The House of Representatives, corresponding to the British House of Commons, has 75 members elected for three years, and apportioned among the separate states according to population—New South Wales sending 26; Victoria, 23; Queensland, 9; South Australia, 7; Western Australia, 5; and Tasmania, 5. Members of both Houses receive £400 per annum.

The Federal Parliament legislates on all matters affecting the Commonwealth as a whole, such as commerce, railways, shipping, finance, defence, postal and telegraph services, emigration, &c., leaving more local matters to be dealt with by the state parliaments. Each state has a governor, a Legislative Council, and Legislative Assembly. See the separate articles.

There is no state church in Australia. In respect of numbers, Episcopacy is the dominant

form of religion, Roman Catholics come second, Presbyterians third, and Methodists fourth. Education has of late been rapidly diffusing itself. In all the colonies education is either free and compulsory, or the primary schools are all so liberally endowed by the government as to place elementary instruction within the reach of all classes; while libraries, museums, botanical gardens, schools of art, mechanics' institutes, &c., are multiplying in all the colonies under the liberal patronage of the several governments. There are universities in Melbourne, Sydney, and Adelaide, and also well-equipped astronomical observatories.

Literary enterprise in Australia is mainly absorbed in journalism, as may well be believed when it is mentioned that in the Australasian colonies, including Tasmania and New Zealand, some 800 newspapers, magazines, and periodicals are published, many of them dailies. The current book literature is of course mainly that of the old country; and of the literature produced in the colonies, by far the greater part is still the work of men born and bred in Britain. In literature proper, there are but few outstanding names—those of Lindsay Gordon, Marcus Clarke, Henry Kendall, F. W. Hume, Mrs Campbell Praed, and 'Rolfe Boldrewood,' being perhaps the best known.

The chief and most general staple produce of Australia, for which the country is peculiarly adapted, and which constitutes its largest export, is wool. Over all the highlands and the riverlands of the sea-border—wherever, in fact, there is water—sheep thrive remarkably, except perhaps within the tropics, and the wool is of the finest quality, realising the highest prices in the English market. The exports of wool from Australia have an annual value of from £16,000,000 to £20,000,000 (New South Wales alone sending to the amount of from £7,300,000 to £11,300,000 a year in 1882–91). The cereals of Europe and maize have been introduced into the island-continent with the happiest success. Potatoes everywhere yield abundantly. The vine is extensively cultivated. Sugar is a very important product of Queensland; tobacco, cotton, arrowroot, and bananas are also largely grown.

The trade of Australia exhibits a remarkable development, the average of trade per inhabitant being about five times that of Europe, and nearly five times that of Canada. The imports of Australia have risen from £35,557,716 in 1874, to £68,129,455 in 1901; the exports in the same period from £36,724,866 to £75,026,787. It has not escaped the influence of the wave of depression which has affected the whole of the civilised world during recent years, followed by many financial disasters, including the stoppage of many of the banks. The borrowing powers of the various governments have been much too freely used, and many of the public works are unproductive, and the public debt has become burdensome. The exports consist principally of wool, frozen meat, preserved meat, tallow, skins of all kinds, hides, wheat, cotton, sugar, and wine. New South Wales, alone of all the divisions of Australia, has (since the governorship of Sir Hercules Robinson, 1872–79) adopted the principle of free-trade. A heavy protective tariff prevails in Victoria, and the example of this colony has been followed by South Australia.

Since 1870, railways and telegraphs have been increasing rapidly; there is railway connection from Adelaide, *viâ* Melbourne and Sydney, to Brisbane, communication having been completed in 1888; and there are shorter lines in the several colonies. At the end of 1902 the railway lines of the Commonwealth already working measured 13,821 miles, and 1065 miles were in course of construction. Telegraphically, the colonies are now all linked together with Tasmania and New Zealand, and with the mother-country *viâ* Java and India.

Manufactures suitable to the country are rapidly developing. Magnificent lines of steamers maintain frequent communication with Europe and America, between the various colonies, and with the Fiji Islands and New Caledonia. Mails have been delivered in Adelaide in twenty-nine days from London *viâ* Brindisi, and the sea-passage between Adelaide and Plymouth may be covered in about thirty-five days. Mails have been delivered at King George's Sound in less than twenty-four days from London. The length of the voyage in sailing-ships ranges generally from seventy to one hundred days.

The following are some of the statistics of the Australian colonies, as shown in the official tables for the census year 1901. For comparison those of New Zealand are added.

STATISTICS—1901.

COLONIES.	Area in Sq. Miles.	Pop. in 1891.	Pop. in 1901.	Revenue in 1901.	Public Debt in 1901.	Imports in 1901.	Exports in 1901.	Acres under crop in 1901.‡
				£	£	£	£	
Victoria	87,884	1,140,405	1,201,341	7,702,818	50,013,552	18,927,340	18,646,097	2,913,296
New South Wales	310,367	1,132,234	1,359,133	10,805,543	61,479,662	26,928,218	27,351,124	2,567,215
Queensland	668,497	393,718*	496,596*	4,096,290	38,534,614	6,376,239	9,249,366	307,344
South Australia	903,690	320,431*	362,604*	2,661,549	26,448,805	7,478,988	8,318,820	2,188,707
West Australia	975,920	49,782*	184,124*	3,142,912	11,709,430	6,454,171	8,515,623	217,124
Tasmania	26,215	146,667	172,475	826,163	9,095,735	1,965,199	2,945,757	513,719
TOTAL	2,972,573	3,183,237	3,776,273	29,235,275	197,281,798	68,129,455	75,026,787	8,707,405
New Zealand	104,471	626,658†	772,719†	6,217,789	52,966,447	11,817,915	12,881,424	12,195,542
GRAND TOTAL	3,077,044	3,809,895	4,548,992	35,453,064	250,248,245	79,947,370	87,908,211	20,902,947

* Exclusive of aborigines. † Exclusive of Maoris (43,143 in 1901). ‡ Including sown grasses and hay.

See also the articles VICTORIA, NEW SOUTH WALES, QUEENSLAND, SOUTH AUSTRALIA, WESTERN AUSTRALIA, and those on the great cities, &c., of Australia; the *Australian Handbook* and other annuals; *The Australian Encyclopædia*, edited by G. C. Levey, C.M.G. (1892); A. Trollope, *Australia and New Zealand* (1873); A. R. Wallace, *Australasia* (1893); historical works by Bonwick (1882), Rusden (1883), Allen (1882), Sir Henry Parkes (1892), and Greville Tregarthen ('Nations' series, 1893); a history of exploration by Favenc (1888); R. Wallace, *Rural Economy and Agriculture of Australia and New Zealand* (1891); works on the aborigines by Dawson (1881) and Curr (1888); and D. B. W. Sladen's *Australian Poets* and *A Century of Australian Song* (1888).

Austria, the usual name of the great empire now officially called the AUSTRO-HUNGARIAN MONARCHY, is a Latinised form of the German *Oesterreich* (Fr. *Autriche*), meaning 'Eastern Kingdom.' Since 1867, the empire is composed of a union of two states under one emperor, but administratively distinct. The one is Austria, or Cisleithania ('on this side the Leitha,' a tributary of the Danube on the frontiers of the archduchy of Austria and Hungary); the other, Hungary and the lands of the Hungarian crown, or Transleithania. The Austrian dominions form geographically a compact territory, with a circumference of about 5350 miles. The total area, 240,456 sq. m., is greater than that of any other European state save Russia, and is nearly twice the area of the United Kingdom. The body of the empire lies in the interior of Europe, though it has about 500 miles of sea-coast on the Adriatic. Austria borders on Italy, Switzerland, Bavaria, Saxony, Prussia, Russia, Roumania, Servia, and Montenegro. The nominally Turkish provinces of Bosnia and Herzegovina, occupied and administered by Austria, are for all practical purposes part of the Austro-Hungarian monarchy, though not included as such in official statistics. The following table shows the area and population of the empire at the censuses of 1880 and 1900:

	Area in sq. miles.	Population in 1880.	Population in 1900.
I. AUSTRIAN LANDS—			
Lower Austria	7,654	2,329,021	3,086,382
Upper Austria	4,631	760,879	809,918
Salzburg	2,767	163,566	193,247
Styria	8,670	1,212,367	1,356,058
Carinthia	4,005	348,670	367,344
Carniola	3,856	481,176	508,348
Istria, Trieste, &c.	3,084	650,897	755,183
Tyrol and Vorarlberg	11,324	911,887	979,878
Bohemia	19,980	5,557,134	6,318,280
Moravia	8,583	2,151,619	2,435,081
Silesia	1,987	565,772	680,529
Galicia	30,307	5,951,954	7,295,538
Bukowina	4,035	569,599	729,921
Dalmatia	4,940	476,164	591,597
Total for Austria	115,823	22,130,705	26,107,304
II. LANDS OF THE HUNGARIAN CROWN—			
Hungary & Transylvania	107,858	13,700,005	16,853,332
Fiume	8	21,363	38,139
Croatia and Slavonia	16,767	1,889,351	2,512,060
Total for Hungary	124,633	15,610,719	19,203,531
Total for the Monarchy	240,456	37,741,424	45,310,835

The area of Bosnia and Herzegovina is 23,179 sq. m., and the pop. in 1895 was estimated at 1,738,092. In 1900 the capital, Vienna, had a pop. of 1,622,269; and there were in the empire seven other towns above 100,000 (Budapest, Prague, Trieste, Lemberg, Gratz, Brün, Szegedin), and thirteen others above 50,000.

Three-fourths of Austria is mountainous or hilly, being traversed by three great mountain-chains—the Alps, Carpathians, and Sudetes, whose chief ridges are of primitive rock. The Rhætian and Noric Alps stretch from Switzerland to the Danube, and contain the highest points of the Austrian territories, the Ortler Spitze rising to 12,814 feet. The Carpathian Chain, extending for 880 miles, rises on the left bank of the Danube, near Presburg, and sweeping in a curve, first east, and then southward through Transylvania, again meets the Danube; it culminates at 8517 feet. The Sudetes run through the north-east of Moravia and Bohemia, in which last the range is known as the Riesengebirge, or Giant Mountains. Continuous with this range, but beginning on the left bank of the Elbe, are the Erzgebirge, or Ore Mountains, on the confines of Saxony. The chief plains of the Austrian empire are the vast lowlands of Hungary and the plain of Galicia. The chief lakes are Lake Balaton (382 sq. m.) and the Neusiedler See (117), both in Hungary; and remarkable is also the Zirknitz Lake (q.v.) in Illyria.

The leading rivers are: the Danube, which has a course of 850 miles within the Austrian dominions, its navigable affluents being the Inn, Save, Drave, March, Waag, and the Theiss, which drains nearly half of Hungary; the Vistula, with its tributary the Bug; the Elbe, with the Moldau and Eger; the Dniester and Adige.

The climate of Austria varies much on account of the extent and diversity of the surface. In the warmest southern region between 42°–46° lat., rice, olives, oranges, and lemons ripen in the better localities; and wine and maize are produced everywhere. In the middle temperate region from 46°–49°, which has the greatest extent and diversity of surface, wine and maize still thrive to perfection. In the northern region, beyond 49°, except in favoured spots, neither wine nor maize succeeds; but grain, fruit, flax, and hemp thrive excellently.

The mineral wealth of Austria is not surpassed in any European country. Bohemia, Hungary, Styria, Carinthia, Salzburg, and Tyrol take the first place in respect of mineral produce. Except platinum, none of the useful metals is wanting. The value of their yearly produce is estimated at about £12,000,000. Of this sum coal yields about a half, iron a fifth, salt a tenth, and gold and silver together one-fourteenth; whilst copper, zinc, quicksilver, lead, iron, coal, and many other minerals, together with precious stones, marble, gypsum, &c., are plentiful. Austria is peculiarly rich in salt. Rock-salt exists in immense beds on both sides of the Carpathians, chiefly at Wieliczka (q.v.). There are inexhaustible deposits of coal in the monarchy, the richest in Moravia and Bohemia. Austria has some 1600 mineral springs, some of them of European reputation, as the sulphur baths of Baden in Lower Austria, the saline waters of Karlsbad, Marienbad, Franzensbad, Teplitz, &c., all in Bohemia.

Although three-fourths of the surface is mountainous, more than five-sixths is productive, being used either for tillage, meadows, pasture, or forest. Grain of all kinds is cultivated; rice grows in the Banat; potatoes are raised everywhere; fruit grows in profusion; for wine, Austria is second only to France; and other vegetable products are flax and hemp, tobacco, rape, &c. Nearly a third of the productive surface is covered with wood.

Bohemia takes the lead in manufacturing industry, then follow Austria Proper, Moravia, Silesia, and Hungary. Vienna is the chief seat of manufacture for articles of luxury; Moravia, Silesia, and Bohemia for linen, woollen, and glass wares; Styria and Carinthia, for iron and steel wares. The chief manufactured articles of export are those of silk and wool; the only manufactures of consequence are linen twist, glass wares, and cotton goods. The yearly value of manufactured iron is considerable. The glass wares of Bohemia are of special excellence. The manufactures of cotton, of silk, of hemp and flax, are very extensive. The manufacture of tobacco is a state monopoly. Austria is not favourably situated for foreign commerce. High mountain ranges oppose great obstacles on all hands to communication,

and separate the producing districts from the only sea that touches the empire; while the chief navigable rivers have their mouths in other countries. The total imports vary in value from £42,000,000 to £70,000,000 a year, some of the principal items being cotton, wool, woollen yarn, cotton yarn, coffee, silk, coal and coke, machinery, furs and hides, tobacco. The exports have an annual value of from £60,000,000 to £80,000,000, half being for agricultural products—grain, sugar, cattle, flour, eggs, feathers, &c.; also timber, minerals, wood-wares.

Nearly two-thirds of the whole commerce of the empire is carried on with Germany. Its next best markets are Roumania, Russia, Italy, and Servia. The direct trade with Great Britain is comparatively small; the Board of Trade returns recognising only the trade by way of the Austrian seaboard. Between 1891 and 1902 the exports from Austria to Great Britain varied from £1,100,000 to £1,375,245; and the goods imported direct from Great Britain, from £1,600,000 to £2,516,899. The length of railways in 1902 was 12,750 miles—more than half belonging to state lines.

There are three distinct budgets, one for the whole empire, another for Austria Proper, and a third for the kingdom of Hungary. Besides their share of the interest on the national debt, Austria pays a larger and Hungary a smaller sum towards the 'common expenditure of the empire;' the precise proportions—to be settled every ten years—have of late been fiercely disputed by the Hungarians, and, with Hungarian home-rule demands, caused very strained relations between Austria and Hungary in 1904–5. The budget estimates for the imperial expenses for the year 1904 showed a total of £16,270,500.—The accounts of *Austria Proper* generally show large deficits. In 1904 the revenue was, however, stated at £72,396,250, and the expenditure at £72,282,150. In 1904 the general debt of the empire was £222,212,084, and the special debt of Austria £156,904,946. For *Hungary* in 1903 the revenue and expenditure nearly balanced at £45,435,946; the debt (largely for railways) amounted to £214,366,540. Hungary also pays £2,541,606 annually to the common debt of the empire.

The population is very unequally distributed. The most populous districts are those of the south-west and of the north-west. The Alpine regions and those of the Carpathians are sparsest; and generally the density diminishes towards the east. The population of Austria embraces a greater number of races, distinct in origin and language, than that of any other European country except Russia. The Slavs are the most numerous race, amounting to nearly 42 per cent. of the whole population. They form the bulk of the population of Bohemia, Moravia, Carniola, Dalmatia, Croatia, Slavonia, the Woiwodina, the north of Hungary, and Galicia. They are, however, split up into a number of peoples or tribes, differing greatly in language, religion, culture, and manners; so that their seeming preponderance in the empire is thus lost. The chief branches of the Slavic stem are, in the north, the Czechs or Bohemians (the most numerous of all), Ruthenians, and Poles; and in the south, the Slovenians, Croats, Serbs, and Bulgarians. The Germans number above 25 per cent., dispersed everywhere, but mainly in the western parts of the empire. The Romance peoples (speaking languages derived from that of ancient Rome) amount to fully 9½ per cent., and are divided into western and eastern. The western consist of Italians, inhabiting the south of Tyrol, Istria, and Dalmatia; the Ladins (Latins), in some valleys of Tyrol; and the Friulians about Görz, north of Trieste. The eastern Romance people are the Roumanians, who are found in Transylvania, Hungary, the Woiwodina, and the Bukowina. The Magyars, or Hungarians proper, number over 16 per cent.: they are located chiefly in Hungary and Transylvania. The small remaining portion is composed chiefly of Jews, Armenians, and Gypsies. The principal languages are German, Hungarian, and Bohemian; but Polish, Ruthenian, and Croat languages are also spoken.

In 1900 there were 30,580,192 Roman Catholics; 4,990,678 Greeks and Armenians united with the Roman Church; 3,423,175 Orthodox Greeks; 1,654,396 Lutherans; 2,569,699 Calvinists; 68,872 Unitarians; 2,076,277 Jews. There are nearly 300 abbeys and above 500 convents in the empire.

Education, whether high or low, is mostly gratuitous. The primary schools in Austria are to a very large extent in the hands of the clergy. The law enforces compulsory attendance at the 'Volks-schulen,' or national schools, of all children between the ages of six and twelve. There is a very great difference between the German provinces and the Slavonic ones in respect of education. In Vorarlberg 82 per cent. of the inhabitants read and write; in Bukowina not quite 10 per cent. There are eleven universities in the empire, at Vienna, Prague, Grätz, Brünn, Innsbruck, Pesth (Budapest), Cracow, Klausenburg, Lemberg, and Czernowitz. Vienna, Grätz, and Innsbruck rank as German universities; Prague has since 1880 a Bohemian and a German university. There are in the whole monarchy over 4000 newspapers and other periodicals (about 380 newspapers), of which nearly half are in German.

Military service is compulsory on all citizens capable of bearing arms. The term of service is twelve years—three in the standing army, seven in the reserve, and two in the landwehr. The army has on a peace footing 396,000 men, and on a war footing 2,580,000. The navy comprised 11 ironclads, 15 cruisers, 62 torpedo boats, and 20 vessels for coast defence. These are manned by about 9000 men, raised to 14,000 in time of war.

Austria is a monarchy hereditary in the House of Hapsburg-Lorraine. In the case of the reigning family dying out, the states of Bohemia and of Hungary have the right of choosing a new king. Since the year 1867 Austria has been reconstructed as a dual empire, consisting of a German or 'Cisleithan' monarchy, and a Magyar or 'Transleithan' kingdom. Each of the two countries has its own laws, parliament, ministers, and government, and deals with the affairs exclusively relating to itself. The ministers for affairs common to the whole empire (foreign affairs, finance, army) are not responsible to either parliament, but to the Delegations—a body forming a connecting link between the two portions of the empire. These constitute a parliament of 120 members: the one-half is chosen by the legislature of Germanic Austria, and the other half represents Hungary. The person of the sovereign is another link between the two members of the empire.

The Austrian Reichsrath consists of an upper and a lower house. The upper house is composed of the princes of the imperial family who are of age, of upwards of 50 nobles, 10 archbishops, 7 bishops, and 105 life-members nomi-

nated by the emperor. The lower house numbers 353 elected members. The executive of Hungary is carried on in the name of 'the king' by a responsible ministry.

The empire of Austria arose from the smallest beginnings at the end of the 8th century. In 796 a Margraviate, called the Eastern Mark (i.e. 'March' or frontier-land), was founded as an outpost of the empire of Charlemagne, in the country between the Enns and the Raab. The name *Oesterreich* appears first in 996. In 1156 the mark was raised to a duchy; and after coming into the possession of the House of Hapsburg in 1282, it rapidly rose to be a powerful state. The princes of that House extended their dominion by marriage, by purchase, and otherwise, over a number of other states, including the crowns of Bohemia and Hungary; and from 1438 down to the 19th century, they held almost without interruption the throne of the German empire (nominally 'the Holy Roman Empire')—*the* emperor being the most conspicuous, if not always the most powerful personage amongst the crowned heads of Europe. In 1804 Francis declared himself hereditary Emperor of Austria, and two years afterwards resigned the dignities of German Emperor and King of the Romans. Thenceforward, especially during the troublous times of 1848–50, Austria held the pre-eminence amongst German states; but after the victory of Prussia at Königgrätz (Sadowa), in the short but decisive Austro-Prussian war of 1866, Austria was excluded from Germany—an exclusion made final by the reconstruction of the German empire with the kings of Prussia as hereditary German emperors. In 1867 Austria was itself reconstituted on its present footing as the Austro-Hungarian monarchy.

See Coxe, *History of the House of Austria* (3 vols. 1847–53; continued by Kelley, 1853); Léger, *Histoire de l'Autriche-Hongrie* (1879); Sidney Whitman, *The Realm of the Habsburgs* (1893).

Austria, ARCHDUCHY OF, the cradle and nucleus of the Austrian empire, lies on both sides of the Danube, from the mouth of the Inn to Presburg, on the borders of Hungary, and embraces an area of 18,052 sq. m., with a pop. (1900) of 4,089,547. It now forms three of the crown-lands, or administrative provinces of the empire—viz. Lower and Upper Austria (i.e. Austria below, and Austria above, the Enns), and the duchy of Salzburg.

Auteuil (*O-tuh'yee'*), formerly a country village at the entrance of the Bois de Boulogne, now enclosed within the fortifications of Paris. It was the residence of Boileau and Molière.

Autun (*O-tun'*; anc. *Augustodunum*), in the French dep. of Saône-et-Loire, in the Burgundian district of Autunois, on the river Arroux, 31 miles NW. of Châlon by rail. It has a fine cathedral (12th century), and many ruins of Roman temples, gates, triumphal arches, and other antiquities. Cloth, carpets, and velvet are manufactured. Talleyrand was bishop of the diocese, and here Macmahon was born. Pop. 13,593.

Auvergne, a southern central district of France, was before the Revolution a separate province, and coincided nearly with the modern departments of Cantal and Puy-de-Dôme. Of several summits that have apparently been at one time volcanoes, the highest is Mont-Dore (6188 feet). Auvergne produces iron, lead, copper, and coal, and is rich in valuable mineral springs, both cold and hot. Many Auvergnats, speaking their own patois, seek employment in Paris and Belgium.

Auxerre (*O-zerr'*; anc. *Autissiodorum*), chief town of the French dep. of Yonne, on the Yonne, 109 miles SE. of Paris. Its noble Gothic cathedral dates from 1215, but was not completed till the 16th century. The principal manufactures are wine (a light Burgundy), candles, chemicals, and hosiery. Pop. 15,300.

Auxonne (*O-zonn'*), a fortified town in the French dep. of Côte d'Or, on the Saône, 20 miles SE. of Dijon. Pop. 5118.

Ava, a ruined city of Burma, of which it was the capital 1364–1740, and again 1822–38. It stands on the Irawadi, 6 miles SW. of Amarapura. On the opposite bank stands Sagaing (q.v).

Avallon (anc. *Aballo*), a town in the French dep. of Yonne, 26 miles SE. of Auxerre, on a steep hill of red granite, nearly surrounded by the river Cousin. Pop. 5571.

Avalon, a peninsula forming the eastern part of Newfoundland (q.v.), in which St John's, the capital, is situated.

Avatcha, a bay on the east coast of Kamchatka, by far the best harbour of the peninsula, and containing the smaller bay on which stands the capital, Petropaulovsk (q.v.).

Avebury, or ABURY, a village of Wiltshire, 6½ miles W. of Marlborough. It is the site of the largest megalithic structure in Britain, including a large outer circle, 330 yards in diameter, and two smaller stone circles. The stones that remain are 5 to 20 feet in height above the ground, and 3 to 12 in breadth and thickness. From an entrance to the circle issued the 'Kennet Avenue,' running 1430 yards south-eastward in a perfectly straight line, and 17 yards broad, with a range of blocks on either side similar to those of the circle itself. Of surrounding antiquities may be mentioned a double circle on Hakpen Hill, and a large barrow, or lofty conical mound called Silbury Hill, ¾ mile to the S. It measures 676 yards in circumference, and is 130 feet high.

Aveiro, a town of Portugal, a bishop's see, 40 miles S. of Oporto by rail, on a salt lake or lagoon joined to the sea by a canal. Pop. 9167.

Avelli'no (anc. *Abellinum*), chief town of an Italian province at the foot of Monte Vergine, 59 miles E. of Naples by rail. It has a cathedral. Pop. 23,790.

Aventine Hill. See ROME.

Aver'nus (Gr. *Aornos*, 'birdless;' now *Lago d'Averno*), a small, nearly circular lake in Campania, Italy, situated between Cumæ, Puteoli, and Baiæ. It is 1½ mile in circumference, and occupies the crater of an extinct volcano. The mephitic vapours arising from it were believed in ancient times to kill the birds that flew over it; hence, according to some, its Greek appellation. Owing to its gloomy and awful aspect, it became the centre of almost all the fables of the ancients respecting the world of shades. Here were located Homer's entrance to the under world, the Elysian fields, the grove of Hecate, and the grotto of the Cumean Sibyl.

Aversa, a town of Italy, 12½ miles by rail N. of Naples. Pop. 23,183.

Avesnes (*A-vehn'*), a town in the French dep. of Nord, 13 miles E. by rail of Cambrai. Pop. 5446.

Aveyron, a mountainous dep. in the south of France, named from the river which runs 90 miles westward through it to the Tarn, a feeder of the Garonne. Area, 3376 sq. m.; population, 382,000. The capital is Rodez.

Avezza'no, a town of South Italy, 22 miles S. of Aquila. Pop. 6166.

Aviglia'no, a town of South Italy, 10 miles NW. of Potenza. Pop. 12,949.

Avignon (*Avenio*), a city of Provence, capital of the French dep. of Vaucluse, on the left bank of the Rhône, 75 miles NW. of Marseilles. With narrow, crooked streets, 'windy Avignon' still is encircled by lofty crenellated walls (1349–68), except on the north side, where the Rocher des Doms rises steeply from the Rhône to a height of 200 feet. Here is the cathedral, dating from the 11th century, with its papal throne; whilst hard by towers the vast palace of the popes (1339–64). The multitude of churches and convents made Rabelais call Avignon *la ville sonnante*, 'the city of bells;' and churches there still are in plenty, though that of the Cordeliers, with the tomb of Petrarch's Laura, was demolished in 1791. Near the hôtel-de-ville (1862) are the quaint old Jacquemart belfry and a statue of Crillon, Henry IV.'s brave captain; Petrarch's statue (1874) may also be noticed. The university (1303) was abolished in 1794. Avignon has manufactures of paper, leather, silk, iron, &c. Pop. (declining) now about 34,000. Avignon was the capital of the ancient *Cavares*, and presents many remains of the times of the Romans. In the middle ages it formed, with the surrounding district, a county, which the popes bought in 1348. They held it till 1790, when the city with its district was united with France. Pope Clement V. and six of his successors from 1309 to 1378 resided here, as also did the French anti-popes (1378–1418). A little cottage was long the loved retreat of John Stuart Mill, the place where he died in 1873.

Avi'la, capital of a Spanish province of Avila, in Old Castile, stands 3000 feet above the sea, at the base of the Sierra de Guadarrama, 71 miles NW. of Madrid by rail. It has a fine Gothic cathedral, a Moorish castle, and massive granite walls 42 feet high and 14 broad, with 86 towers and 10 gateways. Its university (1482) was reduced to a college in 1807. Pop. 11,809. Here St Teresa was born. The province is mountainous. Area, 2981 sq. m.; pop. 200,500.

Aviles (anc. *Flavignavia*), a seaport of Spain, close to the Bay of Biscay, 19 miles N. of Oviedo. Pop. 12,145.

Avlona (Ital. *Valona*, anc. *Aulon*), the best seaport in Albania, stands on an eminence near an inlet of the Adriatic, protected by the island of Sasseno (anc. *Saso*). It carries on considerable trade with Brindisi, &c. Pop. 5000. *Valonia*, imported hence to England for tanning, is the acorn-cup of a kind of oak. Up to 1691 the town belonged to the Venetians.

Avo'ca, or Ovoca (Celt. 'meeting of the waters'), a small river of County Wicklow, formed by the union of the Avonmore and Avonbeg. It runs through a very picturesque vale only ¼ mile broad, with wooded banks 300 to 500 feet high, and after a course of 9 miles reaches the sea at Arklow. See Avondale.

Avo'la (*Abolla*), a seaport of Sicily, 13 miles SW. of Syracuse. The famous honey of Hybla comes from this neighbourhood. Pop. 12,286.

Avon (Celt. 'river' or 'stream'), the name of several of the smaller British rivers. (1) The Upper or Warwickshire Avon rises at Naseby in Northamptonshire, runs 96 miles south-west through Warwickshire and Worcestershire, passing Rugby, Warwick, Stratford, and Evesham, and joins the Severn at Tewkesbury. It receives several tributaries, including the Swift from Lutterworth.—(2) The Lower or Bristol Avon rises in north-west Wiltshire, and runs 70 miles, first south in Wiltshire, and then west and north-west between Gloucestershire and Somerset, passing Bradford, Bath, and Bristol, to the Bristol Channel. It is navigable for large vessels up to Bristol.—(3) The Wiltshire and Hampshire or East Avon rises in the middle of Wiltshire, and runs south 70 miles through Wiltshire and Hampshire, passing Amesbury, Salisbury, and Ringwood, and entering the English Channel at Christchurch. It is navigable up to Salisbury. In Wales, two rivers named Avon—one rising in Monmouthshire, the other in Glamorganshire—fall into Swansea Bay. In Scotland there are several of the same name, affluents of the Spey, Clyde, and Forth. See also A'an.

Avondale, the Wicklow seat of the late Mr C. S. Parnell, on the Avonmore, 1 mile S. of Rathdrum.

Avonmouth, in Gloucestershire, at the mouth of the Avon, 6 miles NW. of Bristol, has a pier and extensive docks (1879), constructed at a cost of £600,000.

Avranches (*Av-ron^{g}sh'*), a French town in the dep. of Manche, on the left bank of the Sée, near its mouth in St Michel's Bay, 37 miles E. of St Malo by rail. Till 1801 a bishop's seat, its former cathedral was built in the 18th century on the site of a cathedral consecrated in 1121, in which Henry II. received absolution for Becket's murder. Pop. 7764.

Awbeg, a river of Cork, flowing 30 miles to the Blackwater.

Awe, Loch, an Argyllshire lake, with Loch Awe station and hotel near its foot, 22 miles E. of Oban. Lying 118 feet above sea-level, it extends 22¾ miles north-eastward, is from 3 furlongs to 3½ miles broad, covers 15½ sq. m., and has a maximum depth of 102 feet. The scenery is most striking at the north-east end—originally the head—of the lake, where the water is studded with numerous wooded islets, overshadowed by towering and rugged mountains, the chief Ben Cruachan (3689 feet). On a rocky peninsula, in the north end of the lake, stands Kilchurn Castle, once a fortress of great strength, built about 1440 by Sir Colin Campbell of Glenorchy. The waters of the lake are carried off at its north-west end by the brawling river Awe, which, after a course of 5 miles, enters Loch Etive at Bunawe. The magnificent 'Pass of Brander,' through which the road and railway run beneath the shoulder of Ben Cruachan, was the scene of a conflict in 1308 between Robert the Bruce and the Macdougals of Lorn, in which that clan was all but exterminated. At the north-east end of the loch it receives the waters of the Orchy and Strae.

Ax, a town in the French dep. of Ariége, at the foot of the Pyrenees, 74 miles SSE. of Toulouse. Pop. 1233. Its 80 hot sulphur-springs range in temperature from 77° to 172° F.

Axbridge, a Somerset village, 10 miles NW. of Wells. Pop. of parish, 732.

Axe, two rivers of Somerset and of Dorset and Devon, flowing the one 25 miles to the Bristol Channel, the other 21 to the English Channel.

Axholme, Isle of, a low level tract of North-west Lincolnshire, cut off by the Trent from the rest of the county. Measuring 18 by 5 miles, it was anciently a forest, and then a marsh, which

was drained into the Trent in 1625 and succeeding years by Cornelius Vermuyden, a Dutchman, at a cost of £56,000. Epworth here was the home of the Wesleys.

Axim, an important station and port on the Gold Coast, a little E. of the mouth of the Ancobrah River.

Ax'minster, a town of Devonshire, on the Axe, 27 miles E. of Exeter by rail. From 1755 till 1835 Axminster was famous for the manufacture of Turkey and Persian carpets. Dr Buckland was a native. Pop. of parish, 2909. See Pulman's *Book of the Axe* (1875).

Axmouth, a Devon fishing village, 6 miles SSW. of Axminster. Pop. 615.

Axum, once capital of an Ethiopian kingdom, is now in the modern Abyssinian province of Tigré, and lies mainly in ruins. Pop. 5000. See a monograph on it by J. T. Bent (1893).

Ayacu'cho (formerly *Huamanga* or *Guamanga*), a town of Peru, 220 miles ESE. of Lima. Founded by Pizarro in 1539, it is now a handsome and thriving town. Here, on 9th December 1824, the combined forces of Peru and Colombia totally defeated the last Spanish army that ever set foot on the continent. Pop. 20,000.—The dep. of Ayacucho has an area of about 20,000 sq. m., and a pop. of upwards of 300,000.

Ayamon'té, a fortified town in the Spanish province of Huelva, Andalusia, on the Guadiana, near its mouth. Pop. 6511.

Ayasaluk, a village on the site of the ancient Ephesus (q.v.).

Aylesbury, the chief town of Buckinghamshire, in a fertile vale, on a rivulet flowing to the Tame, 43½ miles NW. of London. Among its buildings are the cruciform parish church, finely restored by Sir G. G. Scott (1849–67), the corn exchange and markets (1865), and the county infirmary (1862). The inhabitants are engaged in making bone-lace and straw-plait, in brewing, dairying, and rearing fat ducks for the London markets. Aylesbury was taken from the Britons by the Saxons in 571. Till 1885 it formed with its hundred a parliamentary borough, returning two members. Pop. (1841) 5429; (1901) 9244.

Aylesford, a village near the centre of Kent, on the right bank of the Medway, 3½ miles NW. of Maidstone. Remarkable ancient remains are found here, including the cromlech called Kits Coity House (q.v.). Pop. of parish, 2647.

Ayr, the county town of Ayrshire, at the mouth of the river Ayr, 40½ miles SSW. of Glasgow by rail. The Town's Buildings, with a spire 226 feet high, were erected in 1828, and greatly enlarged in 1881. The so-called 'Wallace Tower' is a Gothic edifice of 1834, 113 feet high. There are also the County Buildings, modelled after the temple of Isis in Rome, the Academy (founded 1764; new building, 1880), and the Carnegie library (1893). Three bridges span the river, and connect Ayr proper with Newton-upon-Ayr and Wallacetown—a railway viaduct, and the 'Twa Brigs' of Burns. Of these the narrow four-arched 'Auld Brig' dates probably from the end of the 15th century, and the 'New Brig' (1788) was rebuilt in 1879. There are statues of General Smith Neill, the thirteenth Earl of Eglinton, and Burns. Part of the tower of the old church of St John, built in the 12th century, and turned into a fort by Cromwell, is still standing, and now forms, with additions, a dwelling-house. Harbour improvements, including a wet dock and slip dock, have been carried out since 1874 at a cost of over £150,000. The tonnage of vessels entering the port has increased in seventeen years from 140,000 to 345,000. The chief export is coal; grain and timber are imported; and there are manufactures of lace and woollen fabrics, carpets, large sawmills, &c. A splendid new water-supply, drawn from Loch Finlas, 20 miles distant, was introduced in 1887. William the Lion made Ayr a royal burgh about 1200; and it unites with Campbeltown, Irvine, Inveraray, and Oban in sending a member to parliament. Pop. (1841) 15,749; (1861) 18,573; (1901) 28,697.

Ayrshire, a large maritime county in the SW. of Scotland, washed on the W. by the Firth of Clyde and the North Channel. Its greatest length is 78 miles; its greatest breadth, 28; and its area is 1149 sq. m., it being seventh in size of the Scottish counties. The general aspect of the county is undulating; Shalloch on Minnoch (2520 feet) in the S. is the highest summit; Loch Doon (5⅞ × ¾ mile) is much the largest of several fresh-water lakes; and the chief rivers—only 20 to 38 miles long—are the Ayr, the 'bonny' Doon, the Garnock, the Irvine, the Girvan, and the Stinchar in the south, with the first 16 miles of the Nith. Ayrshire is rich in valuable minerals, especially coal, ironstone, limestone, and freestone. The three ancient divisions of the county are—Carrick, south of the Doon, mostly wild and hilly; Kyle, between the Doon and the Irvine, containing much rich level land; and Cunninghame, comprising all the country north of the Irvine, mostly fertile. The percentage of cultivated area is 43·2. Dairy-husbandry is carried to high perfection. The Dunlop cheese, almost as celebrated as Stilton, since 1855 has been almost superseded by Cheddar. Manufactures, especially woollen and cotton, are largely carried on to an important extent. Pop. (1801) 84,207; (1881) 217,504; (1901) 254,468. Ayrshire returns two members to parliament. The chief towns are Ayr, Kilmarnock, Girvan, Maybole, Dalry, Kilwinning, Beith, Irvine, Stewarton, Old Cumnock, Ardrossan, Saltcoats, Troon, Mauchline, Galston, Newmilns, Kilbirnie, and Largs. Of antiquities, the most interesting are the ruins of Crossraguel and Kilwinning Abbeys; of 'Alloway's haunted kirk,' with the 'auld clay biggin,' Burns's birthplace, hard by; and of the castles of Turnberry (the family seat of Bruce), Dunure, Loch Doon, Dean, Dundonald, &c. It contains the battlefields of Largs and Loudon Hill; and during the religious persecutions of the Stuarts, it was a stronghold of the Covenanters. See works by J. Paterson (2 vols. 1847–52), and A. Millar (1885).

Ayton, a Berwickshire village, 7¼ miles NW. of Berwick-upon-Tweed. Pop. 603.

Ayuthia, the former capital of Siam, on the Menam, 50 miles N. of Bangkok. Founded in 1357, it was sacked and half destroyed by the Burmese in 1767. Among its magnificent but ruinous buildings are Buddhist temples, especially the 'Golden Mount,' 400 feet high.

Azamgarh ('Azam's Fort'), a town in the United Provinces of India, on the river Tons, 81 miles N. of Benares. It was founded in 1665 by Azam Khan. Pop. 19,000.

Azerbijan', or ADERBAIJAN, the ancient *Media Atropatene*, the north-western province of Persia, has an area of about 40,100 sq. m., and a pop. of 2,000,000. The surface is very mountainous, Savalan (an extinct volcano), near Ardebil, reaching over 13,000 feet; whilst Mount Ararat

rises on the north-west border. The chief rivers are the Aras or *Araxes*, the Kara Su, and the Kizil-Uzen. The salt lake Urmia (q.v.), the largest in Persia, is near the western border. Towns are Tabriz (the capital) and Urmia.

Azincourt. See AGINCOURT.

Azo'res, or WESTERN ISLANDS, a Portuguese archipelago in the mid-Atlantic, in 36° 55′—39° 55′ N. lat. and 25° 10′—31° 16′ W. long. Stretching over a distance of 400 miles, their nine islands are divided into three distinct groups—Sta Maria and São Miguel in the SE.; Terceira, São Jorge, Pico, Graciosa, and Fayal in the middle; and Flores and Corvo in the NW. Of these, Flores lies 1176 miles W. of Cape Rocca in Portugal, 1484 SW. of Falmouth, and 1708 ESE. of Halifax. In 1431–53 the Azores were taken possession of by the Portuguese. They were then uninhabited; but Punic coins have been found on Corvo. The Portuguese called them Azores, from *açor* or *azor*, a hawk or kite, found in numbers on the islands. Their total area is 919 sq. m., and the pop. 257,000. The area, population, and the maximum altitude of the different islands are as follows: Sta Maria (38 sq. m.; 5830; 1889 feet); São Miguel (299 sq. m.; 107,000; 3854 feet); Terceira (164 sq. m.; 45,391; 3435 feet); Graciosa (24 sq. m.; 8718); São Jorge (91 sq. m.; 18,000); Pico (173 sq. m.; 27,904; 7613 feet); Fayal (69 sq. m.; 26,264); Flores (54 sq. m.; 10,700; 3087 feet); Corvo (7 sq. m.; 1000). The capital is Angra, in Terceira; but Ponta Delgada, in São Miguel, is a larger town, being counted 'the third city of Portugal' (pop. 18,000). The Azores are of volcanic origin, and with the exception of Corvo, Flores, and Graciosa, are still liable to eruptions and violent earthquakes, the worst of twenty-one shocks since 1444 having been those of 1591, 1638, 1719, and 1841. Hot mineral springs are numerous. The coast is generally steep and rugged; the interior abounds in ravines and mountains. Oranges are the chief article of export. The climate is extremely moist, but equable; and though the islands are exposed to severe storms of wind and rain, some of them are visited as winter health-resorts, especially by Americans. The Azores are regarded as a province, not a colony, of Portugal, and as belonging to Europe. See works by Godman (1870), W. F. Walker (1886), and Roundell (1889).

Azo'tus. See ASHDOD.

Azov, a town in the south of Russia, on the left bank of the Don, 7 miles from its mouth. Spite of the silting of the harbour, there is a large export of grain, with fishing and fish-curing. Pop. 27,500.

Azov, SEA OF, named after the town, is a large gulf of the Black Sea, formed by the Crimean peninsula, or rather an inland lake connected with the Black Sea by the Strait of Yenikale or Kertch (anc. *Bosporus Cimmerius*), 28 miles long, and barely 4 wide at the narrowest. The intricate Siwash or Putrid Sea, which is just a succession of swamps, is cut off from the western portion of the Sea of Azov by the long narrow slip of low sandy land called the Peninsula of Arabat. The ancient name of the Sea of Azov was *Palus Mæotis* or 'Mæotic Marsh;' by the Turks it is called *Balik-Denghis*, or 'Fish Sea,' from its abundance of fish. The water is almost fresh. The whole sea is shallow, from 3 to 52 feet deep; and measuring 235 by 110 miles, it occupies an area of 14,500 sq. m. The largest river emptying into it is the Don.

Azpeitia (*Ath-pay'e-te-a*), a town in the Spanish prov. Guipuzcoa, on the Urola, 18 miles SW. of San Sebastian. A mile from it is the famous convent of Loyola (1683), now converted into a museum. It comprises a tower of the Santa Casa, in which St Ignatius of Loyola, the great founder of the Jesuits, was born in 1491. Pop. 6548.

BAALBEK, a ruined city of Syria, 35 miles NNW. of Damascus, and 38 SSE. of Tripoli. The name signifies 'City of Baal,' the Sun-god, and was by the Greeks, during the Seleucide dynasty, converted into Heliopolis. Baalbek lies 4500 feet above sea-level, at the opening of a small valley into the plain of El-Bukâ'a (Cœle-Syria), on the lowest slope of Anti-Lebanon. It was once the most magnificent of Syrian cities, full of palaces, fountains, and beautiful monuments; now it is famous only for the splendour of its ruins—the Great Temple, a Corinthian edifice, surmounting a Cyclopean substruction or platform; the Temple of Jupiter, larger than the Parthenon at Athens; and a circular building, supported on six granite columns. From the earliest times a chief seat of sun-worship, Baalbek was completely pillaged by Timur Beg in 1400; and its destruction was completed by a terrible earthquake in 1759. It is now a wretched village, with some few hundred inhabitants. See works by Wood and Dawkins (1757), Renan (1864), and Frauberger (1891).

Baba, CAPE (Gr. *Lectum*), a bold rocky headland near the western point of Anatolia, 12 miles from the northern extremity of Mitylene. The town of Baba here has a pop. of 4000.

Babatag, or BABADAGH, a town of 7000 inhabitants, in the Roumanian Dobrudja, 2½ miles W. of Lake Razim.

Bab-el-Mandeb (i.e. 'the gate of tears'), the strait between Arabia and the continent of Africa, by which the Red Sea is connected with the Gulf of Aden and the Indian Ocean. The Arabian peninsula here throws out a cape, bearing the same name as the strait, and 865 feet high, 20 miles distant from which the wall-like coast of Africa rises in Râs es Sean to over 400 feet. Within the straits, but nearer to Arabia, lies the bare rocky island of Perim (q.v.), since 1857 occupied by the British as a fort.

Bablock Hythe, a ferry over the Isis or Thames, 4 miles WSW. of Oxford.

Babylonia (*Babilu* in the Assyrian inscriptions, *Babirush* in the Persian) was the name given by the Greeks, and after them the Romans, to the low alluvial plain watered by the lower streams of the Tigris and Euphrates, now forming the modern Arab province of Irak-Arabi. In the Old Testament it bears the various names of Shinar, Babel, and 'the land of the Chaldees.' For thousands of years before the Christian era it was the seat of a special type of civilisation; the earliest inhabitants we know of were Sumerians and Akkadians, both probably belonging to the Ugro-Finnic branch of the Turanian races. Subsequently, Semitic tribes settled in the country. After long wars with the neighbouring power, Assyria, Babylonia was conquered in 729 B.C. by the Assyrians, and in 712–705 Babylonia became an Assyrian province. In 625 Nabo-

polassar rebelled and became an independent king, and was succeeded by his son Nebuchadnezzar. And henceforward Babylonia was a separate state till 538, when it was conquered by Cyrus and became a Persian province. For the site of the city of Babylon, see HILLAH.

Bacchiglione (*Bak-keel-yo'nay*), a river of N. Italy, rising in the Alps, and flowing 90 miles south-eastward, to the Adriatic near Chioggia.

Bacharach (*Bahh'a-rahh*), a town of Rhenish Prussia, on the Rhine, 30 miles SE. of Coblenz. Pop. 1840. Its name is said to be a corruption of *Bacchi ara* ('Bacchus' altar'), and the vine is still largely cultivated. Here Blücher crossed the Rhine, January 1, 1814.

Backergunge. See BAKERGANJ.

Bacolor, a town of the island of Luzon, Philippines, 10 miles NW. from Manila. Pop. 9737.

Bactria, a province of the ancient Persian empire, lying north of the Paropamisus (Hindu Kush) Mountains, on the Upper Oxus.

Ba'cup, a town of Lancashire, on the Spodden rivulet, 19¼ miles N. by E. of Manchester by rail. Constituted a municipal borough in 1882, it has a mechanics' institute (1846, enlarged 1870), a market-hall (1867), a very large co-operative store that cost £22,000, &c. Cotton-spinning and powerloom-weaving are the staple industries; and there are also dye-works, brass and iron foundries, and neighbouring coal-pits and vast stone quarries. Pop. (1798) 1426; (1871) 17,199; (1881) 25,033; (1891) 23,498; (1901) 22,505.

Badagry, a small British port on the Slave Coast, Upper Guinea, long a great slaving port, with 10,000 inhabitants.

Badajoz (*Bad-a-jozz'*; Spanish pron. *Badh-a-hhoath'*), capital of a Spanish province, is built on a slight hill crowned by a Moorish castle, on the Guadiana, crossed here by a stone bridge of 28 arches. It is 5 miles from the Portuguese frontier, 174 miles from Lisbon, and 315 from Madrid by rail. Badajoz is a fortress of the first rank, and has an old cathedral built like a fortress, with a splendid organ. Its chief articles of manufacture are hats, soap, coarse woollens, leather, and pottery. Pop. (1900) 30,900. Badajoz was the *Pax Augusta* of the Romans, the *Bax Augos*, *Bathaljus* of the Moors. As one of the keys of Portugal, it has often been besieged—twice in vain by the British in 1811, but was stormed by Wellington in 1812, after a most murderous resistance by the French, and delivered up to pillage for two days. The province has an area of 8687 sq. m., and a pop. of (1900) 520,246.

Badakhshan', a territory of Central Asia, lying in 36°—38° N. lat., and 69°—72° E. long., with the chain of the Hindu Kush on the S., and the Oxus, or Amu Darya, on the N. It is drained by the Kokcha, a head-stream of that river, and is famous throughout the East as a picturesque hill-country diversified with woods, rich pasture, and fertile, well-cultivated valleys, its surface varying from 500 to 15,600 feet above sea-level. Faizabad (q.v.) is the capital. The inhabitants, estimated at 100,000, are largely Tajiks, an Aryan race speaking Persian, and Mohammedans.

See Yule's *Marco Polo* (1871); Wood's *Journey to the Source of the Oxus* (new ed. 1872); and Vambéry's *Central Asia* (1874).

Badalona, a Spanish seaport, 5 miles NE. of Barcelona. Pop. 19,885.

Baden (*Bâh-den*), a grand-duchy in the SW. corner of the German empire between Alsace-Lorraine and Würtemberg, separated from Switzerland by the Rhine. Area, 5824 sq. m., less than Yorkshire; pop. (1900) 1,867,944, mainly Catholics. The Schwarzwald, or Black Forest (q.v.), attains a maximum altitude of 4903 feet. Being drained by the Rhine and the Danube, Baden belongs to the basins of two opposite seas; the sources of the Danube, however, drain only some 350 sq. m. The Rhine's chief tributaries are the Neckar, Murg, and Elz. On the north-east the Baden territories are bounded by the Maine. Except a part of the Lake of Constance, Baden has no lake of importance. The Rhine Valley of Baden is one of the warmest and most fruitful districts, not only of Germany, but of Europe. Grain, vegetables of all sorts, tobacco, hemp, rape, opium, &c. are grown, and a large quantity of wine is produced. The principal minerals are the products of the limestone quarries and of the clay and gravel pits, and gypsum, largely used for pavements. Coal, zinc, and manganese are found, and the production of salt and soda is important. Baden is rich in mineral springs; and there are a great number of much-frequented watering-places, as Baden-Baden, Badenweiler, &c.

The manufactures of Baden include ribbons and cotton fabrics, paper, leather, rubber goods, chemicals, machinery, tobacco, chicory, sugar, beer, trinkets, mirrors, wooden clocks, and straw-plaiting. Karlsruhe is the residence of the sovereign; the capitals of the four 'circles' are Constance, Freiburg, Karlsruhe, and Mannheim; and besides, there are two towns each with a population above 20,000.

Baden, a town and fashionable watering-place in the Swiss canton of Aargau, on the Limmat, 14 miles NW. of Zürich by rail. Its sulphur-baths, the *Thermæ Helvetica* of the Romans, yearly attract some 20,000 visitors. Their temperature is as high as 117° F. Pop. 6692.

Baden-Baden, a town in the grand-duchy of Baden, situated in the pleasant valley of the Oos, at the edge of the Black Forest, 8 miles from the Rhine, and 23 SSW. of Karlsruhe by rail. Pop. above 16,000; but its visitors during the season (May—September) are often four times the number of the settled population. Its thirteen medicinal springs were known to the Romans. They have a temperature of 115° to 150° F., are impregnated with iron, magnesia, lime, and sulphuric and carbonic acids, and are especially recommended in chronic cutaneous diseases, gout, rheumatism, and stomach complaints. The beauty of Baden-Baden has been largely due to its gaming-tables, once the most renowned in Europe, but closed in 1872; besides paying a rent of over £14,000, they devoted a like sum yearly to the beautifying of the promenades and public gardens. The buildings include the *Conversationshaus* (1824); the new *Trinkhalle*, or pump-room (1842); the theatre (1862); the Friedrichsbad (1877); the villa occupied by Queen Victoria in 1872 and 1876; the ruined 'old castle' crowning the Schlossberg; and the 'new castle' (1479), destroyed, like the old, by the French in 1689, but restored, and now the summer residence of the grand-duke.

Baden bei Wien (i.e. 'Baden near Vienna;' *Bâh-den bī Veane*), a watering-place of Austria, on the Schwechat, 17 miles S. by W. of Vienna by rail. It was the *Aquæ Pannonicæ* of the Romans, and is still famous for its warm mineral springs, which are visited during the season by upwards of 10,000 persons. They are sulphurous, with much carbonic acid gas, have a temperature of

79° to 104° F., and are good for skin diseases, gout, and rheumatism. Pop. 12,500.

Ba'denoch, a Highland district in the south-east part of Inverness-shire, 45 miles long by 19 broad, bounded by Lochaber, Athole, Braemar, and Moray, and traversed by the Spey.

Badenweiler, a Black Forest watering-place in the SW. corner of Baden, 20 miles NNE. of Basel; frequented yearly by some 5000 visitors.

Badghis, a region north of Herat, comprising the country between the Murghab and the Harirud rivers, as far northward as the edge of the desert. It lies just to the south of the boundary line between Afghanistan and the Russian territories, as defined in 1887.

Badminton, the seat of the Duke of Beaufort, in the south of Gloucestershire, 7 miles E. of Yate Junction. It is a stately Palladian edifice of 1682, with a fine park.

Badrinath, a peak of the main Himalayan range, Garhwal district, North-western Provinces, India, 22,901 feet above the sea. A shrine of Vishnu stands on one of its shoulders at a height of 10,400 feet, 56 miles NE. of Srinagar.

Baëna, a Spanish town 25 miles SSE. of Cordova. Pop. 14,801.

Baeza, a town of Spain, in the province of Jaen, 9 miles from Baeza station, this being 160 S. of Madrid. The Roman *Beatia*, and the seat of Moorish califs, with 150,000 inhabitants, it never fairly recovered from its sack by the Castilians in 1228. Here are a quondam university (1533) and the oratory of St Philip de Neri. Pop. 15,430.

Baffin Bay, a gulf, or rather sea, on the NE. coast of North America, extending between Greenland and the great islands NE. of Hudson Bay (one of which is called Baffin Island), in 69° to 78° N. lat. It is about 800 miles long, with an average breadth of 280. The shores are lofty and precipitous, backed by snow-clad mountains. Baffin Bay communicates with the Atlantic by Davis Strait; and with the Arctic Ocean by Smith and Lancaster Sounds. Discovered in 1562, it was first explored in 1615 by William Baffin, pilot of Bylot's expedition.

Bagamoyo, a village on the coast of German East Africa, opposite the island of Zanzibar, a frequent starting point of expeditions to the interior.

Bagdad, or Baghdad, the capital of a province of Asiatic Turkey, on the Tigris, 500 miles from its mouth. It is surrounded by a brick wall, 5 miles in circumference, and 40 feet high, but in some places broken down, and by a deep dry ditch; the river is spanned by a bridge of boats, 220 yards long, and the communication is guarded by a citadel. There are four gates, the finest of which, bearing date 1220, has remained closed since 1638. Bagdad has an extremely picturesque appearance from the outside, being encircled and interspersed with groves of date-trees, through which one may catch the gleam of domes and minarets; but it does not improve on closer inspection. The bazaars exhibit the produce of both Turkish and European markets; but commerce has greatly decreased since Persia began to trade with Europe by way of Trebizond, or of the Persian Gulf on the south. Nevertheless Bagdad still carries on a considerable traffic with Aleppo and Damascus, and has manufactures of red and yellow leather, silks, and cotton stuffs. Dates, wool, grain, and *timbac* (a substitute for tobacco) are exported, and a number of horses are sent into India. Of the population, estimated at 180,000, the greatest part are Turks and Arabs. In 1831 an inundation destroyed one-half of the town and several thousand lives. Cholera visits it periodically; in 1831, 4000 people perished daily for several days from its ravages. In 1870–71 Bagdad also suffered severely from famine. Since 1836, British steamers have plied on the Tigris between Bagdad and Basra; and here is one of the chief stations of the Anglo-Indian telegraph.

Bagdad in the 9th century was greatly enlarged by Haroun Al-Raschid, and under his son, Al-Mamûn, it became the great seat of Arabic learning and literature. It was conquered by the sultan, Murad IV., in 1638, and ever since has been under the sway of the Porte. The province of Bagdad, comprising great part of the lower basins of the Euphrates and Tigris, falls into the vilâyets of Bagdad (pop. 850,000), Mosul (350,000), and Basra (200,000).

Bagenalstown, a market-town on the Barrow, in the county, and 10 miles S. of the town of Carlow. Pop. 1900.

Baghal, or Bhagul, a Punjab hill-state in North-west India, on the south bank of the Sutlej. Area, 124 sq. m.; pop. 24,633.

Baghelkhand, the name of five native states, under the political superintendence of the governor-general's agent for Central India, lying to the south of the districts of Mirzapur and Allahabad. The total area is 11,324 sq. m.; pop. 1,562,595.

Bagheria, or Bagaria, a town of Sicily, 8 miles E. by S. of Palermo by rail. Pop. 12,650.

Baghistan. See Behistun.

Bagirmi, or Baghermi, a country in Central Africa, bounded on the W. by Bornu and a portion of Lake Tsad. Its area is estimated at nearly 71,000 sq. m.; its pop. at 1,500,000. The capital is Maseña.

Bagnacavallo (*Ban-ya-ca-val'lo*), a cathedral city of Italy, 11 miles W. of Ravenna. Pop. 3843.

Bagnara (*Ban-yâh'ra*), an Italian coast-town, 16 miles NE. of Reggio. Pop. 9749.

Bagnères (*Ban-yehr'*), two watering-places both in the Pyrenees, France.—(1) Bagnères de Bigorre, on the Adour, in the dep. of Hautes Pyrénées, 1820 feet above sea-level, 13 miles SE. of Tarbes by rail. Known to the Romans as *Vicus Aquensis Balnearicæ* or *Aquæ Bigerrorum*, it now is visited by 20,000 strangers yearly, and has fourteen baths and over fifty springs (90° to 135° F.), recommended for catarrhal and nervous diseases. Pop. 6986.—(2) Bagnères de Luchon, in the dep. of Haute Garonne, 43 miles by road SE. of Bagnères de Bigorre, and 22 by rail S. of Montrejeau Junction. Its cold, tepid, and hot sulphurous waters (up to 130° F.) are recommended in rheumatism, gout, cutaneous diseases, and paralysis, and attract 10,000 visitors annually. Pop. 3585.

Bagni di Lucca (*Ban'yee dee Look'ka*), a bathing-place of Italy, 17 miles N. of Lucca, and has hot springs of from 96° to 136° F. Pop. 900.

Bagno a Ripoli (*Ban'yo âh Rip'olee*), an Italian village, 5 miles from Florence, containing baths.

Bagno in Romagna (*Ban'yo in Român'ya*), an Italian bathing-place, on the Savio, 35 miles E. by N. of Florence. It has hot springs of temperature 108°–110° F. Pop. 1875.

Bagshot Heath, near Windlesham in Berk-

shire and Surrey, is a tract of nearly 50 sq. m., 463 feet above sea-level.

Baha'mas, or LUCAYOS (Span. *Los Cayos*), a chain of British West Indian islands, stretching nearly 600 miles north-westward from near the north coast of Hayti to the east coast of Florida. The chain extends in N. lat. from 21° 42′ to 27° 34′, and in W. long. from 72° 40′ to 79° 5′. There are 20 larger islands, 653 islets or *cays*, and 2387 reefs. The chief members of the group, if reckoned from the NW., are: Great Bahama, Abaco, Eleuthera, New Providence, Andros, Cat Island, San Salvador or Watling's Island, Exuma, Long Island, Crooked Island, Acklin, Mariguana, Inagua, Little Inagua. The Caicos (q.v.) and Turk's Island, which geographically belong to the Bahamas, have since 1848 been politically annexed to Jamaica.

The area is 5390 sq. m.; and in 1900 the population was 53,565, of whom about 6500 are Europeans. Of coralline formation, the islands generally are of reef-like shape, long, narrow, and low, the highest hill not exceeding 230 feet. With very little appearance of soil, they derive considerable fertility from the tendency of the porous rock to retain moisture. Sponges are largely found round the shores. Cotton cultivation received a great impulse during the American civil war. The sugar-cane, too, is grown more largely than formerly; but the salt manufacture has ceased to be remunerative. The temperature ranges from 57° to 113° F.; but in the winter the climate is so delightfully temperate as to be often recommended in the United States to sufferers from pulmonary complaints. The annual rainfall is from 43 to 45 inches. In 1866 and 1883 the Bahamas were visited by furious and destructive cyclones.

The Bahamas, Columbus's earliest discovery (1492), were occupied in 1629 by the English, to whom, after various vicissitudes of fortune in the wars with Spain and France, they were ultimately secured by the peace of Versailles (1783). Nassau, in New Providence, is the seat of government. During the American civil war, Nassau became the station for blockade-runners, and thence derived unexampled prosperity; the value of imports and exports rising from £234,029 and £157,350 in 1860, to £5,346,112 and £4,672,398 in 1864. They have greatly declined since; their present annual value, on a four years' average, being £325,000 and £200,000. So far, however, as agriculture is concerned, the impulse then received has been maintained by the Bahamas. Both Baptists and Wesleyans are nearly twice as numerous as members of the Church of England, which was disestablished in 1869. See works by Bacot (2d ed. 1871) and Powles (1888).

Bahar. See BEHAR.

Bahawalpur, capital of an Indian native state in political connection with the Punjab, lies near the left bank of the Sutlej, which here is crossed by the fine 'Empress' railway-bridge. It has manufactures of scarfs, turbans, silks, and chintzes. Pop. 13,635. Area of the state, 17,285 sq. m.; pop. 750,042.

Bahia (*Bâ-ee'a*), capital of a Brazilian province, next to Rio de Janeiro the largest city of the republic, on a range of hills along the sea-shore. The bay, which is one of the finest in America, is defended by forts, with the island of Itaparica sheltering the entrance. Bahia has a university, and is the seat of an archbishop, who is primate of Brazil. The chief exports are sugar, cotton, coffee, tobacco, rice, &c. Bahia is the oldest city in Brazil, and till 1763 was the capital. The bay was discovered by Amerigo Vespucci in 1503, and the city was founded by a Portuguese navigator named Correa in 1510. Pop. 180,000.—The *province* has an area of 164,502 sq. m., and a pop. of 1,950,000.

Bahia Blanca, a growing port of the Argentine Republic, in the province of Buenos Ayres. It is situated on the Naposta River, three miles from its entrance into the bay of Bahia Blanca, and has a good harbour. Pop. about 10,000.

Bahia Honda, a harbour on the north coast of Cuba, 60 miles WSW. of Havana, protected by a fort. Pop. 1500.

Bahr, an Arabic word signifying a large body of water, is applied both to lakes and rivers.—Bahr-el-Abiad (the White River), and Bahr-el-Azrak (the Blue River), are the chief branches of the Nile (q.v.).—Bahr-el-Ghazal is the name of the upper branch of the Nile, constituted by the Bahr-el-Arab and many other tributaries, which flows sluggishly eastward to join the Bahr-el-Jebel and so form the Bahr-el-Abiad. The Bahr-el-Ghazal gives name to a province in the SW. of the Egyptian Soudan, bravely held for years by the governor, Frank Lupton.—Bahr-el-Yemen is the Red Sea (q.v.), and Bahr-Lût (Sea of Lot) the Dead Sea (q.v.).

Bahraich, a town of Oudh, India, 70 miles NE. of Lucknow. To the shrine of Masâûd, a warrior and Mussulman saint, there is a great concourse of pilgrims every May. Pop. 27,000.

Bahrein Islands, or AVÂL ISLANDS, a group of islands in the Persian Gulf. The most important of these is Bahrein (pop. 40,000), 33 miles long and 10 broad. Manama, the capital, has a good harbour. The Bahrein Islands are chiefly remarkable for their pearl-fisheries, which employ, during the season, from 1000 to 2000 boats, each manned with from 8 to 20 men. The annual value of the pearls is estimated at upwards of £300,000. The islands are inhabited by Arabs, and since 1861 have been under English protection. Pop. 70,000.

Baiæ, a small town of antiquity, on the coast of Campania, 10 miles W. of Naples and opposite Puteoli. The ruins still standing on the desolate coast, or visible beneath the clear waters of the sea, are now the only evidence of its former magnificence.

Baikal (Turkish, *Bei-kul*, 'rich lake') is, after the Caspian Sea and the Sea of Aral, the largest lake of Asia, with an area of 13,500 sq. m. It is a fresh-water lake, and is situated in the south of Siberia, in the government of Irkutsk, in 51° 20′—55° 30′ N. lat., and 103°—110° E. long., and somewhat resembles a sickle in shape. Its length is 330 miles, and its breadth 9½ to 40 miles; height above the sea, 1360 feet; mean depth 850 feet, but in some places as much as 4500 feet, more than 3000 feet below sea-level. Its waters are a deep blue, and remarkably clear. Its outlet is by the Lower Angara, a chief tributary of the Yenisei; but the river is inconsiderable in size compared with those which flow into the lake. It has several islands—the largest, Olkhon, 32 miles long. There are numerous hot springs on its shores, and earthquakes are frequent. Formerly the lake—or rather sea—seems to have been much more extensive. The difficult section of the great Siberian railway passing round the south end of the sea was not completed till 1904; the connection being till then carried on by steamers (or across the Baikal ice in winter).

The annual value of its salmon, sturgeon, and other fisheries is estimated at 200,000 roubles. The capture of fresh-water seals is a source of income to the Russian settlers. The surface of the lake is frozen from November to May, but the traffic is carried on over the ice.

Bailén', or BAYLEN, a town of Andalusia, Spain, 22 miles N. of Jaen. Pop. 7988. Here, on July 19, 1808, the Spaniards won their first and only victory over the French, 18,000 of whom laid down their arms.

Bailieborough, a market-town of Cavan county, 58 miles NW. of Dublin. Pop. 1154.

Bailleul (*Ba-yul'*), a town in the French dep. of Nord, 19 miles NW. of Lille. The Baliol family hence derived its name. Pop. 11,900.

Baireuth, or BAYREUTH (*Bye'roit*), capital of the Bavarian province of Upper Franconia, on the Red Maine, 43 miles NNE. of Nuremberg by rail. Its principal buildings are the old palace, dating from 1454; the new palace (1753); the old opera-house (1748); and a magnificent 'national theatre' (1875) for the performance of the operas of Wagner, who, dying at Venice, was in 1883 buried in the garden of his villa here. Jean Paul Richter died here in 1825, and a monument has been erected to his memory. Baireuth's chief articles of industry are cottons, woollens, linen, leather, tobacco, parchment, and porcelain. Population, 30,000, of whom only about 15 per cent. are Catholics. See Milner-Barry's *Baireuth and the Franconian Switzerland* (1887).

Baitul, or BETUL (*Bay-tool'*), a town of British India, in the hill-country of the Central Province, 50 miles NE. of Ellichpur. Pop. 5700.

Baja (*Bâh'ya*), a market-town of Hungary, on the Danube, 90 m. S. of Pesth, with a fine castle, several convents, and brisk trade. Pop. 19,941.

Bajmok (*Bye-mok*), a village of Hungary, 16 miles SW. of Theresienstadt. Pop. 6661.

Bakarganj, a British district in the Dacca division of India, under the lieutenant-governor of Bengal, contains 3649 sq. m. Barisal, the headquarters, on the Barisal River, is the only town with over 5000 inhabitants. Bakarganj, the former capital, near the junction of the Krishnakati and Khairabad rivers, is now in ruins. Pop. 2,353,965.

Bakau (*Ba-kow'*), a Roumanian town on the river Bistrisza, 187 miles N. of Bucharest by rail. Pop. 15,000.

Bakchiserai (Turkish, 'Garden Palace'), a town in the Russian government of Taurida, the residence of the ancient princes or khans of the Crimea, 15 miles by rail SW. of the present capital, Simferopol. The palace (1519) of the khans has been restored by the Russian government in the oriental style. Pop. 15,377.

Bakel, a town with a strong fort, in the E. of the French colony of Senegal, on the Senegal River. Pop. 2600.

Baker, MOUNT, a volcano (14,100 feet) of Washington State, U.S., in the Cascade Range, a continuation of the Rocky Mountains, 20 miles from the Canadian frontier. It was very active in 1830.

Bakewell, an ancient market-town in Derbyshire, on the Wye, 25 miles NNW. of Derby. It has warm baths and a mineral spring. Pop. 2848.

Bakhmut, a town of Southern Russia, in the government of Ekaterinoslav, on a tributary of the Donetz. Pop. 19,674.

Bakhtegan, or NIRIS, a shallow salt-lake (74 × 13½ miles) in the Persian province of Farsistan, 47 miles E. of Shiraz.

Bakony Forest, a densely wooded hill-country of Hungary, extending from Lake Balaton northward to the Danube. Immense herds of swine are annually driven hither to feed upon the mast.

Baku, an important seaport of Russian Transcaucasia, on the Apsheron peninsula, on a crescent-shaped bay in the Caspian Sea. Since 1883 it has been connected by rail with Tiflis, and so with Poti and Batoum on the Black Sea, 561 miles distant; and since 1887, by the North Caucasus Railway, with Novorossiak on the Black Sea. The whole soil around Baku is impregnated with petroleum, which, monopolised till 1872, now forms the staple branch of its industry. Some of the fountains ignite spontaneously, a fact which caused Baku to be esteemed as a holy city by the Parsees (see ATESHGA). Most of the petroleum wells are situated on the Balakhani peninsula, 8 or 9 miles to the north. Lines of pipe carry the oil into the 'black town' of Baku, which is full of oil refineries emitting vast volumes of smoke. One well, tapped in 1886, began to spout oil with extraordinary force, deluging the whole district, till the outflow, on the eighth day, had reached a daily rate of 11,000 tuns, or more than the entire produce of the world at the time. Another gigantic naphtha fountain burst out in 1887, rising to a height of 350 feet, and after forming an extensive petroleum lake, forced its way into the sea. How rapidly the industry grew may be judged from the fact that the number of drilled wells increased from 1 in 1871 to 400 in 1883. Cotton, silk, opium, saffron, and salt are also exported. The Arabian Masudi is the first who mentions Baku, about 943, and he gives an account of a great volcanic mountain in its vicinity, now extinct. Baku was taken by Russia from the Persians in 1806. The harbour, which is strongly fortified, is one of the chief stations of the Russian navy in the Caspian. The population—some 16,000 in 1880—was in 1900 about 115,000. Baku is capital of a government of Russian Transcaucasia, with an area of 15,516 sq. m., and a pop. of 810,000. See works by Marvin (1884–86).

Ba'la, a town of Merionethshire, North Wales, near the foot of Bala Lake, 12 miles SW. of Corwen by rail. Pop. 1622. Bala Lake measures 4 miles by 1 mile, and sends off the Dee from its foot. From Lake Vyrnwy (q.v.), 10 miles south, Liverpool draws its water-supply.

Balaghat' ('above the Ghats'), a large tract of elevated country in the south of India, extending from the rivers Toombudra and Krishna in the north to the farthest extremity of Mysore in the south. Also a British district in the Central Provinces. Pop. 330,554.

Balahissar, a village in the south-western part of the province of Angora, in Asia Minor, on the site of the ancient *Pessinus*, which was famous for its worship of Cybele.

Balakla'va, a small Greek fishing-village with 700 inhabitants, in the Crimea, 8 miles SE. of Sebastopol. The landlocked harbour, which affords secure anchorage for the largest ships, till 1860 was a naval station. Balaklava is the *Symbolon Limēn* of Strabo, and the *Cembalo* of the Genoese (1365–1475), who were expelled by the Turks, as these were in turn by the Russians. During 1854–56 it was the British headquarters,

and the famous charge of the Six Hundred (25th October 1854) has made the name glorious as Thermopylæ.

Balasinor, a tributary state of India, in the province of Guzerat, Bombay. Area about 150 sq. m.; pop. 42,000.—The chief town, Balasinor, is 51 miles N. of Baroda. Pop. 9000.

Balasor', a seaport of Bengal, on the right bank of the Burabalang River, 15 miles from its mouth. Pop. 20,865.

Ba'laton, Lake (Ger. *Platten-See*), a lake, the largest in Hungary, 55 miles SW. of Pesth. Lying 426 feet above sea-level, it has a length of 48 miles, a breadth of 10, and an area of 245 sq. m. Its mean depth is 20 feet, but in one part it sinks to 150. It is fed by over thirty streams—the chief the Szala—as well as by numerous springs. Its outlet is by the Sio, which flows to the Sarvitz, a feeder of the Danube. The waters have a slightly brackish taste. Fish of various kinds abound, including a kind of perch, weighing from 10 to 20 pounds, and found nowhere else.

Balbriggan, a watering-place in Dublin county, 21 miles N. by E. of Dublin. It manufactures linen, cotton (especially cotton stockings), and calico. Pop. 2233.

Balcarres, a Fife mansion near Colinsburgh, where Lady Ann Barnard wrote 'Auld Robin Gray.' It is a seat now of the Earl of Crawford.

Baldock, a town of Hertfordshire, 37 miles N. of London. Pop. 2057.

Baldoon', a ruin 1¾ mile SSW. of Wigtown, the true scene of Scott's *Bride of Lammermoor*.

Bâle. See Basel.

Balearic Isles, a group of islands—Mallorca (Majorca), Minorca, Iviza, Formentera, Cabrera, and several smaller islets—lying off the coast of Valencia. They formed from 1220 to 1344 the kingdom of Mallorca, which was united in 1349 with the crown of Aragon; and they now form a Spanish province, with an area of 1935 sq. m., and a population of 312,000. The Phœnicians visited the Balearic Isles at a very early date, and they were followed by the Greeks, the Carthaginians, and (123 B.C.) the Romans. The *Baleares* were famous slingers. See Bidwell's *Balearic Isles* (1876).

Balerno, a Midlothian village, with paperworks, on the Water of Leith, 7 miles SW. of Edinburgh. Pop. 699.

Balfron', a Stirlingshire village, 19 miles NNW. of Glasgow. Pop. 737.

Balfrush' (more correctly *Barfurush*, 'mart of burdens'), a town in the Persian province of Mazanderan, on the Bhawal, 12 miles from its mouth in the Caspian Sea. It is a centre of trade between Russia and Persia. Pop. 30,000.

Balgownie. See Don (Aberdeenshire).

Balham, part of Streatham (q.v.).

Bali (*Bâh'lee*), or Little Java, one of the Sunda Islands, lying east of Java. It is 75 miles long, 50 broad, and 2300 sq. m. in area; pop. 760,000. A chain of mountains crosses the island from east to west, rising in the volcanic peak of Gunungagung to 12,379 feet. The Balinese are a superior race, and speak a language related to Javanese. Their religion is Brahmanism of an ancient type. Under the Dutch, the nine little principalities of the island are governed by native rulers. Chinese and a few Europeans are the chief traders.

Balize. See Belize, Honduras.

Balkans, a ridge or series of ridges of mountains in south-eastern Europe (anc. *Hæmus; Balkan* is Turkish for 'mountain'). They form the boundary between Bulgaria and Eastern Roumelia, extending from Timok, SE. of Sophia, eastward to the Black Sea, and accordingly are the backbone of the joint principality of Bulgaria and Eastern Roumelia. The watershed between the Danube and the Ægean, they have a steep slope southwards, but northwards incline gradually towards the Danube. They are highest in the west, where the mean height is 6500 feet. The ridge is crossed by some 30 passes, of which the Shipka, between Kezanlik and Tirnova, and 4290 feet high, is the most noted in history—especially as the scene of severe fighting in the Russo-Turkish war of 1877–78.—The term Balkan Peninsula, frequently occurring in connection with the evergreen 'Eastern Question,' is a usual name for the peninsula in South-eastern Europe running southwards between the Adriatic and the Ægean. The most convenient northern boundary is the Save and the Lower Danube; though historically and politically Roumania and some parts of the Austrian dominions are closely associated with the regions south of the Danube. Greece is a peninsula upon a peninsula, but is not usually accounted one of the Balkan States. In a general way the Balkan Peninsula and Balkan States cover the area of Turkey in Europe and the non-Turkish States either now or lately under Turkish suzerainty, with the exception of Roumania and Greece. See the articles Turkey, Bulgaria, Servia, Montenegro, Albania, and Bosnia and Herzegovina.

Balkh (anc. *Bactria*), a district of Afghan Turkestan, the most northerly province of Afghanistan. Offsets of the Hindu-Kush traverse it in a NW. direction, and slope down to the low steppes of Bokhara. Its length is 250 miles; its breadth, 120. The natives are Uzbegs.—Balkh, long the chief town, is surrounded by a mud wall; but though bearing the imposing title of 'mother of cities,' it has not in recent times had any of the grandeur of ancient Bactra, on the site of which it is built. It was twice destroyed by Genghis Khan and Timur. A terrible outbreak of cholera in 1877 caused the capital of Afghan Turkestan to be transferred to Mazar, west of Balkh; since which Balkh has been an insignificant village.

Balkhash' (Kirghiz *Tengis;* Chinese *Sihai*), a great inland lake near the eastern borders of Russian Central Asia, between 44° and 47° N. lat., and 73° and 79° E. long. Lying 780 feet above sea-level, it extends 323 miles WSW.; its breadth at the west end is 50 miles, at the east from 9 to 4 miles; the area is 8400 sq. m. The water is clear, but intensely salt. Its principal feeder is the river Ili. It has no outlet.

Ballaarat, or Ballarat, a thriving town of Victoria, 100 miles WNW. of Melbourne, and 58 NW. of Geelong by rail. It is next in importance to Melbourne, and owes its rise to the discovery of the gold-fields there in June 1851, being the oldest of the *considerable* gold-fields of Victoria, and in fact the oldest but one of all the gold-fields of the colony. Ballaarat is the see of Protestant and Roman Catholic bishops. Amongst the industries are iron-founding, brewing, distilling, with flour and woollen mills. When the surface diggings became exhausted after the first rush in 1851, deposits of gold were found at greater depths, and now there are mines as deep as some English coal-pits, with

steam pumping and all the requisite machinery. The 'Welcome Nugget,' the largest ever found, was discovered in 1858 at Bakery Hill. It weighed 2217 oz. 16 dwt., and was sold for £10,500. Pop. (1891) 40,849 ; (1901) 49,414.

Ballabgarh, a town of India, in the Punjab, 21½ miles S. of Delhi. Pop. 7000.

Ballachu'lish, a village of Argyllshire, on the south shore of salt-water Loch Leven, 16½ miles S. of Fort-William. Its quarries of blue roofing clay-slate, commenced about 1760, produce in a busy year 17,000,000 roofing-slates, weighing 30,000 tons. Pop. 1045.

Ballaghaderreen, a town of County Mayo, 12 miles NW. of Castlereagh. Pop. 1266.

Ballantrae (*Ballantray'*), a fishing-village at the mouth of the Stinchar, in the S. of Ayrshire, 10 miles WSW. of Pinwherry station. Pop. 514.

Bal'later, a village of Aberdeenshire, on the Dee, 44 miles WSW. of Aberdeen by rail. Near it are the medicinal springs of Pannanich, Balmoral Castle (q.v.), and Ballatrich Farm, connected with Byron's boyhood. Pop. 1250.

Ballenstedt, a town of Anhalt, in the Harz Mountains, 7 miles SE. of Quedlinburg by rail. Its castle was a monastery 940–1525, and from 1765 till 1863 the residence of the dukes of Anhalt-Bernburg. Pop. 5852.

Bal'leny Islands, five small volcanic islands discovered in the Antarctic Ocean, 1839, nearly on the Antarctic circle, and in long. 164° E.

Ballina', a seaport on the confines of counties Mayo and Sligo, on the tidal Moy, 7 miles S. of its entrance into Killala Bay, and 168 miles NW. of Dublin by rail. It has a R. C. cathedral (that of the Bishop of Killala). In 1798 the French landed and took Ballina, but were three weeks afterwards defeated at Killala. Pop. 4505.

Ballinakill, a town of Queen's county, 63 miles SW. of Dublin. Pop. 464.

Ballinamore, a town of County Leitrim, 15 miles NE. of Carrick-on-Shannon. Pop. 654.

Ballinasloe', a town in Connaught on the borders of counties Galway and Roscommon, on the river Suck, 94 miles W. of Dublin. At the great annual fair for five days in October, as many as 60,000 sheep and 6000 horned cattle, besides horses, have been sold. Pop. 4904.

Ballincollig, a town of County Cork, on the Bride, 7 miles W. of Cork. Pop. 740.

Ballingarry, a town in the county, and 16 miles SW. of the town of Limerick. Pop. 540.

Ballinrobe', a town of County Mayo, on the Robe, 17 miles SSE. of Castlebar. Pop. 1552.

Balloch, a village at the foot of Loch Lomond, 20½ miles NW. of Glasgow.

Ballochmyle, an Ayrshire estate, near Mauchline, rendered famous by Burns.

Ballybay, a town of Monaghan, 79 miles NNW. of Dublin. Pop. 1208.

Ballybunnion, a watering-place of Kerry, 9 miles NW. of Listowel.

Ballycas'tle, a seaport of County Antrim, on an open bay opposite Rathlin Isle, 68 miles N. of Belfast by rail. Its harbour and pier cost £150,000, but the former is silted up, and the sea has destroyed the latter. Pop. 1471.

Ballyclare, a town of Antrim, 10½ miles SW. of Larne. Pop. 2066.

Ballyconnell, a village in the county, and 14 miles NNW. of the town of Cavan.

Ballygawley, a Tyrone village, 11 miles WSW. of Dungannon.

Ballyhalbert, a fishing-village of County Down, 13 miles SE. of Newtonards.

Ballyhooly, a village in the county, and 18 miles N. by E. of the city of Cork.

Ballyjamesduff, a market-town in the county, and 11 miles SE. of the town of Cavan. Pop. 652.

Ballylongford, a Kerry village, 8 miles N. of Listowel. Pop. 545.

Ballymahon, a market-town in the county, and 12 miles S. of the town of Longford. Pop. 713.

Ballyme'na, a town of County Antrim, on the Braid, 33 miles NNW. of Belfast by rail. It is one of the greatest linen and flax markets in Ireland, and its vicinity is covered with extensive bleach-fields. Pop. (1901) 10,886.

Ballymoney, a market-town of County Antrim, 53 miles NNW. of Belfast by rail. Pop. 2955.

Ballymote, a town in the county, and 14 miles S. of the town of Sligo. Pop. 997.

Ballynahinch, a market-town of County Down, 12½ miles S. of Antrim. Pop. 1542.

Ballyragget, a town in the county, and 10 miles NW. of the town of Kilkenny. Pop. 518.

Ballyshannon, a seaport of County Donegal, at the mouth of the river Erne, on a small inlet running off from Donegal Bay, 157 miles NW. of Dublin by rail. It is celebrated for its salmon-fishing. Pop. 2359.

Ballywalter, a fishing-village of County Down, 10 miles SE. of Newtonards.

Balme, Col de, a mountain pass (7200 feet) between Mont Blanc and the Dent du Midi, taking over the route from Martigny to Chamonix.

Balmer'ino, a small village of Fife, on the Firth of Tay, 3½ miles SW. of Dundee by water. Near it are scanty remains of a Cistercian abbey (1227). See a work by J. Campbell (1867).

Balmo'ral, a royal residence in Braemar, Aberdeenshire, 9 miles W. of Ballater, and 52½ of Aberdeen. Standing 926 feet above sea-level on a natural platform that slopes gently down from the base of Craig-gowan (1437 feet) to the Dee, it commands a magnificent prospect on every side. The estate was acquired by Prince Albert in 1848–52; and the castle rebuilt (1853–55) at a cost of £100,000 in the Scottish Baronial style of architecture.

Balquhidder (*Bal-whidd'er*), a Perthshire parish, 28 miles NW. of Stirling, with Rob Roy's grave.

Balrampur, a town of Oudh, India, near the frontier of Nepaul. Pop. 15,000.

Balta, a town on the Kodema, an affluent of the Bug, in the government of Podolia, Russian Poland. Pop. 24,440.

Baltic Provinces, the five Russian governments bordering on the Baltic—viz. Courland, Livonia, Esthonia, Petersburg, and Finland ; or in a restricted sense often the first three. The Baltic provinces once belonged to Sweden, except Courland, which was a dependency of Poland. They came into the possession of Russia partly in the beginning of the 18th century, through the conquests of Peter the Great, partly under Alexander in 1809. No pains have been spared to Russianise them, and since 1876–77 they have lost their remaining privileges, and been thoroughly incorporated in the Russian

empire. The inhabitants are mainly Esths and Letts, with many Germans.

Baltic Sea, the great gulf or inland sea bordered by Denmark, Germany, Russia, and Sweden, and communicating with the Kattegat and North Sea by the Sound and the Great and Little Belts. Its length is from 850 to 900 miles; breadth, from 100 to 200; and area, including the Gulfs of Bothnia and Finland, 184,496 sq. m., of which 12,753 are occupied by islands. Its mean depth is 44 fathoms, and the greatest ascertained depth, between Gottland and Courland, 140. The group of the Aland Islands divides the south part of the sea from the north part or Gulf of Bothnia (q.v.). The Gulf of Finland (q.v.), branching off eastwards into Russia, separates Finland from Esthonia. A third gulf is that of Riga or Livonia. The Kurisch and other Haffs are not gulfs, but fresh-water lakes at the mouths of rivers. The water of the Baltic is colder and clearer than that of the ocean, and contains in most places only a fourth of the proportion of salt found in the Atlantic; though the salinity varies in different parts and at different seasons. Ice hinders the navigation from three to five months yearly. Rarely, as in 1658 and 1809, the whole surface is frozen over. Tides, as in all inland seas, are little perceptible—at Copenhagen, about a foot. Upwards of 250 rivers flow into this sea, which, through them and its lakes, drains not much less than *one-fifth of all* Europe, its drainage area being estimated as 717,000 sq. m. The chief of these rivers are the Oder, Vistula, Niemen, Dwina, Narva, Neva, and Motala. The principal islands are Zealand, Fünen, Bornholm, Samsöe, and Laaland (Danish); Gottland, Oland, and Hveen (Swedish); the Aland Islands (Russian); and Rügen (Prussian). The Eider Canal, connecting the Baltic near Kiel with the North Sea at Tonningen, facilitates the grain trade; and the two seas are also connected by the Gotha Canal, which joins the lakes of South Sweden. These are navigable for boats of light draught only; but in 1887–95 a great canal was constructed from Brunsbüttel, at the mouth of the Elbe, to Holtenau and Kiel, to allow the passage of the largest vessels, being 61 miles long, 28 feet deep, 200 wide at the surface, and 85 at the bottom; and as the voyage round from the Elbe to Kiel represents nearly 600 miles of dangerous sailing or steaming, the canal must prove of great value to commerce and to the German navy. The cost was estimated at £8,000,000, and the yearly maintenance at £50,000. The most important harbours in the Baltic are: in Denmark, Copenhagen; in Germany, Kiel, Lübeck, Stralsund, Stettin, Danzig, Königsberg, and Memel; in Russia, Riga, Narva, Cronstadt, and Sveaborg; and in Sweden, Stockholm and Karlskrona.

Baltimore, a fishing-village in County Cork, on Baltimore Bay, 7 miles SW. of Skibbereen. Here in 1887 the Baroness Burdett-Coutts established a technical fishery school. Pop. 597.

Baltimore, a port of entry and the largest city of Maryland, and the seventh city of the United States in population, stands on the northern bank of the river Patapsco, an arm of Chesapeake Bay, 250 miles by ship-channel from the ocean, 96 miles SW. of Philadelphia, and 40 NE. of Washington, D.C., in 39° 17′ N. lat., 76° 37′ W. long. Its site is uneven, and its surroundings are picturesque and pleasant. The plan of the streets is not so strictly uniform as in many American cities. The harbour is spacious and perfectly secure, having a minimum depth of 24 feet, and access from the sea is safe and easy. Baltimore is an important centre of the traffic in bread-stuffs, and is also the seat of extensive and varied industries—cotton and woollen goods, flour, tobacco and cigars, beer, glassware, boots and shoes, iron and steel (including machinery, car-wheels, iron bridges, stoves, furnaces, &c.), clothing, pianos, organs, and the canning of oysters, employing over 2000 hands.

Baltimore is noted for the fine architecture of its public and other buildings, among the finest being the chamber of commerce, the Roman Catholic archiepiscopal cathedral, the custom-house, the Maryland Institute, the academy of music, the city-hall, the Johns Hopkins Hospital, the post-office, and the Peabody Institute. The public monuments (the Washington column is 210 feet high) have given it the name of the 'monumental city.' There are several public squares and parks, the beautiful Druid Hill Park of nearly 700 acres, being the most celebrated. The Johns Hopkins University, endowed with over $3,500,000 by a Quaker philanthropist of that name (1795–1873), was opened in 1876, and ranks as one of the first seats of learning in the country. Founded in 1729, the city was named in honour of Lord Baltimore, the founder of the Maryland colony, and in 1796 was incorporated as a city. Pop. (1790) 13,503; (1830) 80,625; (1860) 212,218; (1880) 332,313; (1890) 434,439; (1900) 508,957.

Baltinglass, a Wicklow market-town, on the Slaney, 10 miles E. of Mageney. Pop. 1007.

Baltistan, or Little Tibet, an alpine region of Kashmir, through which the Upper Indus flows. It contains Mount Godwin-Austen, 28,250 feet high, next to Everest the highest on the globe.

Baltjik', a Bulgarian seaport, on the Black Sea, 20 miles NE. of Varna. Near it is ruined Tomi, whither Ovid was exiled. Pop. 4000.

Baluchistan. See Beluchistan.

Balwearie, 2 miles W. by S. of Kirkcaldy, the ruined tower of the 'wizard' Sir Michael Scott.

Bambarra, one of the Soudan states of Western Africa, lying (where 5° W. long. and 12° N. lat. cross one another) on both sides of the Upper Niger. The inhabitants, a branch of the Mandingoes, number about 2,000,000, and are superior to their neighbours in intelligence. The upper classes profess Mohammedanism, but the lower are pagans. The principal towns are Sego, Sansanding, Yamina, and Bammako. In 1881 a French treaty with the sultan of Sego opened the country, which is now in the French sphere.

Bamberg, a Bavarian city, in Upper Franconia, on the Regnitz, 3 miles above its confluence with the Main, and 33 N. of Nuremberg by rail. Set in the midst of vineyards, orchards, and hop-gardens, and founded about 769, from 1007 to 1802 it was the seat of independent prince-bishops. The magnificent Romanesque cathedral, founded by the Emperor Henry II. in 1004, has five towers, and contains the elaborately carved tomb of the founder and his empress, Cunigunda. Opposite it is the palace (1702) of the former prince-bishops, from one of whose windows Marshal Berthier met his death. St Michael's Benedictine abbey (1009) was in 1803 converted into an almshouse. The ruins of the castle of Altenburg stand on an eminence 1¼ mile from the town. Pop. (1871)

25,788; (1900) 41,850, who manufacture beer, cotton, cloth, gloves, tobacco, &c.

Bamborough Castle, an ancient fortress on the Northumbrian coast, 5 miles E. of Belford, and 16½ SE. of Berwick. Crowning a basaltic rock, 150 feet high, it was founded about 547 by Ida the 'Flame-bearer,' first king of Northumbria, and named *Bebbanburh*, after Bebbe, his queen. Forfeited by Tom Forster for his share in the '15, it was purchased by Bishop Crewe, and bequeathed by him in 1721 to trustees for benevolent purposes. In 1894 it was purchased from the trustees by Lord Armstrong, and endowed as an almshouse of cultured poverty. Bamborough village was a royal borough before the Conquest, and in Edward I.'s time returned two members. Grace Darling is buried in the churchyard. See vol. i. of Bateson's *History of Northumberland* (1893).

Bambouk, a country of Senegambia, Western Africa, lying in the angle formed by the Senegal and Faleme rivers. It has rich iron ore and deposits of gold in its rivers, especially the Faleme. Faranaba and Mandinka are the chief towns. The inhabitants, Mandingoes, are professedly Mohammedans.

Bámián, a mountain-valley in Afghanistan, on the road between Kabul and Turkestan, and near the northern base of the Koh-i-baba range. It lies 8500 feet above sea-level, is drained by a feeder of the Oxus. The inhabitants are Hazáras. The most notable feature of the district is a number of Buddhist figures of enormous size carved in the conglomerate cave-pierced rocks, 200 to 300 feet high, which form the northern side of the valley. Of these there are five; and the two principal were described by a Chinese Buddhist monk about 630 A.D. The largest is 173 feet high, or 3 feet higher than the Nelson Monument in Trafalgar Square.

Bam'mako, a trading town of Bambarra, on the Upper Niger, fortified by the French in 1883. Pop. 10,000.

Banagher, a town of King's county, on the Shannon, 18 miles SE. of Ballinasloe. Pop. 1114.

Banas, or Bunas, three rivers of India.—(1) In Rajputana, rising in the Aravalli Mountains, and flowing 300 miles NE. and SE. to the Chambal.—(2) A river also rising in the Aravalli Mountains, and flowing 180 miles SW. to the Runn of Cutch.—(3) In Chutia Nagpur, Bengal, flowing 70 miles NW. to the Son, near Rampur.

Banat, any district or territory under a Ban or military frontier chief, but specially applied since 1718 to a part of Hungary which had no separate *ban* or governor, and was bounded by the Theiss, Danube, and Maros. It was formed into an Austrian crown-land in 1849, but was incorporated with Hungary in 1860.

Banbridge, a town in County Down, on the Bann, 76 miles N. of Dublin. It is a seat of the linen manufacture in all its stages. Pop. (1881) 5609; (1891) 4901; (1901) 5006.

Banbury, a town of Oxfordshire, on the Oxford Canal and the Cherwell, 23 miles N. of Oxford, and 78 NW. of London by rail. Its strong castle (*c.* 1125) was demolished during the Great Rebellion; and in 1469 the Yorkists were defeated in the vicinity. The town is still famous for its cakes and ale; and it manufactures webbing and agricultural implements. Till 1885 Banbury returned a member to parliament; and it is a municipal borough, whose boundaries were greatly extended in 1889. Pop. (1901) 12,967, barely one-third being in the town proper.

Banca, an island from 8 to 20 miles broad lying SE. of Sumatra, from which it is separated by the Strait of Banca. It forms a Dutch Residency, with an area of 4977 sq. m., and a pop. of about 95,000, one-fourth Chinese. Gold, iron ore, silver, lead, and amber are found, but tin is the chief mineral. The once dense forests have been terribly thinned for smelting purposes. The capital, Muntok, in the north-west part of the island, has a fort and 3000 inhabitants.

Banchory, a Kincardineshire village, on the Dee, 17 miles WSW. of Aberdeen. Pop. 1470.

Banda, chief town of a district in the United Provinces, India, on the Ken River, 95 miles SW. of Allahabad. It is a great mart for cotton. Pop. 22,974.

Banda Isles, 12 Dutch islands of the Moluccas, 50 miles to the south of Ceram. Area, 17 sq. m.; pop. 8000 (500 Europeans and half-castes). The chief production is the nutmeg. An active volcano, Gunong-Api (1744 feet), rises near the centre of the group, which the Dutch acquired in 1801–14.

Bandajan', a pass (14,854 feet) over the Himalayas, in Kashmir.

Banda Oriental. See Uruguay.

Ban-de-la-Roche, or Steinthal, a valley of Lower Alsace, in the Vosges Mountains, the scene of the labours of Oberlin.

Bandelkhand. See Bundelkhand.

Bandon, or Bandonbridge, a town of County Cork, on the Bandon, 20 miles SW. of Cork by rail. Founded in 1608 as a Protestant colony, it was incorporated by James I., and now belongs chiefly to the Duke of Devonshire. Till 1885 Bandon returned one member to the House of Commons. Pop. (1871) 6131; (1901) 2830.—The river Bandon rises in the Carberry Mountains, and after a course of 40 miles (15 navigable) forms at its mouth the harbour of Kinsale.

Bandong, a flourishing commercial town in the western end of Java, near the volcano Gunong Guntour. Since 1864 it has been the capital of a province, the Preanger Regencies.

Banff (pron. *Bamf*), the capital of Banffshire, on the Moray Firth, at the mouth of the Deveron, 50 miles NNW. of Aberdeen by rail. On the right bank of the Deveron, 1¼ mile ENE., is the fishing-town of Macduff, included since 1832 in the parliamentary burgh. Scarce a fragment remains of the old castle, in which Archbishop Sharp was born; the present castle is a plain 18th-century edifice. Duff House, the seat of the Duke of Fife, was built in 1745 by the elder Adam. The public buildings include a town-house (1796), the county buildings (1871), a lunatic asylum (1865), Chalmers's hospital (1862), and a museum, of which Thomas Edward (1814–86), the 'Scotch naturalist,' was long curator. The harbour of Banff is inferior to that of Macduff. With Elgin, Cullen, Inverury, Kintore, and Peterhead, Banff sends one member to parliament. Pop. (1901) 7148 (nearly half in Macduff).

Banff, a health-resort among the grand scenery of the Canadian Rocky Mountain National Park, in the south-west of Alberta and on the Canadian Pacific Railway, with a hot sulphur spring. Pop. 350.

Banffshire, a county in the NE. of Scotland, bounded N. by the Moray Firth. Its greatest length is 59 miles, its greatest breadth 31, and

its area 646 sq. m. The coast is rocky, but not high, except to the east of Banff. Chief summits are the Bin of Cullen (1050 feet), Ben Rinnes (2755), and, on the Aberdeenshire border, Ben Macdhui (4296). The rivers are the Spey, which bounds a third of the county on the west; and the Deveron, 61 miles long, and mostly included within the county. The former ranks after the Tweed and Tay as a salmon-river. The southern part of Banffshire is in the Highlands, the north being purely Lowland. Banffshire is divided into the districts of Enzie, Boyne, Strathisla, Strathdeveron, Balveny, Glenlivet, and Strathavon. The chief towns and villages are Banff, Macduff, Portsoy, Keith, Cullen, Buckie, Dufftown, and Tomintoul. Much whisky is produced. The county returns one member. The battle of Glenlivet (q.v.) was fought in 1594. Pop. (1801) 37,216; (1841) 49,670; (1901) 61,488.

Bangalore, a fortified town of Mysore, in a district of the same name, lies 3000 feet above sea-level, 216 miles W. of Madras by rail. When Mysore was occupied by Britain in 1831, Bangalore was made the administrative capital of the state; and when in 1881 Mysore was restored to its maharajah, the British cantonment of Bangalore was specially exempted. In 1791 it was stormed by Lord Cornwallis. Pop. (1871) 142,513; (1891) 180,366; (1901) 159,046.

Bangkok, the capital of Siam, stands on the Menam, 20 miles from its mouth, in 13° 38′ N. lat. and 100° 34′ E. long., and stretches for some 6 or 7 miles along both sides of the river, here a wide and noble stream. The pop. is about 600,000, half of whom are Chinese, in whose hands is centred nearly all the trade, which is large, the exports exceeding £2,000,000, and the imports £3,800,000. The approach to Bangkok by the Menam is exceedingly beautiful, with its temples, gardens, noble trees, and palaces. A large number of the houses float on rafts moored to the banks of the river and its many canals; and the ordinary houses of the city, which are almost wholly of bamboo or other wood, are raised upon piles. The internal traffic is chiefly carried on by means of canals, there being only a few passable streets in the whole city. Bangkok is the constant residence of the king. The palace is surrounded by high walls, and is nearly a mile in circumference. It includes temples, public offices, huge barracks, and a theatre; the famous white elephants have also a place within the palace. The temples are innumerable, and decorated in the most gorgeous style. In the neighbourhood of Bangkok are iron-mines and forests of teak-wood. Among evidences of progress, specially rapid after 1895, may be mentioned the promotion of educational institutions, the erection of steam-mills, the introduction of gas and electricity, regular mails (since 1884), telegraph connection with Burma and Cambodia, railways to Korat and Paknam (1900). In 1893 French war-ships forced their way, in spite of an ineffective defence, to Bangkok, and secured here a treaty making important concessions to France. See SIAM.

Bangor, a city and seaport of Carnarvonshire, on the Menai Strait, 60 miles W. of Chester by the main railway route from London to Dublin (1850). Its chief trade is derived from the great Penrhyn slate-quarries, 5 miles distant, which employ 2000 men. Bangor unites with Carnarvon, &c. in sending one member. In 525 St Deiniol founded a college here; and in 550 he became the first bishop; his cathedral was thrice destroyed, in 1071, 1282, and 1402. The present cruciform edifice (1496–1532) was 'unequalled in meanness,' until in 1869–80 it was restored by Sir Gilbert Scott. In 1883 Bangor received a municipal charter, and the University College of North Wales was opened here in 1884. Pop. (1851) 6338; (1891) 9892; (1901) 11,269.

Bangor, a small seaport and watering-place in County Down, on the south side of the entrance to Belfast Lough, 12 miles ENE. of Belfast. Pop. 5903. St Cungall in 555 founded Bangor Abbey, which in the 9th century had 3000 inmates. See a monograph by the Rev. C. Scott (2d ed. Belfast, 1887).

Bangor, a city and port in the state of Maine, 246 miles NE. of Boston by rail, on the Penobscot, 60 miles from its mouth, and at its confluence with the Kenduskeag, which affords extensive water-power. At spring-tides, here rising 17 feet, the harbour is accessible for the largest vessels, and as the navigation cannot go higher, Bangor is one of the largest lumber depôts in the world. Under English rule the place was known as Kenduskeag; its present name was taken from the well-known psalm-tune, a favourite of one of its ministers, Seth Noble. It was incorporated as a city in 1834. Pop. (1870) 18,289; (1880) 16,856; (1890) 19,103; (1900) 21,850.

Bangor-isco'ed ('Bangor below the Wood'), a Welsh village on the Dee, in a detached portion of Flintshire, 5 miles SE. of Wrexham. It was once the seat of one of the largest monasteries in Britain, founded before 180 A.D., and containing 2400 monks in the time of St Augustine. Pop. 554.

Bangweo'lo, or BEMBA, a great Central African lake, discovered by Livingstone in 1868, which is 150 miles long by 75 in width, and 3700 feet above the sea. The Chambese, flowing into it, and the Luapula issuing from it, constitute the head-stream of the Congo. The shores are flat, and parts of the lake are mere marsh. On its south shore Livingstone died.

Banialu'ka, a fortified town of Bosnia, on the Verbas, 54 miles SE. of Novi by rail. Pop. 15,357.

Banjermassin', a former sultanate on the SE. of Borneo, with an area of 5928 sq. m., and a pop. of about 300,000, chiefly Mohammedans. Tributary to Holland since 1787, it was annexed in 1857.—BANJERMASSIN, the capital, is on the island of Tatas; pop. 30,000.

Bankipur, an Indian civil station close to Patna (q.v.), since 1905 sub-capital of Western Bengal.

Banks Land, an island in the west of Arctic America, discovered by Parry in 1819, and explored by Maclure in 1850. There is also a Banks Island off the coast of British Columbia.

Bank'ura, a town, capital of a district in Bengal, on the Dhalkisor River. Pop. 19,000.

Bann, two rivers in the north-east of Ireland—the Upper Bann, flowing into, and the Lower Bann, out of Lough Neagh. The Upper Bann, rising in the Mourne Mountains, runs 25 miles NNW. through Down and Armagh. The Lower Bann flows 40 miles NNW., through Lough Beg, dividing the counties of Antrim and Londonderry. It runs past Coleraine, into the Atlantic Ocean, 4 miles SW. of Portrush. It has important salmon and eel fisheries.

Bannatyne, a Forfarshire seat, 7½ miles NW. of Dundee.

Bannockburn, a Stirlingshire village of 2444 inhabitants, 3 miles SSE. of Stirling, on the

Bannock Burn, a little affluent of the Forth. It is a seat of the woollen manufactures, especially of carpets and tartans. Here, on 24th June 1314, Robert Bruce, with 30,000 Scotch, gained a signal victory over Edward II., with 100,000 English. Not far off was fought the battle of Sauchieburn (q.v.). See R. White's *Battle of Bannockburn* (1871).

Banswara, a hilly, well-wooded state in the south-west of Rajputana. It has an area of 1500 sq. m., and is peopled by wild and turbulent Bheels. In 1818 it passed voluntarily under British protection. Pop. 164,000.—The capital, Banswara, lies 8 miles W. of the Mahi River. Pop. 6000.

Bantam', a decayed seaport, 61 miles W. of Batavia, in a residency of the same name, which forms the west end of Java. It was the first Dutch establishment in Java (1595), and the seat of government of the residency, until transferred to the more salubrious Serang, 6 miles distant, in 1816.

Bantry, a seaport in the south-west of County Cork, at the head of Bantry Bay, and 44 miles WSW. of Cork. Pop. 3100.—Bantry Bay runs 25 miles ENE., with a breadth of 4 to 6 miles. It is one of the finest harbours in Europe. Here a French force attempted to land in 1796.

Banyuls-sur-Mer, a watering-place of France in the Pyrénées Orientales, 21 miles SE. of Perpignan by rail. Pop. 2342.

Banyu'mas (Dutch spelling, *Banjoemas*), a town of Java, on the Serajo, 22 miles from the south coast. Pop. 9000.

Banyuwangi, a seaport on the east coast of Java. Pop. 10,000.

Banz, a former great Benedictine monastery (1071–1803) in Bavaria, on the Maine, 3 miles below Lichtenfels.

Bapaume (*Ba-pome'*), a town in the French dep. of Pas-de-Calais, 12 miles S. of Arras, scene of a German victory on 2–3d January 1871. Pop. 3000.

Baraba', a steppe of Siberia, between Obi and Irtish.

Baracoa, a decayed seaport near the east end of Cuba. Pop. 4900.

Barataria, a bay of Louisiana, W. of the Mississippi delta, haunted in 1800–14 by a band of pirates.

Barbacena (*Bar-ba-say'na*), a town of Brazil, 125 miles NW. of Rio de Janeiro. It lies 3500 feet above the sea. Pop. 5000.

Barba'does, one of the Windward Islands, the most easterly of all the West Indies, lies 78 miles E. of St Vincent, in 13° 4′ N. lat., and 59° 37′ W. long. Its length is 21 miles; its greatest breadth, 14½ miles; and its area, 166 sq. m., almost all under cultivation. At Bridgetown, the capital, is the open roadstead of Carlisle Bay, the only harbour, the island being almost encircled by coral-reefs. The interior is generally hilly, Mount Hillaby, the loftiest summit, rising 1104 feet above sea-level. The climate is fairly healthy; the temperature equable; and the average rainfall 57 inches. Shocks of earthquake are sometimes felt, and thunderstorms are frequent and severe. But hurricanes are the grand scourge of Barbadoes, two in 1780 and 1831 having destroyed 4326 and 1591 persons, and property to the value of £1,320,564 and £1,602,800. *Barbados* is the official spelling. The area of the island is 166 square miles. In 1834 the population was 102,231; by 1901 it had increased to 195,588—nearly 1200 inhabitants to every square mile. About 20,000 are white, and the rest coloured. The trade and the revenue bear a similar testimony to the benefits of emancipation. Barbadoes was made the see of a bishop in 1824; and the bulk of the population belong to the Anglican communion. It was first colonised by the English in 1625, having previously been depopulated by the Spaniards. See Schomburgk's *History of Barbadoes* (1848).

Bar'bary, in Northern Africa, comprises the countries known in modern times as Barca, Tripoli Proper, Fezzan, Tunis, Algeria, and Morocco; and in ancient times as Mauritania, Numidia, Africa Propria, and Cyrenaica. It stretches from Egypt to the Atlantic Ocean, and from the Mediterranean to the Desert of Sahara, or between 10° W. and 25° E. long., and 25° to 37° N. lat. The north-west of this region is divided by the Atlas Mountains into two parts. The history of Barbary is a record of successive conquests by Romans, Vandals, Arabs, Turks, and the French (1830). To Europe it was chiefly known as the home of the dreaded Barbary corsairs. See the articles on the several countries of Barbary.

Barbastro, a cathedral city of Spain, on the Vero, 44 miles NW. of Lerida by rail. Pop. 7155.

Barberton, a gold-mining town of the Transvaal, 292 miles N. of Durban. Pop. 5000.

Barbizon (*Bar-bee-zon$^{g'}$*), a village close to the Forest of Fontainebleau. It is a great artists' resort, and was the home and death-place of Millet. Corot, Diaz, Daubigny, and Rousseau were other members of the 'Barbizon School' of painters.

Barbu'da, a fertile, densely wooded coral island, one of the Lesser Antilles, 30 miles N. of Antigua, of which it is a dependency. It is 10 miles long, 8 broad, and 75 sq. m. in area. Pop. 650.

Barby, a town of Prussian Saxony, on the Elbe, 15 miles SE. of Magdeburg. Pop. 5222.

Barca, a country extending along the northern coast of Africa, between the Great Syrtis (now Gulf of Sidra) and Egypt. The climate is healthy and agreeable in the more elevated parts, which reach a height of almost 2000 feet, and in those exposed to the sea-breeze. There are none but small streams, but the narrow terrace-like tracts of country are extremely fertile, realising all that is said of the ancient Cyrenaica. But the good soil extends over only about a fourth of Barca: the east exhibits only naked rocks and loose sand. Many ruins in the north-west attest its high state of cultivation in ancient times, when its five prosperous cities bore the title of the Libyan Pentapolis. Subject successively to Egypt, Rome, and the Byzantine empire, it was conquered by the Arabs in 641, and now forms a dep. of Tripoli. Area, 60,700 sq. m.; pop. 500,000. The capital is Benghazi (q.v.).

Barcellona and **Pozzo di Gotto**, two towns of Sicily, 22 miles WSW. of Messina, standing close together, so as really to form one town. Barcellona has sulphur-baths. Pop. 13,948.

Barcelona, the second largest and the most important manufacturing city in Spain, is beautifully situated on the Mediterranean between the mouths of the Llobregat and the Besos, 228 miles E. of Saragossa and 439 ENE. of Madrid. The castle of Montjuich commands the town from the south, and the arsenals near by comprise infantry and cavalry barracks for 7000 men. Barcelona is divided into two parts—the old town and the

new—by the *Rambla* (river-bed), which has been formed into a beautiful promenade. There is another fine promenade, the Muralla del Mar, or sea-wall. Barcelona has a cathedral (1298), a university (1430; rebuilt 1873) with 2500 students, a theatre (the scene in 1893 of an Anarchist bomb outrage), and manufactures of silk, woollens, cottons, lace, hats, firearms, hardware, &c. The imports are RAW cotton, coffee, sugar, wheat, spirits, timber, salt-fish, hides, wax, iron, and coal; the exports fruits, vegetables, wines, silk, oil, and salt. Next to Cadiz, it is the chief port in Spain; in population it is next to Madrid. Pop. (1878) 249,106; (1900, after annexation of suburbs) 533,000.

Barcelona, capital of the state of Bermudez, Venezuela, near the mouth of the Neveri, 160 miles E. of Caracas. Pop. 10,800.

Bard, a village in the Italian province of Turin, 23 miles SE. of Aosta. When the French crossed the St Bernard in 1800, Bard fortress, manned by 400 Austrians, maintained an eight days' resistance to their further advance. Pop. 450.

Bardsey, 9 miles NNE. of Leeds, was the birthplace of the dramatist Congreve.

Bardsey Isle, an island, 2 miles long, in Cardigan Bay, with a ruined monastery.

Bardwan', or BURDWAN (correctly *Vardhamána*), a city of Bengal, 67 miles NNW. of Calcutta by rail. In point of architecture, it is a miserable place—an aggregate, as it were, of 73 villages. It contains a palace of the Maharajahs, and a large collection of temples. Pop. 35,080.

Barèges (*Ba-rezh'*), a small watering-place, with mineral baths, in the French dep. of Hautes-Pyrénées, 4040 feet above sea-level, and 12 miles SE. of Pierrefitte railway station.

Bareilly, or BARELI, the chief city of a district in Rohilkhand, North-west Provinces of India, on the Ramganga, 152 miles E. of Delhi. Cotton, grain, and sugar are the staples of commerce; furniture and upholstery the manufactures. Bareilly is the seat of a college attended by over 300 students. Population, 132,000.—*Rai Bareilly* is a town in Oudh, near Lucknow.

Barfleur (*Bar-flör'*), a seaport in the French dep. of La Manche, 15 miles E. of Cherbourg. Hence, in 1066, William the Conqueror set out on his invasion of England. On the ill-famed *Pointe de Barfleur* stands the highest lighthouse in France, 271 feet above the sea. Pop. 1185.

Barfrush. See BALFRUSH.

Barga Pass, a Himalaya hill-pass (15,000 feet) in the north of Bashahr State, Punjab.

Bargè, a town of Piedmont, 30 miles SW. of Turin. Pop. 2074.

Barholm, a ruined tower (Scott's 'Ellangowan') on the coast of Kirkcudbrightshire, 5¾ miles SE. of Creetown.

Bari (*Bâk'ree*), capital of an Italian province, on a peninsula in the Adriatic, 277 miles SE. of Ancona, with a brisk export trade, an old Norman castle, the church of San Nicola (1087), and the older archiepiscopal cathedral. Pop. 60,000.

Baringo, an African lake lying NE. of the Victoria Nyanza, and ½ degree N. of the equator. It is 20 miles long, lies 3000 feet above the sea, and has no outlet, though its water is fresh.

Barisal, headquarters of Bakarganj (q.v.), in a region of the Brahmaputra delta, disturbed by mysterious noises of disputed origin known as 'Barisal guns.' Pop. 16,000.

Barking, a market-town of Essex, on the Roding, 7 miles NE. of London, with market-gardens and jute-factories. Its Benedictine abbey (founded 670), one of the richest convents in the kingdom, has left hardly a trace. Near Barking Creek is one of the great outfalls into the Thames of the (partially purified) London sewage. Pop. (1851) 5076; (1891) 14,301; (1901) 21,547.

Barkly, two towns in Cape Colony: *Barkly East*, in the NE., 35 miles E. of Aliwal North, pop. 2500; *Barkly West*, a diamond-digging centre in 1870–90, on the Vaal, 40 miles NE. of Kimberley, pop. 2000.

Bar-le-Duc, capital of the French dep. of Meuse, 158 miles E. of Paris. It manufactures cottons, and has the ruined castle of the Dukes of Bar. Pop. 15,634.

Barletta, a seaport of Italy, on the Adriatic, 34 miles NW. of Bari by rail. Pop. 41,994.

Barmen, a busy town in the district of Düsseldorf, Rhenish Prussia, extending in the beautiful valley of the Wupper for about 4 miles from close to Elberfeld almost to Langenfeld. It is the principal seat of the ribbon-manufacture on the Continent, and produces also cloth, stay-laces, thread, soap, candles, metal wares, buttons, machinery, and pianofortes. There are, besides, in the valley, numerous bleach-fields and Turkey-red dye-works. Barmen is a great missionary centre, and possesses the mission-house and seminary of foreign missions belonging to the Rhenish Missionary Society. Pop. (1871) 74,947; (1890) 116,144; (1900) 141,950.

Barmouth, a watering-place of Merionethshire, Wales, at the mouth of the Maw, 10 miles W. of Dolgelly. Opposite, across the river, is Cader Idris, 2914 feet high. Pop. 2219.

Barnard Castle, a market-town in the county of Durham, on the Tees, 15 miles W. of Darlington. On a rocky height are the ruins of a castle built in 1112–32 by Barnard Baliol. Near it is an art museum (1874). Pop. (1851) 4357; (1891) 4341; (1901) 4421.

Barnaul, a town of Western Siberia, on the Obi, 290 miles SSW. of Tomsk. It is a great mining and smelting centre. Pop. 33,529.

Barnes, a Surrey parish, on the Thames, 7 miles WSW. of Waterloo station. It has memories of Cowley, Fielding, Handel, Hoare, and the 'Kitcat Club.'

Barnet, a town of Hertfordshire, 11 miles NNW. of London. It has still large fairs. Here, on 14th April 1471, the Yorkists defeated the Lancastrians, killing their leader, Warwick, 'the king-maker.' An obelisk (1740) marks the spot. Pop. 7876.

Barnsley, a manufacturing town in the West Riding of Yorkshire, on the river Dearne, 10 miles S. of Wakefield, and 15 N. of Sheffield by rail. Standing high, in the midst of a rich mineral district, it has manufactures of linen, iron, steel, and glass, bleaching and dye works, &c. It was made a municipal borough in 1869. Pop. (1851) 13,437; (1891) 35,427; (1901) 41,083.

Barnstable, a port of entry, with coasting and fishing trade, in Massachusetts, U.S., situated on the south side of Barnstable Bay, 65 miles SE. of Boston. Pop. 4342.

Barn'staple, a town of Devonshire, on the right bank of the tidal Taw, 6 miles from its mouth, and 40 NW. of Exeter by rail. Owing to the silting up of the river, much of the trade of Barnstaple has been transferred to Bideford. It has manufactures of lace and pottery. Athel-

stan built a castle here; and there are a 14th-century parish church, a town-hall (1855), an Albert memorial tower (1863), &c. Till 1885 Barnstaple returned two members. Pop. (1861) 10,743; (1891) 13,058; (1901) 14,137.

Baro'da, the second city of Guzerat, and third in the Presidency of Bombay, capital of the territory of the Guicowar (Gáekwár) of Baroda, is 248 miles N. of Bombay by rail. It stands to the east of the Viswamitri, and has several palaces and a considerable trade, occupying an important position between the coast and the interior. Population, 105,000.—The Mahratta state of Baroda, the political control of which in 1875 was transferred from Bombay to the government of India, includes the territories of the Guicowar in various parts of the province of Guzerat. Area of these territories, 8570 sq. m. (larger than Wales). Pop. 2,185,005.

Barossa. See BARROSA.

Barquisimeto (*Bar-kee-see-may'to*), a town of Venezuela, on an affluent of the Tocuyo, in a fertile and healthy plain, 1700 feet above sea-level. Founded in 1522, it was destroyed in 1812 by a dreadful earthquake. Pop. 38,476.

Barra, an island of Inverness-shire, near the southern extremity of the outer Hebrides, 42 miles W. of Ardnamurchan Point. It is 8 miles long, 2 to 5 broad, and 25 sq. m. in area. A low sandy isthmus, over which the sea nearly breaks at high water, connects the two parts into which Barra is divided. The south or larger part rises to 2000 feet. Pop. (1841) 1977; (1891) 2131; (1901) 2362, Gaelic-speaking, and largely Catholic, and among the most industrious of Scottish fishermen. A lighthouse (1833) on Barra Head is 680 feet above the sea. Kismull Castle was the ancient seat of the M'Neills, who in 1840 sold the island to Colonel Gordon of Cluny.

Barra, a pleasant suburban town, 3 miles E. of Naples; pop. 8464.

Barra, a petty Mandingo kingdom of Western Africa, near the mouth of the Gambia, with an estimated pop. of 200,000. It borders on British Gambia (q.v.).

Barrackpur, a town of Bengal, on the E. bank of the Hooghly, 15 miles up the stream from Calcutta. It is a favourite retreat for Europeans from Calcutta; and to the south is the suburban residence of the Viceroy. Pop., with Nawabganj, about 20,000.

Barrafranca, a town of Sicily, near Caltanisetta; pop. 9052.

Barra Head. See BERNERA.

Barra Mansa, a town of Brazil, on the Parahiba, 70 miles NW. of Rio de Janeiro; pop. 5000.

Barranquilla (*Bar-ran-keel'ya*), the chief port of Colombia, in Bolivar state, near the Magdalena's left bank, 15 miles from the sea. Pop. 45,000.

Barren Island, a small active volcano in the Bay of Bengal, lying east of the Andamans, about 94° E. long.

Barrhead', a town of Renfrewshire, 8¾ miles SW. of Glasgow by rail. Founded about 1773, it has cotton-mills, and bleaching, dyeing, and print works. The poet John Davidson was born here. Pop. (1841) 3492; (1891) 8215; (1901) 9855.

Barrier Reef, an immense coral-reef extending along the NE. coast of Australia for over 1000 miles, at a distance from the shore of from 10 to upwards of 100 miles. In many places it rises out of great depths. There are several breaks or passages in it, only one, Raines Inlet, being safe for ships, with a lighthouse. See Saville-Kent, *The Great Barrier Reef* (1893).

Barro'sa, a Spanish village 16 miles SSE. of Cadiz. Here, on March 5, 1811, General Graham (Lord Lynedoch), with a handful of British, gained a glorious victory over the French.

Barrow, a term applied in honour of Sir John Barrow, to (1) *Point Barrow*, on the northern coast of Alaska, in 71° 23′ N. lat. and 156° 31′ W. long., long received as the most northerly spot on the American mainland (but see BELLOT STRAIT, BOOTHIA).—(2) *Cape Barrow*, on the northern coast of Canada, or Coronation Gulf, 68° N. lat., 111° W. long.—(3) *Barrow Strait*, the earliest of Parry's discoveries, leading to the west out of Lancaster Sound. Besides its main course to Melville Sound, Barrow Strait throws off Prince Regent's Inlet to the south, and Wellington Channel to the north. It averages 50 miles in breadth, extending pretty nearly along the parallel of 74° N., from 85° to 100° W.

Barrow, a river in the south-east of Ireland, rising in the north of Queen's County, on the north-east slope of the Slieve Bloom Mountains, and flowing 100 miles E. and S. past Portarlington, Athy, Carlow, and New Ross, until, having received the Nore and the Suir, it forms the large and secure estuary of Waterford harbour, 9 miles long. It is navigable for ships of 300 tons to New Ross, 25 miles up, and for barges to Athy, 65 miles up, whence the Grand Canal communicates with Dublin.

Barrow Falls, 2 miles S. of Keswick, a double cascade, 122 feet high.

Barrow-in-Furness, a seaport and manufacturing town of North Lancashire, situated on the south-western coast of the peninsula of Furness. By rail it is 36 miles WNW. of Lancaster, and 268 NNW. of London. In 1847 it was a fishing-village of 325 inhabitants; in 1864 the population had risen to 10,608, in 1871 to 18,245, in 1891 to 51,712, and in 1901 to 57,584. This rapid increase, matched in Great Britain by only Birkenhead and Middlesbrough, is owing to the discovery in 1840 of extensive deposits of rich hæmatite ore at Park, near Barrow; to the establishment both of mines and smelting-works; and to the opening of railway communication throughout the district. Smelting-works established in 1859 were in 1866 amalgamated with the Bessemer Steel Company, founded three years before. Copper also is obtained in considerable quantity in the neighbourhood; whilst some 20,000 tons of slate are annually quarried. The Dukes of Devonshire and Buccleuch are the principal landowners, and gave name to the first two docks, which, together covering 66 acres, were opened by Mr Gladstone in 1867. The Ramsden and the Cavendish Dock (1877) cover a respective area of 78 and 200 acres, and, like their predecessors, are 24 feet deep. Barrow Island has since 1871 become the seat of great iron shipbuilding yards; and huge flax and jute-works were erected in 1872 to provide employment for women and girls. There are besides engineering works, a great steam-mill, furnace-building works, and iron-founding, brewing, boiler-making, &c. There are statues of the first mayor, Sir James Ramsden (1872), and Lord Frederick Cavendish (1885); but the great ornament of the place is the town-hall, built in 1887 at a cost of £80,000. The interesting ruins of Furness Abbey lie within 2 miles of the town; while on Piel Island there are the ruins of a castle built by the Abbot of Furness. Made a

municipal borough in 1867, Barrow since 1885 has returned one member. See J. Richardson's *Furness Past and Present* (Barrow, 1880).

Barrow-on-Soar, a village of Leicestershire, 3 miles SE. of Loughborough.

Barry, a seaport, with docks and a tidal basin, in Glamorgan, 7 miles SW. of Cardiff; it exports coal, iron, and iron manufactures. Pop. 27,000.

Barry Links, in Forfarshire, 9 miles ENE. of Dundee, a government camp of instruction.

Bar-sur-Aube (*Bar-sür-Ob*), a town in the French dep. of Aube, 137 miles ESE. of Paris. Pop. 4306.

Bar-sur-Seine (*Bar-sür-Sayn*), a town in the French dep. Aube, 21 m. SE. of Troyes. Pop. 2773.

Bartfa, or Bartfeld, a town of Hungary, on the river Topla, near the borders of Galicia, with hot baths. Pop. 5884.

Barth (*Bart*), a seaport of Prussia, at the mouth of the Barth, 21 miles W. of Stralsund. Pop. 7714.

Barton-upon-Humber, an ancient town of Lincolnshire, 8 miles SW. of Hull. Pop. 5671.

Barton-upon-Irwell, a village and township of Lancashire, 5½ miles W. of Manchester. Here was built in 1770 Brindley's famous aqueduct, carrying the Bridgewater Canal across the Irwell, superseded in 1890–93 by a swing bridge of novel and ingenious construction, crossing the Manchester Ship Canal. Pop. of rural district (1901) 8065.

Bas. See Batz.

Basel (*Bâh'zel;* Fr. *Bâle;* old Fr. *Basle*), a Swiss city and canton. The canton was divided in 1833 into two independent half-cantons, called *Basel-town* and *Basel-country*. The urban half-canton consists only of the city, with its precincts, and three villages on the right bank of the Rhine; the remainder forms the half-canton of Basel-country, which borders on Alsace-Lorraine and Baden, and has an area of 178 sq. m.—but little larger than Rutlandshire. The Roman *Basilia*, after 1032 it formed part of the German empire, but joined the Swiss Confederacy in 1501, having in 1431–43 been the scene of a famous church council. The Rhine, here spanned by three bridges, 200 yards long, divides the city into two parts—Great Basel on the south side, and Little Basel on the north. The minster, a cathedral till 1528, was built between 1010 and 1500. It has two conspicuous towers, 218 feet high. Other buildings are the town-hall (1508); the university (1460); a museum, with thirty-two pictures by the younger Holbein, who lived thirteen years in Basel; and a public university library of 160,000 volumes and 4000 manuscripts. During the Reformation, the university was a central point of spiritual life, and it has numbered among its professors Erasmus and Œcolampadius, both of whom died here, and the mathematicians Euler and Bernouilli, who were natives. It has now some 70 professors and lecturers, and about 300 students. Pop., mainly Protestant and German-speaking, of Basel-country, 70,000; of Basel-town (1850) 29,555; (1900) 112,250.

Bashahr, one of the Punjab Hill-states, on the lower slopes of the Himalayas, traversed by the Sutlej. Area, 3320 sq. m.; pop. 74,345.

Bashan, a country of North-eastern Palestine, situated to the east of the Jordan. A volcanic plateau rising in the Jebel-ed-Druz to 6000 feet, it extends 60 miles north and south, and about 40 miles east and west. It is covered with the ruins of the so-called 'giant cities,' which, however, according to Major Conder, date only from the early Christian centuries; their roofs, doors, stairs, and windows are of stone, some of them as perfect as when first built. See Dr Porter's *Giant Cities of Bashan* (1865).

Bashi, or Batanes Islands, the most northerly small cluster of islets in the Philippine chain of islands, lying between Luzon and Formosa. They consist of three larger (Bayal, Batan, and Saptang) and many smaller islets. Area, 127 sq. m.; pop. 8250.

Basim, or Bassim, a town of India, in the province of Berar, 413 miles E. by N. of Bombay. Pop. 12,576.

Basingstoke, a town in the north of Hampshire, 48 miles WSW. of London. It is a busy road and railway centre, and has a trade in corn, malt, coal, and timber. Basing House (Marquis of Winchester), 1½ mile E., for two years withstood the Roundheads; but Cromwell at last took it by storm, and burned it to the ground, in 1645. Pop. (1871) 5574; (1901, mun. borough) 9793.

Basle. See Basel.

Basra (also *Bassora* or *Bussora*), a town of Asiatic Turkey, on the west bank of the Euphrates, 56 miles from its mouth in the Persian Gulf. The river, navigable up to Basra for ships of 500 tons, is there divided into a number of channels, and by evaporation and frequent overflowing makes the climate very unhealthy. The population, once 150,000, had sunk in 1854 to 5000, but the establishment of the English Tigris and Euphrates Steamship Company altogether changed the prospects of Basra, and now it probably contains at least 40,000 inhabitants. Basra was founded in 636 by the Calif Omar, and soon became one of the most famous cities of the East.

Bass. See Bass Rock.

Bassadore, the principal station for British ships in the Persian Gulf, situated at the west end of the island of Kishm.

Bassa'no, a cathedral city of Italy, on the Brenta, 30 miles N. by W. of Padua. Near it Napoleon defeated the Austrians in 1796. Pop. 8086.

Bassas, dangerous ledges of rocks to the SE. of Ceylon, in 6° 11′—6° 22′ N. lat., and in 81° 28′—81° 43′ E. long. On both are lighthouses.

Bassein', (1) a town in Burma, on the Bassein River, one of the mouths of the Irawadi, 75 miles from the sea, but accessible to the largest ships. It is an important centre of the rice trade. It was captured by the British in 1852. Pop. 30,147.—(2) A decayed town, 28 miles N. of Bombay. Ceded to the Portuguese in 1534, it was taken by the Mahrattas in 1765, and in 1780 surrendered to the British. Pop. (1720) 60,499; (1901) 11,000.

Bassenthwaite, a Cumberland lake, 3 miles NNW. of Keswick. It is 4 miles long, ¾ mile wide, 78 feet deep, and 226 feet above sea-level. Skiddaw towers above it.

Basse-terre (Fr., 'lowland'), three places in the West Indies.—(1) The capital of St Christopher's or St Kitt's, on the west coast; pop. 9000.—(2) Capital of the French island of Guadeloupe; pop. 9500.—(3) The chief town of Marie Galante, a dependency of Guadeloupe, which is about 12 miles to the NW.

Bassora. See Basra.

Bass Rock, an island-rock of Haddingtonshire, near the mouth of the Firth of Forth, 2 miles from Canty Bay, and 3¼ miles ENE. of North Berwick. Confronted by the ruins of Tantallon

Castle, and composed of volcanic greenstone and trap tuff, it is 1 mile in circumference, and 313 feet high, is inaccessible on all sides but the south, and is denizened by myriads of solan geese and other birds, which give it a snowy appearance in the distance. In 756 St Baldred died in a hermitage on the Bass Rock; in 1671 Charles II. purchased it for £4000, and within its dreary dungeons many Covenanters were confined. Four young Jacobite prisoners captured, and, with twelve more who joined them, held it for King James, from June 1691 till April 1694. In 1701 the fortifications were demolished, and five years afterwards the Bass passed into the possession of the Dalrymples. See an interesting volume by Hugh Miller and four others (1848).

Bass Strait, the isloted channel separating Tasmania from Australia. It runs 180 miles almost due east and west, and has an average breadth of 140 miles. It was named after George Bass, surgeon of H.M.S. *Reliance*, who in 1798 proved the existence of the channel.

Bastia (*Bastet'a*), a seaport of Corsica, 95 miles NNE. of Ajaccio by rail. It was founded in 1383 by the Genoese, and till 1811 was the capital of Corsica. Pop. 23,000.

Basutoland, a British possession in South Africa, lying between Cape Colony, Natal, and the Orange River Colony, with an area of 10,300 sq. m.—nearly as large as Belgium—with a population of 650 Europeans and 265,000 Basutos, a people either belonging to the Bechuana stock or closely allied thereto. The country is one continuous rugged plateau, has the best grain land in South Africa, and admirable pasture; the climate is perfect, and the scenery beautiful. Basutoland was annexed to the Cape Colony in 1868, but separated from it in 1884; it is governed by a resident commissioner under the High Commissioner for South Africa.

Batangas, a seaport of the Philippine island of Luzon, 50 miles S. of Manilla, on an extensive bay opening into the Strait of Mindoro. It was founded in 1581. Pop. of town and district, 40,000.

Bata'via, properly the name of the island occupied by the ancient Batavi, became at a later date the Latin name for Holland and the whole kingdom of the Netherlands. The name Batavian Republic was borne by the Netherlands from 1795 till 1806.

Batavia, the capital of the Dutch East Indian possessions, stands on the NW. coast of Java, near the mouth of the Tjiliwong. That small and shallow river is connected with a network of canals which intersect the town; and the influence of a vertical sun on the canals made Batavia proverbial as the grave of Europeans. The temperature, though not extreme, is oppressive from its uniformity, the mean of winter being 78·1° F., and that of summer only 78·6°. Latterly, the climate has been improved by draining, and most of the merchants live in the healthier suburbs, farther inland. The old town now contains mainly shops, stores, offices, and the houses of natives and Chinese. During the day, however, it is a busy place; and in it are still the town-house, the exchange, the great poorhouse, a hospital, &c. The bay is spacious, but very shallow towards the shore. Batavia is accessible only to boats; and since 1880 the government has constructed a great harbour some distance to the eastward at Tanjong Priong, connected with the capital by road, rail, and canal. To seaward the bay is protected by a range of islands and sandbanks. Its markets present at once all the productions of Asia and all the manufactures of Europe. The exports include coffee, rice, indigo, hides, arrack, sugar, tin, pepper, teak, tea, and tamarinds; the imports, cottons, woollens, silks, machinery, iron goods, and wine. In 1811, while Holland was under France, Batavia was taken by the English, but was restored to its former owners in 1816. The Dutch government has laid a telegraphic cable of 600 miles from Batavia to Singapore. Population, 120,000.

Batavia, a post-village of Western New York, on Tonawanda Creek, 36 miles NE. of Buffalo by rail. Pop. 10,000.

Batchian. See Moluccas.

Bath, the chief city of Somerset, is beautifully situated in the wooded valley of the sinuous Avon, 12 miles ESE. of Bristol, and 107 W. of London. Its houses are built wholly of white freestone—'Bath oolite,' worked in the neighbouring quarries. Set in a natural amphitheatre, with Lansdown Hill (813 feet) to the north, the city has a finer appearance than any other in England. The beauty and sheltered character of its situation, the mildness of its climate, and especially the curative efficacy of its hot chalybeate springs, have long rendered it a favourite fashionable resort. The springs were known to the Romans, who here in the 1st century A.D. built baths, of which extensive remains have been discovered. The temperature of the springs varies from 97° to 120° F. The water is most useful in bilious, nervous, and scrofulous complaints, palsy, rheumatism, gout, and cutaneous diseases. Besides a beautiful park (1830), Bath has the Assembly Rooms (1771), the Guild-hall (1766), the Pump-room (1797), the Mineral Water Hospital (1737–1861), and the new baths (1887). The Abbey Church (1499–1616) is a cruciform Late Perpendicular structure, with a fine fan-tracery ceiling in the style of Henry VII.'s chapel, and a central tower 162 feet high. On Lansdown Hill is Beckford's Tower, 130 feet high, built by the eccentric author of *Vathek*. South of the city is Prior Park, built in 1743 by Ralph Allen, Fielding's friend, and now a Catholic college. There are several other educational establishments. Bath returns two members to parliament, and conjointly with Wells is the seat of a diocese. It has no manufactures of importance; but it has given name to a kind of bun, to wheeled invalid chairs, and to 'bricks' (made of very fine sand from the Parrel River) used for cleaning metal. Coal is found in the neighbourhood. Pop. (1881) 51,814; (1901) 49,817. Traditionally founded by a British prince, Bladud (863 B.C.), Bath is really of great antiquity. It was a Roman station called *Aquæ Solis*, at the intersection of the great Roman ways from London to Wales, and from Lincoln to the south coast of England. Richard I. granted Bath its earliest extant charter. It figures frequently in literature, in the works of Smollett, Fielding, Anstey, Madame D'Arblay, Miss Austen, Dickens, &c. See works by Warner (1800), Scarth (1864), Sir G. Jackson (1873), Peach (1873–86), King and Watts (1885), Meehan (1897).

Bath, a city and port of entry, Maine, U.S., on the Kennebec River, 35 miles S. of Augusta. Shipbuilding is the chief industry. Bath was incorporated as a town in 1780, and as a city in 1850. Pop. 11,000.

Bathgate, a town of Linlithgowshire, 20 miles W. by S. of Edinburgh. Freestone, coal, carbon-

iferous limestone, and bituminous shale have been extensively wrought in the vicinity—the last since 1852. There are also large paraffin and paper works, a distillery, &c. In 1824 the town was constituted a free burgh of barony, in 1865 a police-burgh. Sir James Simpson was a native. Pop. 5331.

Bath'urst, a name applied to various localities in honour of Earl Bathurst, Colonial Secretary (1812–28).—(1) Bathurst in New South Wales, the first county settled beyond the Blue Mountains, is bounded NE. by the Macquarie, and SW. by the Lachlan. Besides its gold-fields (discovered in 1851), it has also slate-quarries, copper-mines, and silver-mines. The chief town, Bathurst, on the Macquarie River, 144 miles W. of Sydney by rail, is now the third in New South Wales. Erected into a municipality in 1862, it contains a government railway workshop, and has manufactures of soap, candles, glue, boots, leather, beer, &c. It is the seat of an Anglican and of a Roman Catholic bishop. Pop. 9870.—(2) Bathurst Island, off North Australia, close to the much larger Melville Island.—(3) Bathurst, the principal settlement of the British colony on the Gambia (q.v.). It is situated on St Mary's Isle, a sandbank at the mouth of the river. Pop. 8000.—(4) An island in the Arctic Ocean, intersected by the 100th meridian, and situated immediately beyond the 75th parallel.—(5) Bathurst Inlet, an arm of the Arctic Ocean, projecting due south for 75 miles into the North American continent, just touching the Arctic circle and 110° west longitude.—(6) A division in the east of Cape Colony.

Batignolles, a northern suburb of Paris.

Batjan. See Moluccas.

Batley, a manufacturing town in the West Riding of Yorkshire, 8 miles SW. of Leeds; since 1868 a municipal borough, associated for parliamentary purposes with Dewsbury, 1 mile distant. Batley is a chief seat of the shoddy and heavy woollen manufactures—army cloths, flushings, pilots, druggets, &c. It has a town-hall (1864–74), a free grammar-school (1612; reconstituted 1874), waterworks (1871–78), &c. Pop. (1851) 9308; (1871) 20,871; (1901, mun. borough) 30,321.

Batn-el-Hajar ('Womb of Rocks'), a stony district of Nubia, stretching along the Nile in the neighbourhood of the third cataract.

Baton Rouge, a city on the east bank of the Mississippi, 129 miles above New Orleans, from 1847 to 1862, and again since 1880, the capital of the state of Louisiana. It has a national arsenal and barracks, a military hospital, a deaf and dumb asylum, an elegant state-house, &c. Pop. 12,000.

Batoum', a town of Russian Transcaucasia, on the Black Sea, 201 miles W. of Tiflis, and 575 of Baku, by a railway (1883). The Berlin Congress of 1878, in sanctioning the cession of Batoum by Turkey to Russia, stipulated that it should not be made into a naval station; but the Russians have rendered it a second Sebastopol, and in 1886 withdrew its privileges as a free port. The harbour is one of the best on the east coast of the Black Sea. Pop. 30,000, mostly Russians. Batoum was founded as Petra by one of Justinian's generals early in the 6th century A.D., and figures as Vati in the middle ages.

Batshian. See Moluccas.

Battersea, a SW. suburb of London, on the Surrey side of the Thames, here crossed by the Chelsea, Albert, and Battersea bridges. In the parish church (1777) is a monument to Lord Bolingbroke, who was born and died in a house close by. Battersea Park, 185 acres in area, was laid out in 1852–58 at a cost of £318,000. It is now one of the London metropolitan boroughs. Pop. (1901) 168,896. The parliamentary division returns one member.

Battle, a town in Sussex, 6 miles NW. of Hastings. An uninhabited heathland then, Senlac by name, it received its present name from the battle of Hastings, fought here on 14th October 1066, when William the Conqueror overthrew King Harold. To commemorate his victory, he founded in 1067, on the spot where Harold fell, a splendid Benedictine abbey. The so-called Battle Abbey Roll, generally assumed to have been a list of William's followers, but probably of Edward I.'s time or later, is supposed to have perished in the burning of Cowdray House, near Midhurst, in 1793; and the ten copies of it extant have all been grossly tampered with. The abbey, two-thirds a ruin, was bought in 1857 by Lord Harry Vane, afterward Duke of Cleveland. Pop. 2996. See works by J. B. Burke (1848), Mackenzie Walcott (2d ed. 1867), and the Duchess of Cleveland (1889).

Battle Creek, a thriving town of Michigan, on the Kalamazoo River, 45 miles SW. of Lansing. It has flour-mills, iron-foundries, machine-shops, &c. Pop. (1880) 7063; (1900) 18,563.

Battlefield, 3 miles NE. of Shrewsbury, the scene of the battle of Shrewsbury (1403), in which Hotspur was defeated and slain.

Battleford, in Saskatchewan, Canada, at the junction of the Battle River with the Saskatchewan, 175 miles to the north of the Canadian Pacific Railway. It was capital of the North-west in 1876–83.

Batum. See Batoum.

Baturin', a town of South-west Russia, on the Seim, 50 miles SSW. of Novgorod. Pop. 6850.

Batz, or Bas, a small island in the English Channel, belonging to France, and situated off the north coast of the dep. of Finistère. Its length is about 2½ miles, and its breadth about 1¼ mile. It has three villages; a fine haven, that of Kernoc, and a lighthouse. Pop. 1184.

Bautzen (*Bowt'zen;* Wendish *Budissin*), a town in Saxony, on the Spree, 35 miles W. of Görlitz. The chief buildings are a former cathedral (1497), and the castle of Ortenburg, dating from 958, a frequent residence of the kings of Bohemia. The manufactures include woollens, fustian, linen, hosiery, leather, and gunpowder. Pop. (1871) 13,165; (1900) 26,025. Here Napoleon won a barren victory over the Russians and Prussians, May 20–21, 1813.

Bavaria (Ger. *Bayern*), the second state of the German empire. It is divided into two unequal parts, separated by Baden and Hesse-Darmstadt, of which the eastern comprises eleven-twelfths of the whole. Its frontiers touch also on Alsace-Lorraine, Prussia, Bohemia, Austria, and the Tyrol—the divisions are Bavaria upper and lower, the Palatinate upper and lower, the three divisions of Franconia, and Swabia. The area, 29,375 sq. m., is a little less than that of Scotland. In 1900 the pop. was 6,176,057; Munich, the capital, had all but 500,000 inhabitants, and Nuremberg over 261,000. There are close on 4,500,000 Catholics to 1,750,000 Protestants and 55,000 Jews. Bavaria is walled in on the SE., NE., and NW. by mountains ranging from 3000 feet to close on 10,000 feet in height—highest elevation the Zug-

spitz in the Noric Alps, 9665 feet high. The interior is intersected in several directions by various less elevated ranges, alternating with extensive plains and fertile valleys. The country is rich in wood, nearly one-third of its surface being covered with forests, mostly of pine and fir. The Rhine flows along the eastern boundary of the Palatinate; the Danube has a navigable course of 270 miles in Bavaria; the north part of the state is in the basin of the Main. The soil is very fertile, and the wealth of the country consists almost wholly of its agricultural produce, including wine and cattle. The chief minerals are salt—a government monopoly—coal, and iron, which is worked almost everywhere. Beer, coarse linens, and woollens are the most important manufactures. The growth of the population of Bavaria has been much checked by the law that no marriage can take place until the guardians of the poor are satisfied that the persons wishing to marry have adequate means to support a wife and family—a law which has tended to increase inordinately the number of illegitimate children. The three Bavarian universities are at Munich, Würzburg, and Erlangen, the last being Protestant. Bavaria is a constitutional monarchy, the throne hereditary in the male line. When Bavaria in 1870 became one of the states of the German empire, she still retained certain privileges, including the control of her home affairs, of her postal system, and of her army in time of peace. The army forms two corps of the imperial army, under the command of the king of Bavaria in time of peace, but controlled by the emperor of Germany in war. The legislature consists of a chamber of senators and one of deputies. The revenue of Bavaria is about £24,000,000, which is more than enough to cover the total expenditure. The public debt in 1892 was £87,000,000, about two-thirds of it having been contracted for railways.

Held successively by the Celtic Boii, the Ostrogoths, and the Franks, Bavaria was constituted first a margraviate, then a dukedom by Charlemagne and his successors; and in 1180 the crown was bestowed on a duke of the House of Wittelsbach, ancestor of the still reigning dynasty. The Rhenish Palatinate was added to the ducal dominions in 1216: in 1805 the duke was, for services rendered, made a king by Napoleon I. The Bavarians sided with Austria in 1866, and took an active share in the Franco-German war of 1870–71.

Bawtry, a village in the West Riding of Yorkshire, 8 miles SE. of Doncaster. Pop. of parish, 947.

Baya'mo, or San Salvador, a town in the east of Cuba, on the northern slope of the Sierra Maestra. It is connected by railway with Manzanilla. Pop. 7500.

Bayana, or Biana, a town of India, in the Rajput state of Bhurtpur, 50 miles SW. of Agra. Pop. 8758.

Bayazid', a town of Turkish Armenia, in the province of Erzerum, on a spur of Ala Dagh, 15 miles SW. of the foot of Mount Ararat. From 15,000 prior to 1829 its pop. has dwindled to 5000. In 1877 it was seized by the Russians, but was restored by the Berlin Congress of 1878.

Bay City, the fourth town of Michigan, U.S., on the Saginaw River, 4 miles from Saginaw Bay, and 108 miles NNW. of Detroit. It is an important railway centre, with a large trade in timber and salt, and some shipbuilding. Pop. (1860) 1583; (1890) 27,839; (1900) 27,628. On the opposite bank of the river are the consolidated villages of Salzburg, Wenona, and Banks, known as West Bay City, with a pop. of 12,981; and the village of Essex (2000) adjoins the north end of the city. An act of the state legislature of 1887 provided for the consolidation of these with Bay City in 1891.

Bayern. See Bavaria.

Bayeux (*Bah-yuh'*), a city of Normandy, in the French dep. Calvados, on the Aure, 15 miles NW. of Caen. In its public library is the famous 'Bayeux Tapestry;' and its cathedral was rebuilt after a fire by William the Conqueror in 1077, though the present edifice dates mainly from 1106 to the 13th century. Pop. 7583.

Bay Islands, a small group in the Bay of Honduras, 150 miles SE. of Balize. The cluster was proclaimed a British colony in 1852, but in 1859 was ceded to Honduras. The chief of the six islands is Roatan (30 by 9 miles; 900 feet high). Pop. 5000.

Bay of Islands, a safe and extensive harbour on the east coast of the northernmost portion of the North Island of New Zealand. It is 11 miles across, and nearly a hundred islands stud its surface. Russell, a considerable port, is on the south side of the bay.

Bayonne, a strongly fortified town in the French dep. of Basses-Pyrénées, at the confluence of the Adour and Nive, 4 miles from the Bay of Biscay, and 63 miles WNW. of Pau by rail. Population (declining), 23,000. Spanish in aspect, yet with a strong Basque admixture, it has a 13th-century cathedral, an inviolate citadel, one of Vauban's masterpieces; and manufactures of brandy, liquorice, chocolate, bottles, &c. Bayonne belonged to the duchy of Aquitaine, then to Gascony, and to the English from 1152 to 1451. In 1814 it was besieged in vain by the British and Spanish allies.

Bayonne, a city of New Jersey, U.S., 6 miles SW. of New York by rail, on the narrow peninsula to the south of Jersey City, between New York and Newark Bays. It has a large coal-dock, and chemical and other works. Pop. (1880) 9372; (1890) 19,033; (1900) 32,722.

Bayreuth. See Baireuth.

Bayswater, a NW. suburb of London.

Baza (Roman *Bastia*), a town of Spain, 50 miles ENE. of Granada. Pop. 11,828.

Bazardjik, a town of Bulgaria, 26 miles N. of Varna. Pop. 9545.—Tatar-Bazardjik, a town of Eastern Roumelia, on the Upper Maritza, 23 miles W. of Philippopolis by rail, with warm baths, and 15,659 inhabitants, having greatly increased since the Russo-Turkish war of 1877–78.

Bazeilles (*Ba-zel'ye*), a village in the French dep. of Ardennes, near the Meuse, 4 miles SSE. of Sedan. A pretty, well-to-do place, it was burnt to the ground by the Bavarians on the day of Sedan (1st Sept. 1870), but was rebuilt, in great measure with British contributions. Pop. 1391.

Beachy Head, the loftiest headland on the south coast of England, projecting into the English Channel, 3½ miles SSW. of Eastbourne, Sussex. It consists of perpendicular chalk-cliffs, 575 feet high, forming the east end of the South Downs. The Belle Toute Lighthouse (1831), 2½ miles to the west, is 285 feet above the sea, and is seen above 20 miles off. Off Beachy Head, a French fleet beat the combined English and Dutch fleets, 30th June 1690.

Beaconsfield, a quiet little market-town of Buckinghamshire, 10 miles N. of Windsor. It is noteworthy as the home and the burial-place of the poet Waller and of Edmund Burke, and as having given his earl's title to Benjamin Disraeli. Pop. 1750.

Beaminster, a Dorset market-town, on the Birt, 6 miles NNE. of Bridport. Pop. 2000.

Bearhaven. See CASTLETOWN BEARHAVEN.

Bear Island, County Cork, in Bantry Bay, measures 6½ by 1½ miles.

Bear Lake, GREAT, in the north-west of Canada, in 65°–67° N. lat., and 117°–123° W. long. Lying 246 feet above sea-level, Great Bear Lake is irregular in shape, with an area of 7012 sq. m., or not much smaller than Wales. It sends forth a river of its own name to the Mackenzie.

Bearn, one of the thirty-two old French provinces now forming the greatest portion of the dep. of Basses-Pyrénées. The inhabitants are chiefly Gascons with a strong Basque infusion, and they speak the purest Gascon dialect. Bearn virtually became a part of France on Henry IV.'s accession (1593), but was only formally incorporated with it in 1620.

Bear River, a stream of Utah, U.S., which rises in the Rocky Mountains, flows NW. into Idaho, then bends round and again returns into Utah, falling into Great Salt Lake.

Beás, one of the 'Five Rivers' of the Punjab, rises in the Snowy Mountains of Kúlu, at 13,320 feet above sea-level, and flows 290 miles SW. to the Sutlej, 30 miles above Ferozpur.

Beatrice, capital of Gage county, Nebraska, on the Big Blue River, 40 miles by rail S. of Lincoln, with limestone quarries, cement works, flour and lumber mills, &c. Pop. (1880) 2447; (1900) 7875.

Beattock, the junction for Moffat (q.v.).

Beaucaire (*Bo-kayr'*), a town in the French dep. of Gard, on the Rhone, opposite Tarascon, 14 m. SSW. of Avignon. Vessels enter its harbour by a canal from the Mediterranean. A July fair, once attended by 300,000 strangers, still does a brisk trade in silks, wines, oil, &c. Pop. 8906.

Beauce (*Boass*), a fertile district of France, partly in the deps. of Loir-et-Cher and Eure-et-Loire, of which the capital is Chartres.—Also a SE. county of Quebec province, Canada.

Beaufort (*Bo-forr'*), an Angevin town of 4317 inhabitants, in the French dep. of Maine-et-Loire, 19 miles E. of Angers. Its ancient castle came into the hands of the Lancaster family at the end of the 14th century, and gave name to the natural sons of John of Gaunt.

Beaufort (*Bo'fort*), a port, N. Carolina, U.S., at the mouth of Newport River. Pop. 2500.—Also a port and watering-place of S. Carolina, on Port Royal Island, and terminus of Port Royal Railroad, 14 miles from the ocean. Pop. 5000.

Beaufort, WEST, a town of Cape Colony, near the foot of the Nieuwveld Mountains, 338 miles NW. of Capetown by rail. Pop. 2600.

Beaugency (*Bo-zhon²-see'*), a town in the French dep. of Loiret, on the Loire, 16 miles SW. of Orleans by rail. Here the Germans defeated the French, December 7–10, 1870. Pop. 3775.

Beaujolais (*Bo-zho-lay'*), a subdivision of the old French province of Lyonnais, now forming the northern part of the dep. of Rhône, and a small part of Loire.

Beaulieu (*Bewley*), a village of Hampshire, at the head of a creek, on the verge of the New Forest, 6 miles NE. of Lymington. King John here founded a Cistercian abbey in 1204.

Beauly (pron. *Bewley*), a village, 10 miles W. of Inverness, with remains of a priory founded in 1232. Beauly Firth (7 by 2 miles) is the upper basin of the Moray Firth, and receives the river Beauly, winding 10 miles NE. Pop. 859.

Beaumaris, a seaport, watering-place, and chief town of Anglesey, North Wales, on the west side of the picturesque bay of Beaumaris, near the north entrance to the Menai Strait, 3 miles N. of Bangor, and 239 miles NW. of London. It has the ivy-covered remains of a castle erected by Edward I., and a free grammar-school. Till 1885 it united with Amlwch, Holyhead, and Llangefni in returning one member. Pop. (1871) 2291; (1901) 2310.

Beaune (*Boane*), a town in the French dep. Côte d'Or, 23 miles SSW. of Dijon by rail, with a fine 13th-century church, a splendid hospital, founded in 1443 by Nicholas Rollin; and a bronze statue (1849) of Monge the mathematician. It manufactures serges, woollen cloth, and cutlery, and gives name to one of the best Burgundy wines. Pop. 12,755.

Beauvais, the capital of the French dep. Oise, situated in the valley of the Thérain, 55 miles NNW. of Paris. Of its unfinished cathedral, begun in 1225, the choir, 153 feet high, is the loftiest as well as one of the finest specimens of Gothic in France. The industries include the weaving of Gobelins tapestries (since 1664), and the manufacture of cotton, woollen cloths, shawls, and carpets. Population, 17,500. Beauvais was known by the Romans as *Cæsaromagus*, afterwards as *Bellovacum*. In 1472 it was besieged by Charles the Bold of Burgundy, with 80,000 men, when the women of Beauvais, under Jeanne Hachette, displayed remarkable valour.

Beaver Dam, a city at the outlet of Beaver Lake, Wisconsin, U.S., 61 miles NW. of Milwaukee, on the Chicago, Milwaukee, and St Paul Railway. It is the centre of a fertile district, and has a university, various factories, and flour-mills. Pop. 5222.

Beaver Falls, a village of Pennsylvania, U.S., near the Beaver River's junction with the Ohio, 34 miles NW. of Pittsburgh. The 'Harmony' society of economy controls most of the factories here. Pop. 12,000.

Bebek, a lovely bay on the European side of the Bosphorus, with a palace (built 1725).

Beccles, a Suffolk market-town and municipal borough, on the Waveney, 8 miles W. of Lowestoft. It has a fine church with a detached belfry, a good grammar-school, and large printing-works. Pop. 7000.

Bechuanaland (*Betchooah'naland*), a tract of South Africa, inhabited by the Bechuanas, extending from the Zambesi to the Transvaal border. The Bechuanas, who speak a Bantu language, also occupy a considerable portion of the Transvaal. British protection extends over Bechuanaland as far north as 22° S. lat. since 1884. South of the river Molopo a territory was proclaimed a crown colony in 1885; its area is 51,000 sq. m., and its population is about 70,000, of whom some 10,000 only are whites. The protectorate of Bechuanaland outside the crown colony is in extent about 380,000 sq. m.—more than thrice as large as the Transvaal or the United Kingdom—with a population of some 130,000. (For Rhodesia and the British area farther north, see RHODESIA, ZAMBESIA, MATABELELAND, MASHONALAND.) Bechu-

analand is a portion of an elevated plateau 4000 to 5000 feet above sea-level, and though so near the tropics, is suitable for the British race. In winter there are sharp frosts, and snow falls in some years. The rains fall in summer, and then only the rivers are full. It is an excellent country for cattle; sheep thrive in some parts, and there are extensive tracts available for cornlands. There are extensive forests to the north-east, and to the west the Kalahari Desert, which only requires wells dug to make it habitable. The enormous quantities of buck which roam over the land attest the productiveness of the soil. Gold has been found near Sitlagoli, and diamonds were discovered at Vryburg in 1887. The province of Stellaland is principally inhabited by Boers, and the rest of the country by Bechuanas, speaking a Bantu language. Their ancestors are said to have come from the north. They have since 1832 been at enmity with the Matabele, and in later years the Transvaal Boers endeavoured to occupy their country. During the native risings in 1878, the Bechuanas invaded Griqualand West, and were in turn subdued by British volunteers as far as the Molopo. When the British government withdrew from Bechuanaland in 1880, the natives, being helpless, were left to the mercy of the Boers of the Transvaal, whose harsh treatment in 1882 and 1883 led to the Bechuanaland expedition in 1884. The administration of the protectorate was left to three chiefs (Khama, Sebele, Bathoen) under British protection, represented by a resident commissioner under the High Commissioner for South Africa. The colony of Bechuanaland was incorporated with Cape Colony in 1895.

Beckenham, a town of Kent, 7 miles S. by E. of London. Pop. 27,000.

Becse, Old, a Hungarian town, on the Theiss. Pop. 19,000.—New Becse, on the E. bank, 348 miles SSE. of Pesth, has a pop. of 7000.

Becskerek, a town of Hungary, on the Bega canal, 368 miles SSE. of Pesth by rail. Pop. 22,100.

Bédarieux (*Bay-dar-yuh'*), a town in the French dep. of Hérault, on the Orb, 27 miles NNW. of Béziers by rail. Pop. 6046.

Beddgelert, a Carnarvonshire village, a great tourist centre, near Aberglaslyn Pass, 12 miles SE. of Carnarvon. 'Gelert's Grave' is marked by a few stones.

Bedford, the county town of Bedfordshire, on the navigable Ouse, 49 miles NNW. of London by rail. The Ouse is spanned here by two bridges—a stone one of five arches, 306 feet long, built in 1811 at a cost of £15,000, and an iron one, built in 1888 at a cost of £6000. The charitable and educational institutions are mostly due to Sir W. Harper, Lord Mayor of London (c. 1496–1573). He in 1566 founded a free school, and endowed it with 13 acres of land in Holborn. The enormously increased value of the property (from £150 to £15,000 a year) enables the trustees to maintain grammar, modern, and preparatory schools for boys, the same class of schools for girls, and almshouses. The chief manufacture is that of agricultural implements. Lace-making is also carried on; straw-plaiting has declined. An embankment beside the Ouse forms a pretty promenade; and a people's park of 60 acres was opened in 1888. Bedford returns one member (till 1885 two) to parliament. Pop. (1851) 12,693; (1901) 35,144. Bedford (*Bedican-fortha*) was the scene of a battle between the Britons and Saxons in 571. The Danes burned it in 1010. Bunyan, who was born at Elstow, near Bedford, was for twelve years a prisoner in Bedford jail, and ministered to the Nonconformist congregation in Mill Lane from 1672 to his death in 1688. His chapel has been twice rebuilt, in 1707 and 1849; but his chair and other relics of him are preserved; whilst a colossal bronze statue of him by Boehm was erected at the cost of the Duke of Bedford in 1874.

Bedford Level, an extensive tract of flat land in the east of England, embracing nearly all the marshy district called the Fens. It extends inland around the Wash into the six counties of Northampton, Huntingdon, Cambridge, Lincoln, Norfolk, and Suffolk, and has an area of about 750,000 acres. Its inland boundary forms a horseshoe of high lands, and reaches the towns or villages of Brandon, Milton (near Cambridge), Earith, Peterborough, and Bolingbroke. Of the three divisions, the north level lies between the rivers Welland and Nene; the middle, between the Nene and the Old Bedford River; and the south extends to Stoke, Feltwell, and Mildenhall. Intersected by many artificial channels, as well as by the lower parts of the rivers Nene, Cam, Ouse (Great and Little), Welland, Glen, Lark, and Stoke, it receives the waters of the whole or parts of nine counties. A great forest at the coming of the Romans, and by them rendered a fertile inhabited region, this district, owing to incursions of the sea, became a morass in the 13th century, but has been drained since 1634, mainly by the enterprise of Francis, Earl of Bedford, the principal landholder—whence the name. See Heathcote's *Reminiscences of Fen and Mere* (1876).

Bedfordshire, a midland county, the 37th of the 40 English counties in size, and 36th in population. Extreme length, 31 miles; breadth, 25; area, 461 sq. m. The general surface is level, with gentle undulations. In the south, a range of chalk-hills, branching from the Chilterns, crosses Bedfordshire in a north-east direction from Dunstable, and another parallel range runs from Ampthill to near the junction of the Ivel with the Ouse. Between the latter ridge and the north-west part of the county, where the land is also somewhat hilly, lies the corn vale of Bedford. No hill much exceeds 500 feet in height. The chief rivers are the Ouse (running through the centre of the county, 17 miles in a direct line, but 45 by its windings), navigable to Bedford; and its tributary, the Ivel, navigable to Shefford. There are extensive market-gardens, especially on the rich deep loams. Bedfordshire is the most exclusively agricultural county in England, its cultivated area being 88·1 per cent., against 79·3 for the whole kingdom. Pop. (1801) 63,393; (1841) 107,936; (1901) 171,249. The principal proprietor is the Duke of Bedford; and his seat, Woburn Abbey, is the chief mansion. Lace-making and straw-plaiting are leading industries, carried on almost entirely by women. Bedfordshire is divided into nine hundreds and 122 parishes. Two members of parliament are returned for the county, one for the Biggleswade, and one for the Luton division. Many British and Roman antiquities exist, as well as the ruins of several monasteries. Three Roman roads crossed the county, and several earthwork camps remain.

Bedlington, a Northumberland township, 5 miles SE. of Morpeth. Here about 1800 Mr Aynsley bred the famous Bedlington terriers.

Bednor', Bednur, or Nagar, a decayed city, now a village, of Mysore, India, 150 miles NW. of Seringapatam. It was at one time the seat of government of a rajah, and its pop. exceeded 100,000. In 1763 it was taken by Hyder Ali, who pillaged it of property to the estimated value of £12,000,000.

Bedwellty, a mining urban district of Monmouthshire, with ironworks, 7 miles from Pontypool. Pop. 10,000.

Bedwin, a Wiltshire town, 5 miles SW. of Hungerford. Pop. of parish, 1627.

Bedworth, a market-town of Warwickshire, 3 miles S. of Nuneaton. Pop. of parish, 7485.

Beer, a Devon fishing-village, 1½ mile SW. of Axmouth.

Beeston, an urban district of Notts, 3 miles from Nottingham. Pop. 8960.

Beeston Rock, a steep eminence (366 feet) in Cheshire, 2 miles S. of Tarporley, with a ruined castle (1220).

Begharmi. See Bagirmi.

Bégles, a town of France, in the department Gironde, 2 miles S. from Bordeaux. Pop. (1901) 12,061.

Beg-Shéhr, or Kereli Göl, a mountain lake in Asia Minor, 44 miles SW. of Konia. Lying almost 3700 feet above the sea, it is over 30 miles long, from 5 to 10 miles broad, and contains several islands. On its east and north shores are the towns of Begshehr and Kereli.

Behar, or Bahar (also *Bihar*), once one of the three provinces under the Nawab of Bengal, now one of the four great provinces of Bengal, occupying part of the valley of the Ganges, comprising the two divisions of Patna and Bhagalpur, and subdivided into 12 administrative districts. Area, 44,200 sq. m.; pop. (1901) 24,241,395. The Ganges divides the province almost into two equal parts; it is watered besides by several of its important tributaries.—*Kooch Behar* is a native state near Bhotan, under the lieutenant-governor of Bengal; area, 1307 sq. m.; pop. 578,863. Its capital is also Kooch Behar, or Kuch Behar.

Behar, or Bahar, a town of Bengal, 54 miles SE. by S. of Patna. The original city is nearly deserted, and the present town consists of houses scattered about its remains, and interspersed with fields, gardens, and groves. Silk, cotton cloths, and muslin are manufactured here. Pop. 45,000.

Behistun, or Bisutun (anc. *Baghistan*), the site of an ancient Persian city, 22 miles E. of the city of Kirmanshahan. It is noted for its famous precipitous rock, which on one side rises perpendicularly to the height of 1700 feet, and which bears cuneiform inscriptions of Darius Hystaspes about 515 B.C.

Behring Strait separates Asia from America, and connects the Pacific with the Arctic Ocean. The proof that the two continents were not connected was given by a Cossack named Deschnev, who in 1648 sailed from a harbour in Siberia, in the Polar Ocean, into the Sea of Kamchatka. But his voyage was regarded by Europeans as a fable, until Behring's expedition in 1728. The strait was explored and accurately described by Cook in 1778. The narrowest part is near 66° lat., between East Cape in Asia, and Cape Prince of Wales in America, where the capes approach within 36 miles; about midway are three uninhabited islands. The greatest depth is some 30 fathoms.—Behring Sea, called also the Sea of Kamchatka, is that part of the North Pacific Ocean to the S. of Behring Strait. The right of sealing in Behring Sea, long a source of difficulty between Britain and the United States, was settled by arbitration in 1893.—Behring Island, the most westerly of the Aleutian Islands, has an area of 30 sq. m., and was the place where Vitus Behring, or Bering, the discoverer, was wrecked and died in 1741.

Beilan', a pass in the northern extremity of Syria, on the east shore of the Gulf of Scanderoon, runs across the mountain-range of Amanus. It is the common route from Cilicia into Syria. The town of Beilan (pop. 5000) is situated near the summit-level of the pass, 1584 feet above the Mediterranean.

Beira (*Bay'ee-ra*), a Portuguese province; area about 9222 sq. m., and a pop. of 1,517,432. The surface is mountainous; the rivers are the Douro and Tagus. It is divided into the districts of Aveiro, Castello Branco, Coimbra, Guarda, and Vizeu. The capital is Coimbra.

Beira, a small town (pop. 5000) in Portuguese East Africa, near the mouth of the Pungwe River, 12 miles from the point whence the railway towards Mashonaland starts.

Beiram. See Bairam.

Beit-el-Fakih, a town of Yemen, Arabia, near the Red Sea, 87 miles N. of Mocha. Hodeida, on the Red Sea, is the port. Pop. 8000.

Beith, a small town of North Ayrshire, on the borders of Renfrewshire, 18 miles SW. of Glasgow by rail. It has large cabinet-works and the Speir School (1887), resembling the old college at Glasgow. Pop. 4963.

Beja (*Bay'zha*; Roman *Pax Julia*), a town in the province of Alemtejo, Portugal, 101 miles SE. of Lisbon by rail. It has a castle and a cathedral. Pop. 8887.

Bejapur. See Bijapur.

Bejar, a town of Spain, 45 miles S. of Salamanca. Pop. 9500.

Bekaa. See Cœle-Syria.

Bekes, or Bekesvar, a town of Hungary, at the confluence of the Black and White Körös, 113 miles SE. of Pesth. Pop. 25,700.

Bekes Csaba, a town of Hungary, 7 miles S. of Bekes by rail. Pop. 37,243.

Belbeis (anc. *Bubastis Agria*), a town on the east arm of the Nile, Lower Egypt, 28 miles NNE. of Cairo. Pop. 11,500.

Belchi'té, a town of Spain, on the Aguas, 22 miles SSE. of Saragossa. Here, on June 18, 1809, the French completely routed the Spanish. Pop. 3279.

Belem'. See Lisbon.

Belem', or Para', capital of the Brazilian province of Para (q.v.).

Belfast', the largest and most prosperous city in Ireland, since 1898 a county apart from Antrim, is situated mainly on the left bank of the Lagan, at its entrance to Belfast Lough (12 × 3 miles). It is 12 miles from the Irish Sea, 101 N. of Dublin, 130 SW. of Glasgow, and 156 NW. of Liverpool. On the Antrim side the picturesque hills, rising almost to the dignity of mountains, have an impressive effect, and the general aspect of the town is bright and animated. Though the seat of the linen industry, with a number of mills and manufactures of several kinds, Belfast has a much more pleasant appearance than most

British manufacturing towns. On each side of the spacious lough, which resembles in some respects the Lake of Geneva, are a number of pleasant villas, whilst in the higher suburb of Malone, and along the Lisburn Road, handsome edifices of a similar character have sprung up. A fine large new street called Royal Avenue was in 1884 driven through the centre of the town from York Street to Donegal Place. It contains the new post-office, the Ulster Reform Club, the offices of the Water Commissioners, and the free library, which, with many fine shops, form a very imposing thoroughfare. The Queen's College, a handsome brick building, was opened in 1849. The Presbyterian College in 1881 had, in conjunction with the Magee College of Londonderry, the power conferred on it of granting theological degrees. The Catholics and Methodists have colleges of their own, while a Royal Academical Institution and the Belfast Academy, with other institutions of a similar character, supply great educational facilities. Simultaneously with drainage and other improvements in the town, the Harbour Commissioners have been engaged in greatly improving the quays and the harbour. With this object they had already expended £500,000 when, under an Act of 1883, they obtained power authorising an additional expenditure of about a million of money more. Recent improvements are a through channel and a deep-water quay, new parks, new hospitals, and a Protestant cathedral (1899–1904). The linen trade is by no means the sole staple, several industries having since 1855 greatly developed, notably shipbuilding; others are rope-making, the manufacture of aërated waters, and the whisky trade. At intervals there have been serious riots between the lowest classes of Protestants and Catholics. Belfast is a town of great energy, steadily growing, and handsome beyond most large commercial and manufacturing towns. Amongst famous natives are the physicists Thomas Andrews, Lord Kelvin, and his brother, Professor James Thomson; Sir J. Emerson Tennant; Sir Samuel Ferguson; and the painter Lavery. In 1888 it became a city, in 1892 its mayor became Lord Mayor, and in 1898, much extended in area, it was made 'the county of the city of Belfast.' Pop. (1821) 37,117; (1851) 102,103; (1881) 208,122; (1891) 255,950; (1901) 349,180. See George Benn's *History of Belfast* (1877).

Belfast, a port of entry in Maine, U.S., on the west side of Penobscot Bay. Pop. 4294.

Belford, a town of Northumberland, 15 miles SSE. of Berwick-on-Tweed. Pop. of parish, 854.

Belfort (*Bel-forr'*), capital of the French remnant of the dep. of Haut-Rhin, 117 m. ENE. of Dijon by rail. From 1870 this remnant (235 sq. m.), taking its name from the town, has been called the *Territoire de Belfort* (or, alternatively, *Haut-Rhin*), and consists of those portions of Haut-Rhin which, seized by the Germans during the Franco-German war, were restored to France in 1871. The strategical importance of Belfort was recognised by France on its cession by Austria in 1648, and it was fortified by Vauban. A fortress of the first rank, it maintained, from 3d December 1870 till 16th February 1871, a gallant defence against the Germans. It then capitulated, the defenders marching out with all the honours of war. The fortifications have been enormously strengthened since 1874. Pop. (1872) 8014; (1901) 32,570; of territory (1901) 92,304.

Belgard, a Prussian town of Pomerania, on the Persante, 16 miles SSW. of Köslin. Pop. 7617.

Belgaum', or BELGAM, the chief city of a district in the presidency of Bombay, situated to the E. of the dividing ridge of the West Ghats, at a height of 2500 feet above the sea, 55 miles NE. of Goa. Its fort in 1818 was taken from the Peishwa by the British. The chief articles of commerce are dry fish, salt, dates, cocoa-nuts, coir. Cotton cloth is manufactured here. Pop. 36,800.

Belgiojoso (*Bel-ji-o-yo'zo*), a town of Lombardy, North Italy, 9 miles E. of Pavia. Pop. 3168.

Belgium (Fr. *Belgique*), one of the smaller European states, consists of the southern portion of the former kingdom of the Netherlands (as created by the Congress of Vienna), lying between France and Holland, the North Sea and Rhenish Prussia. Its greatest length from north-west to south-east is 173 miles; and its greatest breadth from north to south, 105 miles. The area is 11,373 sq. m., not a third of that of Ireland. Pop. (1880) 5,520,009; (1901) 6,693,548. There are nine provinces—Antwerp, West Flanders, East Flanders, Hainault, Liége, Brabant, Limburg, Luxemburg, and Namur, of which Luxemburg is the largest and Limburg the smallest. Brussels, the capital, is, with its suburbs, the largest town (pop. 565,000); Antwerp is half its size; Liége and Ghent have more than 150,000 inhabitants; and there are twenty other towns with over 20,000. The population of Belgium is of partly Germanic, partly Celtic origin. The Flemings (of Teutonic stock) and Walloons (Celtic in origin) speak each their own dialects of Dutch and French; there are also numbers of Germans, Dutch, and French. East and West Flanders, Antwerp, and Limburg are almost wholly Flemish; and Brabant mainly so. The line between the Flemish and Walloon districts is sharply defined, the Flemish part being the richest and most cultivated. The French language has gained the ascendency in educated society and in the offices of government; but the Flemish dialect prevails numerically in the proportion of nine to eight. Belgium is next to England the most densely peopled country in Europe, the population being 589 to the sq. m., as compared with 558 in England, without Wales (150 in Scotland, 136 in Ireland). In Brabant the density is close on 1000 per sq. m.

Belgium is, on the whole, a level, and even low-lying country; diversified, however, by hilly districts. In the south-east, a western branch of the Ardennes highlands (2000 feet) separates the basin of the Maas from that of the Moselle. The unfertile Campine, composed of marshes and barren heaths, extends along the Dutch frontier. In Flanders dykes have been raised to check the encroachments of the sea. The abundant water-system of Belgium is chiefly supplied by the great navigable rivers Scheldt and Maas, both of which rise in France, and have their embouchures in Holland. These rivers have numerous and important tributaries, and there are some 40 canals (563 miles). Of the total area, almost two-thirds are in ordinary cultivation, more than one-eighth is meadow and pasture, one-sixth is under wood, and less than 600,000 acres are waste or water. Good pasturage is found on the slopes and in the valleys of the hilly districts, and in the rich meadows of the low provinces. Beet is largely grown; and the level provinces raise wheat, rye, oats, and barley, leguminous plants, hemp, flax, colza, tobacco, hops, dye-plants, chicory, and a little wine. It

has been said that the agriculture of Belgium is gardening on a large scale, so carefully and laboriously is every inch of soil cultivated by the farmers, the vast majority of whom are small holders owning less than one hectare (about 2½ acres) of land. The spade is still the principal implement used. Belgium is famous for its horses. In the Campine, honey, silk, and fine butter are produced. There are valuable fisheries on the coast. Belgium is rich in minerals, which yield great quantities of coal and iron, with lead, copper, zinc, calamine, manganese, alum, peat, marble, limestone, granite, and slate. The chief manufactures are linen, woollens (with carpets), cotton, silk, lace, leather, metals (especially iron and iron goods), paper, glass, porcelain, and beet-sugar. Among the principal articles of export are coal, flax, linen, woollen and cotton goods, glass, firearms, and nails. More than a third of the whole is consigned to France, and most of the remainder to Germany, England, and Holland. The chief imports are cereals and flour, raw textiles, vegetable substances, chemicals, minerals, timber, resin and bitumen, hides, tissues, coffee, animals, meat, yarns, wines. The sea-borne trade is almost entirely in British hands. In 1902 the imports were valued at over £94,227,000, and the exports at over £77,000,000. These sums exclude the value of 'goods in transit,' which may amount to some £70,000,000 more. The commercial intercourse of Belgium with Great Britain in 1902 amounted to £26,550,000 for exports from Belgium, and £12,620,000 for imports into it. In the middle of the 13th century, Flanders, with Bruges as its chief seat of manufactures, had surpassed all its neighbours in industry. After the discovery of America, Antwerp took the place of Bruges. The unhappy period of Spanish oppression and the war in the Netherlands deeply depressed Flemish commerce. But Belgium has long been again a busy and prosperous commercial country, the separation from Holland having been indirectly favourable to the development of Belgian resources. Belgium employs the French decimal system of weights, measures, and moneys.

The Roman Catholic is the dominant religion. Although full liberty of worship is guaranteed to all, and the ministers of each denomination are paid by the state, almost the entire population are Roman Catholics, the number of Protestants being set down at 10,000, of Jews at 4000. There are over 1200 conventual houses, inhabited by 4000 monks and 21,000 nuns. Diversity of dialects has retarded the formation of an independent national literature to act as the bond of national unity. The Flemish element—the most important—has done much of late to foster the Flemish tongue, and if possible secure its predominance. Painting and architecture formerly flourished in the wealthy old towns of Flanders; and in modern times a revival of art has taken place. There are universities at Ghent, Liége, Brussels, and Louvain, and an elaborate school system, partly secular, partly Catholic.

Military service is by conscription, all males above 19 being liable; but substitution is permitted. The army, on a peace footing, numbers 48,341 officers and men; in war time, 154,780, besides the garde civique, of 43,647 men. The importance of Belgium in a military point of view affords a reason for the maintenance of fortifications at Antwerp, Dendermonde, Namur, Diest, Liége, and other places. The chief arsenal is at Antwerp. In 1902 the revenue of Belgium was £20,031,000, leaving a margin over the expenditure, £19,901,000; while the national debt was under £112,000,000. The interest is more than covered by the revenue from the railways, for which the debt was almost entirely contracted.

The Gallia Belgica of the Romans passed under the sway of the Franks, and fell later to the Burgundian princes. On the death of Charles the Bold in 1477 it passed by marriage to the House of Hapsburg. The Spanish Netherlands remained (unlike the northern provinces which rebelled against Spain and became a Protestant republic) under the Spanish branch of the Hapsburgs, till in 1713 they were transferred to Austria. From 1794 Belgium was under French sway, but on the fall of Napoleon was united with the kingdom of the Netherlands. It rebelled in 1830, and since then has had a separate career as a limited constitutional monarchy. The legislative body consists of two chambers—the Senate, and the Chamber of Representatives, non-resident members of the latter body being paid a small salary during the session. Both are elective bodies.

See descriptive works on Belgium by Genonceaux (1879), Hymans (1880), Wauters (1882), and Sendamore (1901); and histories by Juste (1868), Moke (1881), Hymans (1884), and Boulger (1902).

Belgorod' (Russian *Bjelgorod*, 'white town'), a town in the Russian government of Kursk, on the Donetz, 412 miles S. of Moscow by rail. It is an archbishop's see, and has manufactures of leather, soap, and woollens, and three important fairs. Pop. 26,097.

Belgrade' (Serb. *Bielgorod*, 'white town'), the capital of Servia, lies opposite Semlin, at the confluence of the Save and Danube, 215 miles SSE. of Pesth, and 234 miles NNW. of Vranja, by rail. The walls have disappeared since 1862; the last and finest of the five gates was demolished in 1868; and the citadel is hardly up to the requirements of modern warfare. Year by year the town is losing its old Turkish aspect, becoming more modern, more European. The royal palace, the residence of the metropolitan, the national theatre (1871), and the public offices are the principal buildings. Opposite the theatre is a bronze monument (1832) to the murdered Prince Michael III. Belgrade has but trifling manufactures of arms, cutlery, saddlery, silk goods, carpets, &c. It is, however, the entrepôt of the trade between Turkey and Austria. Pop. (1872) 26,674; (1900) 69,100. Belgrade is the *Singidunum* of Ptolemy. Its position has made it the chief point of communication between Constantinople and Vienna, and the key to Hungary on the south-east. The Greeks held it until 1073, after which it passed through the hands of Hungarians, Greeks again, Bulgarians, Bosnians, and Servians, who sold it in 1426 to the Emperor Sigismund. In 1440 it was unsuccessfully besieged by the Turks; and when stormed (1456), was retaken from the Turks by the heroism of Hunyadi and Capistrano. Of seven more sieges between 1522 and 1789 the chief was in 1717, when the citadel surrendered to Prince Eugene, after he had defeated 200,000 Turks, with a loss to them of 20,000 men. In 1862, after a wanton bombardment from the citadel, it was made the capital of Servia, though the citadel remained with the Turks till 1867.

Belgravia, a district in the southern part of the West End of London.

Belize (*Be-leeze'*), or BRITISH HONDURAS, a

British colony washed on the E. by the Bay of Honduras, in the Caribbean Sea, and elsewhere surrounded by Guatemala and Mexico. It forms the south-east part of Yucatan, and measuring 180 by 60 miles, has an area of 7560 sq. m., or a little larger than Wales. In 1901 the population was 37,480, of whom less than 2000 were whites. The river Belize traverses the middle of the country, and the Rio Hondo and the Sarstoon form respectively its north-western and its southern boundary. The Cockscomb Mountains (4000 feet) are the highest eminences, the land all along the coast being low and swampy. The country has a general tropical fertility; its chief exports are mahogany and logwood, besides sugar, coffee, cotton, sarsaparilla, bananas, plantains, and india-rubber. The name Belize is probably a Spanish corruption of the name Wallis, one of the early British settlers; otherwise it is usually referred to the Fr. *balise*, 'a beacon.' Those early settlers, buccaneers at starting, then logwood-cutters, were frequently attacked by the Spaniards; but after 1798, when they repulsed a fleet and a land-force of 2000 men, their occupation was formally acquiesced in. Since 1862 Belize has ranked as a British colony, with a lieutenant-governor, whose rank was raised in 1884 to that of governor. Belize, the capital, is a depot for British goods for Central America, and has a pop. of about 6600. See A. R. Gibbs's *British Honduras* (1883).

Bella, a town of Italy, 17 miles S. of Melfi. Pop. 5830.

Bellaggio (*Bellad'jo*), an Italian village on the spit between the arms of Lake Como. Pop. 966.

Bellaire, a town of Ohio, U.S., on the Ohio River, 5 miles below Wheeling, with manufactures of glass, nails, pig-iron, &c. Pop. 9934.

Bella'ry, the chief town of a district, 305 miles NW. of Madras by rail. One of the principal military stations in the presidency of Madras, its fort crowns a high rock. Pop. 58,250.

Belleek, on the Erne in Fermanagh, from its own clay formerly manufactured fine porcelain (Belleek ware) and pottery.

Bellegarde (*Bel-gard'*), a second-class fortress of France, in the dep. of Pyrénées-Orientales, built by Louis XIV. in 1679. It is situated on the Spanish confines on the road leading over the Col de Pertuis from Perpignan to Figueras.

Belle Isle, a British island in the Atlantic, 21 miles in circumference, midway between Newfoundland and Labrador. It gives name to the strait on the south-west, 70 miles long, and 11 miles wide at the widest.—There is another small island of the same name in the Bay of Conception, Newfoundland.

Belleisle-en-Mer, an island of the French dep. of Morbihan, 8 miles S. of Quiberon Point. It is 11 miles by 7, and has an area of 330 sq. m. Pop. 10,117, chiefly engaged in fishing, and 2967 in the fortified seaport of Le Palais.

Belleville, an eastern suburb of Paris, now enclosed by the line of fortifications.

Belleville, a town in the province of Ontario, Canada, on the Bay of Quinte, Lake Ontario, 48 miles W. of Kingston by rail. Here is Albert University (1857). Pop. 9516.

Belleville, a city of Illinois, U.S., 16 miles SE. of St Louis. It has manufactures of iron goods, thrashing-machines, and flour. Pop. (1871) 8146; (1901) 17,484.

Belley, a town in the French dep. of Ain, 40 miles E. of Lyons. It has a cathedral dating from 889, and fine lithographic stones are procured in the neighbourhood. Pop. 6385.

Bellingham, a Northumberland village, on the North Tyne, 16 miles NNW. of Hexham. Pop. of parish, 1268.

Bellinzo'na, or Bellenz, the chief town of the Swiss canton of Ticino, on the river Ticino, 109 miles SSE. of Lucerne by rail. It still has its three old castles. Pop. 5436.

Bellot Strait, the passage on the north coast of North America, which separates North Somerset from Boothia Felix, and connects Prince Regent Inlet with Franklin Channel. Its east entrance was discovered in 1852 by Lieutenant Bellot. It is 20 miles long, and, at its narrowest part, about 1 mile wide, running pretty nearly on the parallel of 72°, between granite shores which rise here and there to 1500 feet. A point on the south shore, 71° 55′ N., 95° W., is the most northerly point of the North American continent.

Bell Rock, or Inchcape, a reef of old red sandstone rocks in the German Ocean, 12 miles SE. of Arbroath, and nearly opposite the mouth of the Tay. It is 2000 feet long; at high water of spring-tides it is covered to a depth of 16 feet, at low water is partly uncovered to a height of 4 feet; and for 100 yards around, the sea is only 3 fathoms deep. A lighthouse, 120 feet high, designed by Robert Stevenson and Rennie, was erected in 1807–10, at a cost of £61,331.

Bellshill, a Lanarkshire mining town, 9 miles ESE. of Glasgow. Pop. 8786.

Bellu'no, a cathedral city of Northern Italy, on the Piave, 42 miles N. of Treviso. Pop. 18,650.

Belmullet, a Mayo fishing-village, 49 miles NW. of Ballina. Pop. 652.

Beloit, a city of Wisconsin, U.S., on Rock River, 75 miles SW. of Milwaukee. It has a college (1847), foundries, &c. Pop. 10,500.

Belper, a market-town of Derbyshire, on the Derwent, 7½ miles N. of Derby. It owes its prosperity to the cotton-works of Messrs Strutt, one of whom was in 1856 created Lord Belper. The manufacture of silk and cotton hosiery is also largely carried on; but nail-making has declined. Pop. (1851) 10,082; (1901) 10,934.

Belt, the name given to two straits, the Great and the Little Belt, which, with the Sound, connect the Baltic with the Cattegat. The Great Belt, nearly 40 miles long, and 10 to nearly 20 miles broad, divides the Danish islands, Zealand and Laaland, from Fünen and Langeland. The Little Belt divides Fünen from Jutland. It is as long as the Great Belt, but narrows from 10 miles to less than a mile. Both the Belts are dangerous to navigation.

Belturbet, an Irish town, on the Erne, 9 miles NW. of Cavan. Pop. 1675.

Beluchistan, or Baluchistan (*Belootch'istan*), a country of Asia, bounded on the N. by Afghanistan, on the E. by Sind, on the S. by the Arabian Sea, and on the W. by the Persian province of Kerman. The frontier towards Afghanistan is seldom anywhere clearly defined. Beluchistan, which has a coast-line of over 500 miles, corresponds in general with the ancient Gedrosia. The area is about 133,000 sq. m., and the pop. is estimated at some 1,050,000. Until 1810 Beluchistan was almost entirely a *terra incognita* to Europeans. Most of the country indeed is still unknown, but it has been crossed by several travellers; the laying of the Indo-Afghan Railway

(by Quetta to Kandahar, 1885-94) through the desert in the north-east, and the surveys of the Indo-European Telegraph Company in the south, have established its general features. The surface is generally mountainous, more especially towards the north, where branches of the great Sulimán Range, running north and south, rise to a height of 12,000 feet. The ranges in the south generally run east and west, parallel with the coast, and the longitudinal valleys between form the principal thoroughfares, there being no regular routes in the country except those through the Bolan and Mula passes to Quetta and Kelát. Even the bottoms of some of the valleys have an elevation of 5700 feet; and the capital, Kelát, situated on the side of one of them, is 6783 feet above the level of the sea. Large deserts, rendered impassable in summer by sand-storms, and swept in winter by benumbing, piercing winds, occupy hundreds of square miles of the country; and the rivers—unless after heavy rains, when those in the north-east frequently inundate great tracts of country—are inconsiderable, few of the streams in the south appearing to be perennial at all. The west is largely a land of drought, with stretches of sand varied by bare hills and treeless valleys. The temperature is one of striking and sudden extremes, 125° F. in the shade having been registered on the coast even in March, although at Kelát, in February, water has been observed to freeze as it was poured on the ground. There are few cattle; sheep, mountain goats, and antelopes are numerous. The camel is the ordinary beast of burden; but in the north-west serviceable horses are bred. The wild animals include the tiger, leopard, wolf, hyena, ape, wild ass, &c., and fish in great quantities are caught off the coast. Wherever there is a sufficiency of water the soil is productive—the lowlands yielding rice, sugar, cotton, indigo, and tobacco; and the higher grounds, wheat, barley, madder, maize, and pulse. The minerals are gold, silver, copper, lead, antimony, iron, tin, sulphur, alum, and sal-ammoniac, and in 1887 valuable petroleum wells were discovered in the north. The only nameworthy towns are the capital, Kelát (q.v.), and Quetta. Gwadar, on the coast, is a fort and a telegraph station.

The inhabitants belong to the distinct races of Brahui and Beluchis. The former are the dominant as well as the aboriginal race, and are hospitable and generous; the latter, a hungry, needy, greedy people, are largely nomadic. The Brahui are usually referred, though doubtfully, to the Dravidian stock. In appearance they are short, sturdy, and strongly built, with round, flat faces, and brown hair. Their dress is a coarse calico tunic, with trousers fastened at the ankles, and a skull-cap with sash of the same colour. The Beluchis are of Iranian descent, with a mingling of Tartar blood, and their language closely resembles the modern Persian; they are both numerically smaller and a more recent element than the Brahui. They are tall, with longer and more prominent features, and are brave, but restless and prone to predatory warfare, in which they frequently show themselves senselessly cruel. Both races are Mohammedans of the Sunni sect. Besides these two races, there are colonies of Persian descent called Dehwars ('villagers'), and scattered families of Luri, a sort of Gypsies of possibly Indian origin. Beluchistan is, in a somewhat indefinite manner, under the authority of the khan of Kelát, who, with a revenue of about £30,000, maintains an army of 3000 men. For his hostility, his capital was held (1839-41) by a British force. In 1877 England obtained by treaty with the khan the right of permanently occupying Quetta (which was annexed, with his consent, in 1887), and of having a political agent at Kelát; and the khan practically became a feudatory of the Indian empire, and placed his territory at the disposal of the British government for all military and strategical purposes. With Kelát may be reckoned the Las Bela. The semi-independent Marri and Bugti tribes are administered from Sibi.—British Beluchistan is a chief-commissionership of British India, so constituted in 1887, out of the districts of Pishin, Thal Chotiali, and Sibi, in south-eastern Afghanistan; with Khetran, the Zhob Valley, and the Gumál Pass added later. British Beluchistan, some 46,000 square miles in area, has 310,000 inhabitants.

See Bellew's *From the Indus to the Tigris* (1874), works on Beluchistan by Hughes (1877), Macgregor (1882), Floyer (1882), and Oliver (1891), and Thornton's Life of Sir R. Sandeman (1895).

Belvoir Castle (pron. *Beever*), Leicestershire, 7 miles W. by S. of Grantham, the magnificent seat of the Duke of Rutland.

Bembato'ka, a bay on the NW. coast of Madagascar.

Bembridge, a village near the east corner of the Isle of Wight, 5 miles SE. of Ryde, giving name to a division of the Tertiary formation. Pop. 1100.

Bemersyde, Berwickshire, on the Tweed, 2½ miles NE. of St Boswells, the seat of the Haigs.

Bemerton, a Wiltshire parish, 1½ mile W. by N. of Salisbury, the scene of George Herbert's ministry.

Benares (*Be-nâh'res*), or Varanasi, the most sacred city of the Hindus, and one of the chief towns of North India, situated on the northern bank of the Ganges, 420 miles from Calcutta. In the United Provinces of Agra and Oudh, it is seventh in size of Indian cities. It skirts the crescent-like Ganges for 3 miles, and the high bank is lined continuously with broad flights of *ghâts* or stairs, leading to the innumerable temples and large substantial houses, which present towards the river an imposing array of towers and pinnacles and richly carved façades. Benares, however, is disappointing internally, the streets being mere narrow lanes between lines of tall, dismal houses. Among the chief buildings are the Nepalese Temple; Aurungzebe's mosque, with its two minarets 147 feet high; Raja Jai Singh's observatory; the Gopal Mandir, wealthiest of all the temples; the Bisheswar or Golden Temple of Siva, the holiest of all; and the famous Monkey Temple, in the suburbs. Other points of special interest are the well of Mani Karniki, formed of Vishnu's sweat; the Juana-vapi, or 'pool of knowledge;' and the Lat Bhairo, a portion, it is believed, of one of Asoka's pillars. At the Burning Ghat the bodies of Hindus are reduced to ashes. The city counts 1450 Hindu temples or shrines, most of them small, and 272 Mohammedan mosques. In the European quarter there is the Government College, a large freestone structure, with 700 students; the Prince of Wales's Hospital; and a town-hall. By far the most important European work is the Dufferin railway bridge over the Ganges, opened in 1887, and 3518 feet long. Benares draws immense revenues from the thousands of pilgrims who visit it from all parts of India. It has a considerable trade, not only in country produce, but in English goods, jewellery, and

precious stones. Its brass-ware, gold-cloth, and lacquered toys are famous. Pop. (1901) 209,350. A city of great antiquity, Benares (Sansk. *Várânasi*) was for 800 years the headquarters of Buddhism. In the 4th century B.C. it reverted to Brahminism, the ancient faith, of which it has ever since been the metropolis. It has been in the hands of many temporal rulers—the Rajput princes, the Mogul emperors, the Oudh nawabs—being ceded by the latter to the British in 1775.

Benaven'te, a town of Spain, on the Esla, 34 miles N. from Zamora. Here Moore's retreat commenced, 28th December 1808. Pop. 4518.

Benbec'ula, one of the Hebrides, between North and South Uist, 20 miles W. of Skye, belongs to Inverness-shire. Measuring 6 or 7 miles either way, it is nearly 36 sq. m. in area, low and flat, and consists chiefly of bog, sand, and lake, with a very broken coast-line. Nearly three-fourths of the area are under crofts and farms. Pop. 1434.

Bencoo'len, capital of a Dutch residency on the SW. coast of Sumatra. Owing to the surf and coral reefs, landing is difficult; the site is low and swampy, and the houses are mostly built on bamboo piles. Pepper and camphor are the chief exports, but trade has declined. Bencoolen was founded by the English (1686), but was ceded to the Dutch in 1825. Pop. 10,000.

Bender, a strongly fortified town, in the Russian province of Bessarabia, on the Dniester, 82 miles NW. of Odessa by rail. The principal industries are the manufacture of bricks, stoneware, paper, and leather, with agriculture, fishing, and mining. It was captured by the Russians from the Turks in 1770, 1789, 1806, and 1811, and ceded to Russia in 1812. Pop. 44,684.—Bender-Abbas is also another name for the town of Gombroon (q.v.).

Ben'digo (for some time renamed Sandhurst), a town of Victoria, on Bendigo Creek, 101 miles by rail NNW. of Melbourne, in the centre of a rich auriferous country. It owes its rise to the discovery of gold here in 1851. The mines employ 4500 miners, and yield about 150,000 oz. per annum. Bendigo was proclaimed a municipality in 1855, a borough in 1863, and a city in 1871. Pop. (1881) 28,662; (1891) 26,774; (1901) 41,900.

Beneven'to (anc. *Beneventum*), a city of Italy, on a hill near the confluence of the Calore and Sabato, 61 miles NE. of Naples by rail. It has a citadel, a fine old archiepiscopal cathedral, and a magnificent arch, erected in 114 A.D. to the honour of the Emperor Trajan. From 1053, when it was given to the pope by the Emperor Henry III., until 1860, when it was united with the kingdom of Italy, Benevento was governed through a resident cardinal with the title of Legate. Pop. 25,000.

Benfieldside, a Durham township, 13 miles SW. of Gateshead. Pop. 7259.

Bengal' (old *Bangálá*), a name given to part of British India, but variously signifying—(1) the old historical presidency which, in pre-mutiny times, comprised the greater portion of Northern India; (2) the modern military division, corresponding in extent to the old presidency; (3) the province as it was till 1905, also called Lower Bengal, comprising Bengal Proper (the division of Calcutta and four other districts), Behar, Orissa, and Chota Nagpore; (4) Bengal as divided in 1905 from Eastern Bengal and Assam, with 141,580 square miles and fifty-four millions of inhabitants; while Eastern Bengal (Chittagong, Dacca, and Rajshahi divisions) and Assam has 106,540 square miles and thirty-one millions. The undivided province before 1905 had an area of 151,000 square miles and seventy-five millions—with the native states, eighty millions, or more than the United States of America. Only some 11,000 were British-born. Bengal comprises the low-lying deltas of the Ganges and Brahmaputra, and the alluvial plains stretching along their lower courses; hemmed in on the N. by the Himalayan ramparts. The distinctive features of Bengal are its immense network of rivers, the magnificent range of the Himalayas, the luxuriant but fever-haunted Terai at the base of the great mountain-chain, and the trackless forests and jungles of the Sundarbans (Sunderbunds), on the sea-face of the delta—the almost undisputed home of the tiger and rhinoceros. As compared with Northern India, Bengal has few very large cities. Calcutta, the capital, is one of the largest cities in the world, having, with suburbs, a pop. of a million and a quarter; the next largest in the province being Patna, with 150,000.

The climate of the plains is similar to that of the Indian seaboard everywhere—hot and humid. But inland in Behar it is much drier, with hot winds in summer; while in ascending the hills, every variety of climate is met with, till the perpetual snow-line is reached. The ordinary range of temperature in the plains is from about 52° F. in the cold season, to 103° in the shade in summer. The people are mostly employed in agriculture, and among the chief products are indigo, jute, the opium poppy, oil-seeds, many varieties of rice, cinchona, tea, turmeric, pepper, the silk mulberry, cotton, sugar, and innumerable grains, spices, and drugs. Opium is a government monopoly; and cinchona is chiefly grown at the government plantation at Darjiling. Bengal has considerable mineral wealth; in Burdwan, coal, iron, and copper are worked. The jute and cotton mills round Calcutta employ over 40,000 hands. Standing far in advance of the rest of India in education, the enlightened classes in Bengal are largely employed in government service. The province has five colleges affiliated to the university of Calcutta, besides nearly 30 'institutions' catalogued as giving university education, besides higher and lower schools, engineering, normal, and industrial schools.

Within the province there is a great variety of race, language, religion, and degrees of civilisation. A large proportion of the people are descended from the Aryan stock; but no sharp line can be drawn between those called Hindus and those reckoned aborigines or non-Aryan, as many low-caste Hindus are wholly aboriginal in blood. Bengal in 1905 had 25½ million Moslem inhabitants (mostly in the upper classes), while about 3 millions are semi-savage tribesmen, and 280,000 are returned as Christian converts. Bengalis speaking Bengali number 40 millions; Hindustani speakers, 26 millions. As divided in 1905, Bengal contains 42 millions of Hindus and 9 of Mohammedans; while Eastern Bengal and Assam has 18 millions of Mohammedans and 12 of Hindus. In Bengal Proper the Santals are the most notable aboriginal stock; in the feudatory states are the Kolarian or Dravidian Gonds, Kols, and Bhuiyas, with Indo-Chinese tribes. The Mohammedan conquest dates from 1200. See India.

Bengal, Bay of, a triangular portion of the Indian Ocean, between India and the Indo-Chinese peninsula. The bay receives many large rivers—the Ganges, Brahmaputra, Irawadi, Mah-

anadi, Godavery, Krishna, and Cauvery. On the west coast there is hardly anything worthy of the name of harbour; on the east there are many good ports—Akyab, Gwa, Maulmain, Tavoy River. The numerous islands include the Andaman, Nicobar, and Mergui groups.

Benga'zi (anc. *Hesperis*), a North African seaport, capital of the Turkish vilayet of Barca, on the coast of the Gulf of Sidra. Pop. 7000.

Benguela (*Ben-gay'la*), a country of W. Africa, bordering on the Atlantic, between Angola on the N. and Mossamedes on the S., and lying roughly between 10° and 15° S. lat. and 12° and 17° E. long. Its surface is generally mountainous, rising from the coast-line inland in a series of terraces. Sulphur, copper, and petroleum are found in the mountains, and also gold and silver in small quantities.—São Felipe de Benguela, the Portuguese capital of the above region, on a level plain near the sea, in 12° 33′ S. lat., was once a great slave-station. Pop. 2000 natives and a garrison of 100 men. The harbour is good, though difficult of entrance. See *From Benguella to Yacca*, by Capello and Ivens (1883).

Benhar, East, a Linlithgowshire mining village, 1½ mile NNW. of Fauldhouse. Pop. 573.

Beni', an impetuous river of South America, in the state of Bolivia, rises in the La Paz Cordillera of the Andes, at a height of almost 12,000 feet, and joins the Mamore, after a course of over 1000 miles, to form the Madeira, one of the largest affluents of the Amazon.

Benicar'lo, a town of Spain, 84 miles SW. of Tarragona. Pop. 7913.

Benicia, capital of Solano county, California, and formerly capital of the state, on the Carquinez Strait, 30 miles NE. of San Francisco. It has a commodious harbour, and is the seat of the U.S. Pacific arsenal. Pop. 2794.

Beni-Hassan, a village of Upper Egypt, on the east bank of the Nile, remarkable for its catacombs.

Benin', a country of Western Africa, lying between the lower Niger and Dahomey. Once a powerful kingdom, it is now broken up into several small states, whilst all the coast-line is British, included either in Lagos, or in the Niger protectorate, which are separated by the Benin River. The pop. is dense. The capital, Benin, 73 miles inland from the mouth of the Benin River, has a pop. of above 15,000. Gato is a centre for the palm-oil trade. The river Benin is 2 miles wide at its mouth, but has a troublesome bar of mud. Benin was discovered by the Portuguese Alfonso de Aveiro (1486).

Benin, Bight of, that portion of the Gulf of Guinea (q.v.) extending from Cape Formosa to Cape St Paul, with a coast-line of 460 miles.

Beni-Souef', a town of Central Egypt, on the right bank of the Nile, 70 miles SSW. of Cairo. A branch line of railway has been constructed westward to Medinet el Fayum, and the town is the entrepôt of the fertile Fayum, and has cotton-mills and alabaster quarries. Pop. 11,085.

Ben Law'ers, a Perthshire mountain, flanking the NW. shore of Loch Tay, and attaining 3984 feet, or with the cairn at the top (rebuilt in 1878), 4004.

Ben Ledi (*Leddy*), a mountain (2875 feet) of Perthshire, 4½ miles W. by N. of Callander. A jubilee cairn was erected on it in 1887.

Ben Lomond, a Scottish mountain (3192 feet) in the NW. of Stirlingshire, on the east side of Loch Lomond, 13½ miles N. of Dumbarton.

Ben Macdhu'i, a mountain (4296 feet) of South-west Aberdeenshire, one of the Cairngorms, 18 miles WNW. of Castletown-of-Braemar.

Benmore, the name of several Scottish mountains.—(1) Perthshire, 10 miles SW. of Killin, 3843 feet; (2) in Assynt parish, Sutherland, 3234 feet; (3) in Mull island, 3185 feet, &c.

Ben Nevis, a mountain of Inverness-shire, 7 miles SE. of Fort William, by a carriage-road opened in 1880. The loftiest summit in Great Britain, it has a height of 4406 feet, with a tremendous precipice of 1500 feet on the north-east side. Till a road to the top was made in 1883, the ascent was difficult. A meteorological observatory was erected on the summit in 1883, and beside it is now a shelter for travellers.

Ben-Rhydding, a hydropathic establishment (1846), in the West Riding of Yorkshire, on the Wharfe, 12 miles NW. of Leeds. The name is a modern coinage.

Ben Rinnes, a Banffshire mountain (2755 feet).

Bentham, a town in the West Riding of Yorkshire, on the Wenning, 12 miles WNW. of Settle. Pop. of parish, 2273.

Bentley Priory, a seat in Harrow parish, 3 miles WNW. of Edgware. Queen Adelaide died here.

Be'nuë (spelt also *Binuë* and *Benuwé*), an important river of Central Africa, forming the great eastern affluent of the Niger, which it joins 230 miles above its mouth in the Gulf of Guinea. Flowing through wide tracts of fertile territory, and navigable for 700 miles, it is a highway into the heart of the Soudan. Dr Barth describes it as 800 yards wide, with a general depth in its channel of 11 feet, and 'a liability to rise under ordinary circumstances at least 30, or even at times 50, feet higher.' The Benuë was explored by Dr Baikie (1854 and 1862), and by Mr Flegel (1879–83), who reached its sources, in the Adamawa country, in 7° 30′ N. lat. and 13° E. long.

Ben Venue (*Venoo'*), a Perthshire mountain (2393 feet) flanking Loch Katrine.

Ben Wyvis (*Wee'vis* or *Wi'vis*), a lumpish mountain (3429 feet) of Ross-shire, 8 m. NW. of Dingwall.

Benzerta. See Bizerta.

Berar', a commissionership of India till 1902 under the resident of Hyderabad, and called 'Hyderabad Assigned Districts,' but now in the Central Provinces. It is bounded by Bombay and the Nizam's dominions. Its length from east to west is about 150 miles; area, 17,710 sq. m.; pop. 2,754,000. Berar consists of six districts, assigned to Britain under the treaties of 1853 and 1861 with the bankrupt Nizam of Hyderabad, but leased in perpetuity in 1902. Mainly a broad and fertile valley running east and west, between the Satpura and Ajanta ranges, it is traversed by the Purna, a tributary of the Tapti. Ellichpur was the capital of the old kingdom.

Berat', a town of Albania, Turkey, 30 miles NE. of the seaport of Avlona. Pop. 12,000.

Berber, a town on the right bank of the Nile, below the confluence of the Atbara. Pop. 8000.

Ber'berah, a seaport of British Somaliland, with a good harbour, on a bay of the Gulf of Aden. It was conquered by Egypt in 1875, but in July 1884 the British government took possession of it. A fair here brings over 30,000 people together.

Berbice (*Ber-beess'*), the E. division of British Guiana (q.v.), bounded on the E. by the Corentyn and Dutch Guiana. Area, 21,000 sq. m. The Berbice River is navigable for small vessels 175 miles from its mouth. An important affluent is the Canje. New Amsterdam, on the right bank of the Berbice River (pop. 9000), is the chief town and port.

Berchtesgaden (*Berhh-tez-gâh'den*), a village of Bavaria, on a mountain-slope, 15 miles S. of Salzburg. It has a royal castle (once an abbey) and huge government salt-mines. Pop. 1901.

Berck-sur-mer, a harbour and bathing resort in the French dep. of Pas-de-Calais, 22 miles S. of Boulogne. Pop. 5752.

Berdiansk', a seaport of southern Russia, in the government of Taurida, on the NW. coast of the Sea of Azov. Pop. 28,180.

Berditchef', a town of Russia, 108 miles WSW. of Kiev, with five annual fairs. Pop. 55,000.

Berehaven. See CASTLETON BEREHAVEN.

Bere Regis, a Dorset town, 8 miles SSW. of Blandford. Pop. of parish, 1144.

Beresina (*Ber-e-zee'na*), a river of Russia, rising in the N. of the Lithuanian government of Minsk, and flowing 350 miles S. (over 200 navigable) to the Dnieper. It is memorable on account of the disastrous passage of the French army, November 1812, during the retreat from Moscow.

Bereslav, a town in the Russian government of Kherson, on the Dnieper. Pop. 11,093.

Berezna, a town of Russia, in Tchernigov, on a tributary of the Desna. Pop. 10,827.

Berezov', a town of Siberia, in the government of Tobolsk, on a branch of the Obi. Pop. 2000.

Berezovsk, a village in the Russian province of Perm, near Ekaterinburg, gives name to a famous gold-field, wrought since 1744.

Berg, a former German duchy on the Rhine's right bank, now incorporated with the Prussian dominions, between Düsseldorf and Cologne.

Berga, a town of Catalonia, Spain, 52 miles NNW. of Barcelona. Pop. 4735.

Ber'gama (anc. *Pergămos*), a city of Asia Minor, 40 miles N. of Smyrna. Pop. 6000.

Ber'gamo (anc. *Bergomum*), a fortified town of Lombardy, 34 miles NE. of Milan by rail. It has a castle, a cathedral, and manufactures of silk, cotton, linen, woollens, and iron goods. Tiraboschi and Donizetti were natives. Pop. 43,819.

Bergedorf (*Ber'gay-dorf*), a town of Germany, 10 miles SE. of Hamburg. Pop. 9209.

Bergen (*Ber'gen*; *g* hard), a seaport in the west of Norway, and the second city of the kingdom, situated on a promontory at the head of a deep bay. The harbour is safe and commodious, and around it the town is built, presenting a picturesque appearance from the sea, with its cathedral and wooden houses of various colours. It has manufactures of gloves, tobacco, porcelain, leather, soap, and cordage, besides distilleries and shipbuilding yards. Its principal trade, however, is the export of stockfish, herrings, and fish-oil and roe. Since 1833 Bergen has been connected by railway with the north of the Hardangerfjord. The chief imports are brandy, wine, corn, cotton, woollens, hemp, sugar, tobacco, coffee, &c. Bergen, formerly called Björgvin ('the pasture betwixt the mountains'), was founded about 1070 by Olaf Kyrre. Often devastated by fire between 1189 and 1855, it was long the most important trading town of Norway, but has been recently surpassed by Christiania. The castle of Bergenhus was till 1397 the residence of the Norwegian kings. Bergen was the birthplace of Holberg, Dahl, Welhaven, and Ole Bull. Pop. (1872) 30,252; (1901) 72,251.

Bergen-op-Zoom (*Ber-gen-op-Zoam'*; *g* hard), a town of Holland, 21 miles N. by W. of Antwerp, stands on the little river Zoom, at its entrance into the east branch of the Scheldt. It has a harbour, manufactures of brick and earthenwares, and a large trade in anchovies. Strongly fortified until 1767, Bergen-op-Zoom was repeatedly besieged by the Spaniards, French, and English between 1581 and 1814. Pop. 14,419.

Bergerac (*Berzh'erak*), a town in the French dep. of Dordogne, on the Dordogne, 60 miles E. of Bordeaux by rail. Most of its inhabitants are employed in the surrounding ironworks and papermills. Its wines are esteemed. Pop. 15,485.

Bergholt, EAST, a Suffolk parish, Constable's birthplace, on the Stour, 9 miles SSW. of Ipswich.

Bergues (*Berg*), a town and fortress in the French dep. of Nord, on the Colme, 5 miles SSE. of Dunkirk. Pop. 5380.

Berhampur, two towns in British India.—(1) in Madras, a military station, 18 miles SW. of Ganjam, and but 9 from the coast. Pop. 25,653. —(2) in Bengal, on the Bhagirathi, 5 miles below Murshidabad. It was long one of the principal military stations in British India, and in 1857 was the scene of the first open act of mutiny. Pop. 24,515.

Beri, (1) a town of India, in the British district of Rohtak, Punjab, 36 miles W. by N. from Delhi. Pop. 9695.—(2) A state in Bundelkhand. Area, 30 sq. m.; pop. 4985.

Berja, a town of Spain, 22 miles W. of Almeria, with lead-mines. Pop. 13,493.

Berkeley, a town of Gloucestershire, on the Avon, 17½ miles SW. of Gloucester by rail. It lies in the Vale of Berkeley, which consists of rich meadow pasture-land, and is celebrated for its 'Double Gloucester' cheese. Berkeley Castle, on an eminence to the south-east, about 1162 was granted by Henry II. to Robert Fitzhardinge, with whose descendants it has since continued, they having held the title of Baron Berkeley from 1295, and of earl and viscount from 1679. Here Edward II. was murdered in 1327. Dr Jenner, the discoverer of vaccination, was a native, and is buried in the parish church. Pop. of parish, 890. See Smyth's *Lives of the Berkeleys* (1884).

Berkeley, a town of Almeda county, California, overlooking the Bay of San Francisco, is the seat of the state university. Pop. 13,500.

Berkeley Sound, an inlet of the East Falkland Island, near its north-eastern extremity.

Berkhamstead, a market-town of Hertfordshire, on the Bulburn, 28 miles NW. of London. Straw-plaiting is carried on, and manufactures of wooden articles and chemicals. Cowper was a native. Pop. of parish, 6034.

Berkovitza, a town of Bulgaria, 40 miles NNW. of Sofia, on a tributary of the Danube. Pop. 5445.

Berkshire (*Bark'shir*), a midland county, bounded by Gloucester, Oxford, Bucks, Surrey, Hampshire, and Wiltshire. Its greatest length is 53 miles; its greatest breadth, 30; and the area, 705 sq. m., or 451,210 acres, nearly one-half of which is under tillage, one-fourth in pas-

ture, and one-sixteenth in wood. Berkshire, which is one of the most beautiful of the English counties, lies in the valley of the Thames, and has an undulating surface, rising in some parts into hills, of which White Horse Hill attains 893 feet. The Thames winds 100 miles along the northern border of the county, whose other rivers are its tributaries—the Kennet, Loddon, and Ock. The Kennet is navigable for 30 miles. The country between the fertile vales of Kennet and the White Horse consists chiefly of sheep-walks; and along the Thames, and to the west of the Ridge Way, or Downs, it is principally dairy and pasture land. The chief crops are oats and wheat. 'Double Gloucester' and 'pine-apple' cheese are sent in large quantities to London. Swine are extensively reared. Berkshire is divided into 20 hundreds, 151 parishes, and 12 poor-law unions. It returns five members to parliament, one for each of the three divisions (Abingdon, Newbury, Wokingham), one for Reading (the county town), and one for Windsor. The county contains besides, the municipal boroughs of Newbury and Maidenhead, and the market-towns of Faringdon, Hungerford, Wantage, Wokingham, East Ilsley, and Lambourn. British and Roman remains are numerous; of the old castles, the principal is Windsor; of monastic establishments, the abbeys of Abingdon and Reading. There are many Norman churches, erected in the 12th and 13th centuries. In 1836 Berkshire was transferred from the diocese of Salisbury to that of Oxford. Pop. (1801) 110,480; (1841) 161,759; (1901) 256,509. See Lieut.-Col. Cooper-King's *History of Berkshire* (1887).

Berlad (*Bârladu*), a town of Lower Moldavia, 84 miles by rail NNW. of Galatz. Pop. 24,008.

Berlen'gas, a group of rocky islands in the Atlantic Ocean, off the west coast of the Portuguese province of Estremadura.

Berlin', the capital of Prussia, and since 1871, of the German empire, and the third largest city of Europe, is situated on a flat sandy plain, in 52° 30′ N. lat., 13° 24′ E. long., and is divided into two nearly equal parts by the sluggish Spree. The inconvenience of its low-lying situation in the midst of the sandy flats of Brandenburg is more than made up for by the great geographical advantages of its position in the heart of Northern Germany. By rail it is 177 miles SE. of Hamburg, 101 NNE. of Leipzig, and 362 ENE. of Cologne; whilst from London it can be reached in 25 hours, Paris in 23½, and Vienna in 15. The advance of the city has been extraordinary. In 1804 the pop. was 182,157; in 1871 it was 826,341; in 1880, 1,122,330; and in 1900, 1,888,848. It was not till the time of the 'Great Elector,' Frederick-William (1640-88), that the town became of consequence. In the 17th century it received many French and Bohemian religious refugees. Under Frederick the Great, it continued to prosper. Since the peace of 1815, Berlin has increased with extraordinary rapidity; by reason of the high rents, a tenth of the population are driven to take up their abode in cellars underground. At the centre of the city is the old royal palace, with nearly 700 apartments. Near this are the emperor's palace, the imperial residence; the royal library, which contains upwards of 1,300,000 volumes and 30,000 manuscripts; the old and new museums, the national gallery, the arsenal, the royal theatre, the opera-house, the guard-house, and the university. These are all situated between the Spree and the east end of the street 'Unter den Linden' (so called from its double avenue of limes). The city is adorned throughout with numerous statues of national heroes, the Great Elector, Frederick the Great, and many others. There are more than 20 theatres in Berlin. The university, established in 1809, has 400 professors and lecturers and 6000 students, with museums, institutes, and library. Famous professors have been Fichte, Hegel, Schelling, Schleiermacher, Eichhorn, De Wette, Neander, Wolff, Savigny, Niebuhr, the brothers Grimm, Ranke, Mommsen, Curtius, Lepsius, Dorner, Treitschke, Sybel, Dove, Gneist, Virchow, Helmholtz, Van t'Hoff, and Harnack. Other institutions are the Academy of Sciences; the Military Academy; the Academy of Architecture; the Academic High School (of art); the School of Mines; the School of Agriculture; the Artillery, Technical, and Engineering Colleges; the Industrial (1881), Ethnological (1886), and other museums; the Academy of Music; and the Observatory. About 88 per cent. of the pop. are Protestants, 7 per cent. Roman Catholics, and 5 per cent. Jews. Berlin has a cathedral, rebuilt in 1893-95, 100 Protestant and 15 Catholic churches. Of these, the Nicolaikirche (restored in 1880), Marienkirche (with a spire 295 feet high), and Klosterkirche, all of the 13th century, are the oldest; the Petrikirche (with a tower 315 feet high) is the loftiest; and the Michaelskirche (Catholic), Thomaskirche, Zionskirche, Dankeskirche (1884), and Heiligekreuzkirche (1887), are more recent. The New Synagogue (1866) has seats for 3000 persons.

The Old Museum contains antiquarian specimens, a collection of 90,000 coins, a gallery of ancient sculpture, and a picture-gallery with about 1300 paintings. The New Museum contains six magnificent mural paintings by Kaulbach in the grand staircase, a very valuable collection of casts, the Egyptian museum, and 500,000 engravings. The National Gallery includes about 700 works by modern artists. The celebrated Brandenburg Gate leads to the Thiergarten. To the south-west of this lies the Zoological Garden. The Botanical Garden (at Schöneberg) contains 25,000 species. Noteworthy also are the Rathhaus, the royal château of Monbijou, the Ruhmeshalle in the arsenal, the Gothic monument on the Kreuzberg, the Column of Peace in the Belle-Alliance-Platz, the Warriors' Monument, the Column of Victory, the War Office, the new building for the Reichstag, the Exchange, and the Reichsbank. Berlin now ranks among the most important mercantile places of continental Europe, and has large manufacturing industries.

See, besides the guidebooks, Vizetelly, *Berlin under the New Empire* (1879), and histories (in German) by Wilken (1826), Fidicin (1852), Schwebel (1882), &c.

Berlin, a town of Ontario, Canada, 62 miles SW. of Toronto by rail. Pop. 10,000.

Berlin, the name of forty different towns, villages, hamlets, and townships in the United States. The largest is a city of Coos county, New Hampshire, on the Androscoggin River, 15 miles from Mount Washington. Pop. 10,000.

Ber'mondsey, a south-east suburb of London, on the south bank of the Thames, and (since 1899) one of the metropolitan boroughs. Pop. 130,760.

Bermu'das, or **Somers' Islands**, British possessions in Mid-Atlantic, 2900 miles from Liverpool, and 677 from New York. They were so named from Bermudas, a Spaniard, who first sighted them in 1515, and from Sir George Somers,

an Englishman, whose shipwreck here in 1609 was the immediate occasion of their colonisation from Virginia in 1611. This low and lonely archipelago is a mere group of specks; for though it numbers perhaps 100 islets and more than twice that number of rocks, yet it measures only 19 sq. m. in all, the whole occupying a space of about 14 miles in length by little more than 5 in breadth. The islands are composed of blown coral sand, and are surrounded by a living, growing reef of coral—the most northerly of atolls. The great value of this natural fortress as a British naval station, defended by its extensive barrier of reefs and rocks, with only one or two intricate channels, arises from its situation. In 32° 15′ N. lat., and 64° 51′ W. long., the Bermudas occupy, commercially and politically, a singularly commanding position. In the principal or Main Island is the seat of government, Hamilton, on a deep inlet running 2 or 3 miles into the land. St George's contains the picturesque town of the same name, and a landlocked and fortified harbour. Ireland Island is occupied by a dockyard and other naval establishments; and Boaz and Watford Islands have the military depots and garrisons. At Ireland Island also is the celebrated Bermuda Floating Dock, towed out from England in 1869. The minor islands of St David, Cooper, Smith, Nonsuch, Godet, and others, form numerous picturesque and deep creeks and bays. The group forms an almost continuous chain, and with one break there is uninterrupted communication by roads, causeways, and bridges for 22 miles; but from the shape of most of the islands, and the number of lagoons, the communications are largely by water. The climate is tempered by an almost constant sea-breeze, and the air is moist at all seasons. The thermometer never falls below 40° F., and seldom rises above 85°. The islands are becoming a popular holiday and winter resort, especially for Americans. The soil is poor in quality, and not more than a fourth is cultivable at all; still the raising of early vegetables for New York is a great industry. Besides being useful as a naval station, Bermuda was formerly an important convict depot, but since 1862 it has ceased to be so. The colony has a very complete telegraph system. Pop. (1871) 12,121; (1901) 17,535, almost two-thirds of them coloured, and more than half are members of the Church of England. See works by Lefroy (1882), Ogilvy (1883), Dorr (New York, 1884), and Heilprin (Phil. 1890).

Bermudez, a state in the NE. of Venezuela, between the Orinoco and the Caribbean Sea.

Bern, or BERNE, a Swiss canton, bounded on the N. by France. It is the most populous, and next to the Grisons the largest canton of Switzerland; its area being 2650 sq. m., and its pop. (1900) 589,433—more than one-sixth of the total inhabitants of Switzerland. Most of these are Protestant and German-speaking.—BERN, the capital of the canton, and since 1849 of Switzerland, 68 miles by rail SSW. of Basel, is situated on a lofty sandstone promontory formed by the winding Aar, which surrounds it on three sides. It is one of the best and most regularly built towns in Europe, as it is the finest in Switzerland. The houses are massive structures of freestone, resting upon shop-lined arcades. Rills of water flow through the streets. The view of the Alpine peaks from the city is magnificent. The principal public buildings are a Gothic cathedral (1421–1573); the magnificent Federal Council Hall (1857), the mint, the hospital, and the university. Bern has an interesting museum, and a valuable public library of 50,000 volumes. Population, 65,000. Bern was founded in 1191, was made a free imperial city in 1218, under Frederick II.; and between 1288 and 1339 successfully resisted the attacks of Rudolf of Hapsburg, Albert his son, and Louis of Bavaria. The 'Disputation of Bern' between Catholics and Reformers in 1528 (January 6–27) prepared the way for the acceptance of the reformed doctrine. On account of the traditionary derivation of its name (Swabian *bern*, 'a bear'), bears are maintained in a public bear-pit.

Bernalda, a town in South Italy, in the province of Potenza. Pop. 6976.

Bernard, GREAT ST. See ST BERNARD.

Bernay, a French town in the dep. of Eure, 25 miles WNW. of Evreux. Pop. 6964.

Bernburg, a town in the German duchy of Anhalt, till 1863 capital of Anhalt-Bernburg, on the Saale, 23 miles S. of Magdeburg. It manufactures machinery, sugar, spirits, porcelain, &c. Pop. (1871) 15,709; (1900) 34,500.

Berne. See BERN.

Ber'nera, (1) a Ross-shire island, 23 miles W. of Stornoway, on the coast of Lewis. It measures $5\frac{3}{8}$ by $3\frac{1}{4}$ miles, and attains 223 feet. Pop. 585.—(2) An Inverness-shire island, 1 mile N. of North Uist, measuring $5\frac{1}{2}$ by 2 miles. Pop. 521.

Ber'neray, an Inverness-shire island, 14 miles SSW. of Barra. Pop. 17.

Berni'na, a mountain of the Rhætian Alps, 13,290 feet high, in the Swiss canton of Grisons. Its summit was first attained in 1850. The Bernina Pass (7642 feet), with a carriage-road (1864), leads from Pontresina to Poschiavo.

Berre, ÉTANG DE, a lagoon of France, dep. Bouches-du-Rhône, 45 miles in circumference, with salt-works and eel-fisheries.

Berri, or BERRY, a former province of Central France, now forming Indre and Cher deps.

Bervie, a seaport and one of the Montrose burghs in Kincardineshire, near the mouth of Bervie Water, 13 miles NE. of Montrose by rail. Pop. 1207.

Berwick, NORTH. See NORTH BERWICK.

Berwick-on-Tweed (*Ber'rick*), at the mouth of the Tweed, 58 miles ESE. of Edinburgh, and 67 N. by W. of Newcastle. The liberties of the borough, called 'Berwick Bounds,' have an area of 8 sq. m., and with Spittal and Tweedmouth, form the 'county of the borough of Berwick-on-Tweed.' Though long boasting to be neither in England nor Scotland, and still possessing separate quarter-sessions and commission of the peace, it is to all intents and purposes part of the county of Northumberland (the adjoining parts of which formed till 1844 a detached portion of Durham); especially since by the Redistribution Act of 1885 Berwick ceased to return two members, and was for election purposes merged in Northumberland. The town is engirt with ramparts of Elizabeth's time, and has large barracks (1719). Tweedmouth and Spittal (the latter a favourite watering-place), on the south side of the Tweed, have since 1835 both been included within the municipality. They are reached by a narrow stone bridge (1609–34) of fifteen arches; and the river is also spanned by Robert Stephenson's magnificent viaduct (1850) of 28 arches, 136 feet high and 2160 long. The public buildings include the town-hall (1760),

with a belfry 150 feet high, the corn exchange (1858), and several churches, Presbyterian outnumbering the Anglican. The harbour has been improved by the construction of a wet-dock (1873–76), at a cost of £40,000; there is a considerable coasting trade, but the salmon-fishing has fallen off. For the manufacture of agricultural implements Berwick stands high, and in Spittal there are several large artificial-manure works. Pop. (1841) 12,689; (1901) 13,437. Berwick, in the 12th century, was the chief seaport of Scotland; was captured by Edward I. in 1296, was annexed to England in 1333, after the battle of Halidon Hill, and was finally ceded by Scotland in 1482. See J. Scott's *History of Berwick* (1888).

Berwickshire (*Berrickshir*), a Border county of south-east Scotland, bounded by Haddingtonshire, the German Ocean, Berwick-on-Tweed, Northumberland, Roxburghshire, and Midlothian. It extends from east to west 29 miles, from north to south 21 miles, and has an area of 464 sq. m., or 297,161 acres. Berwickshire is divided into three districts—the fertile Merse, the Lammermoors, and Lauderdale. The coast, 19 miles in length, is rocky and bold, rising at St Abb's Head and other points to heights of from 177 to 528 feet above sea-level, and having only two bays, at Eyemouth and Coldingham. The Lammermoors, whose highest point in Berwickshire is Seenes Law (1683 feet), besides seventeen other summits exceeding 1240, consist of Silurian strata, stretching to St Abb's Head. The streams —Blackadder, Whitadder, and Leader Waters—are all tributaries of the Tweed, the Eye alone flowing direct to the sea. Pop. (1801) 30,206; (1841) 34,438; (1861) 36,613; (1901) 30,816. Berwickshire returns one member to parliament. Agriculturally, Berwickshire occupies a prominent position, 65·4 per cent. of the entire area being in cultivation, it has suffered proportionally from the recent agricultural depression. The Earlston ginghams excepted, there are no manufactures worth naming. The principal towns are Duns, Greenlaw, Lauder, Eyemouth, Coldstream, and Earlston. The county contains some very interesting examples, though on a comparatively small scale, of Norman or Pointed architecture, at Coldingham, Dryburgh, &c. There are also the remains or sites of Fast, Hume, and Cranshaws castles, and of British and Roman camps and barrows, besides remains of a curious broch-like structure at Edinshall, near Duns.

Berwyn Mountains, a range (2716 feet) on the border of Merioneth and Montgomery shires.

Besançon (*Be-zon^{g}son^{g}*), a fortified French city, the capital now of the dep. of Doubs, and formerly of Franche-Comté, on the river Doubs, 57 miles E. of Dijon. It was the ancient *Vesontio* or *Besontium;* in 58 B.C. Cæsar expelled the Sequani hence, and in the neighbourhood gained a victory over Ariovistus. It finally came into the possession of France in 1674. Several streets still bear old Roman names; and in the neighbourhood are ruins of a triumphal arch, an aqueduct, an amphitheatre, and a large theatre. Among later structures are the 12th-century cathedral, the Palais de Justice (1749), and the half-Gothic, half-Renaissance palace (1534) of Cardinal Granvella. Besançon makes a large percentage of the watches made in France, and 15,000 of its inhabitants are engaged in this industry, introduced from Switzerland about 1818. Other manufactures are porcelain, carpets, iron-wire, Seltzer-water, and beer. Abel Rémusat and Victor Hugo were natives. Pop. 51,000.

Besika Bay (*Be-zee'ka*), a bay on the north-west coast of Asia Minor, to the south of the entrance of the Dardanelles. The English fleet was stationed here during crises in the Eastern Question, in 1853-54 and 1877–78.

Bessarabia, a government in the south-west of Russia, on the Roumanian frontier. Area, 17,627 sq. m.; pop. 1,932,175. The Dniester flows along the whole of its northern and eastern boundaries; the Pruth separates it from Moldavia on the west; and it has the Danube on the south. In the north-west the country is traversed by well-wooded offshoots of the Carpathian Mountains; generally, however, Bessarabia is flat and fertile. Bessarabia, which fell under the power of the Turks in 1503, was ceded to Russia in 1812. By the Treaty of Paris the portions lying along the Pruth and Danube—3578 sq. m., with some 200,000 inhabitants—were assigned to Moldavia, but by the Berlin Congress of 1878 were again transferred to Russia.

Bessbrook, an Armagh market-town, 2 miles NW. of Newry. Pop. 2977.

Bessèges (*Bes-sezh'*), a town in the French dep. of Gard, 21 miles N. of Alais. Pop. 9068.

Betanzos (*Betan'thoas*), a Spanish town, 10 miles SE. of Corunna. Pop. 8101.

Beth'any ('house of dates'), by the natives of Palestine called 'El' Azariyeh' or 'Lazariyeh' ('town of Lazarus'), is situated on the southern slope of the Mount of Olives, 2208 feet above the sea, 2 miles ESE. of Jerusalem. It was the home of Lazarus and his sisters, often visited by the Saviour, and the scene of his ascension. It is now a poor place of some 200 inhabitants, with nothing remarkable except the reputed house of Martha and Mary, and the cave or grave of Lazarus shown by the monks.—Bethany is also the name of three German mission stations in South Africa; one in Great Namaqualand, one in the Orange Free State, and one in the Transvaal.

Bethel ('house of God'), now called Beitin, 11 miles N. of Jerusalem, mentioned in Scripture as the scene of Jacob's dream. The old name of the place was Luz. Here Abraham pitched his tent; at a later date it was a resting-place of the ark, a royal residence, and a seat of idolatrous worship. It is a heap of ruins.

Bethesda, a small town of Carnarvonshire (so named from its Nonconformist chapel), 4½ miles SE. of Bangor. Its inhabitants are mostly employed in the neighbouring Penrhyn slate-quarries. Pop. (1861) 7346; (1901) 5281.

Bethlehem ('house of bread'), the birthplace of Jesus Christ and of King David, and the Ephratah of the history of Jacob, is now a small unwalled village of white stone houses, 6 miles S. of Jerusalem. The population, about 3000 souls, is wholly Christian—Latin, Greek, and Armenian. The Convent of the Nativity, a large square building, resembling a fortress, was built by the Empress Helena, 327 A.D., but destroyed by the Moslems in 1236, and, it is supposed, restored by the Crusaders. Within it is the Church of the Nativity, with a crypt below, where the blessed Virgin is said to have been delivered.

Bethlehem, a post-borough of Northampton county, Pennsylvania, on the Lehigh River, 55 miles N. of Philadelphia by rail, is the principal settlement in America of the Moravians, by whom it was founded in 1741. It has silk, paint,

and flour mills, and is noted for its excellent schools. Two bridges connect it with South Bethlehem, the seat of Lehigh University (1866) and other Episcopal institutions, and possessing iron and steel works. Another borough, West Bethlehem, separated from Bethlehem by Monocacy Creek, contains silk and planing mills, machine-shops, and dye-works. Pop. 7762.

Bethnal Green, an eastern suburb of London, since 1885 a parliamentary borough with two divisions, and since 1899 one of the metropolitan boroughs. It is largely peopled by silk-weavers, an offshoot of the Huguenot settlement in Spitalfields. Its museum is a branch of the one at South Kensington. Pop. (1901) 129,680.

Bethsaida, a village on the western shore of the Lake of Galilee, the birthplace of Peter and Andrew and Philip. Its site has been identified with a heap of grass-grown ruins.—At the north-eastern extremity of the lake was another Bethsaida, a village, near which the five thousand were fed.

Bethune (*Bay-tün'*), a town in the dep. of Pas-de-Calais, on a rock overlooking the river Brette, 16 miles NNW. of Arras, with old fortifications by Vauban. It has bleaching-works and manufactures of soap. It belonged in the middle ages to Flanders, but was ceded to France by the Treaty of Utrecht in 1713. Pop. 11,398.

Bettia, a municipal town in the north-west corner of Behar, India, on the line of the Tirhut state railway. Pop. 22,780.

Bettws-y-Coed (*Bettus-ee-Kō'ed*), a tourist centre in Carnarvonshire, North Wales, at the Llugwy's influx to the Conway, 15 miles S. of Llandudno Junction by rail. Pop. of parish, 840.

Betwa, a river in Bundelkhand, North-west Provinces, India, which flows 360 miles north-east to the Jumna.

Beulah Spa, 1 mile S. of Upper Norwood, was much resorted to once, but is now built over.

Beuthen (*Boy'ten*), a town of Prussian Silesia, 121 miles SE. of Breslau. It lies in a mining district, and manufactures woollen cloths and earthenware. Pop. 52,500.

Bev'eland, North and South, two Dutch islands in the Scheldt's estuary. South Beveland is the largest and most fertile of the Zeeland islands, with a pop. of 23,000. North Beveland is low and marshy.

Beveren, a town of Belgium, 5½ miles W. by S. of Antwerp. Lace-making is the principal industry. Pop. 8023.

Beverley, the chief town of the East Riding of Yorkshire, 1 mile W. of the river Hull, with which it communicates by canal, and 8 miles NNW. of the city of Hull. Its trade consists in corn and coal; and tanning and the manufacture of agricultural implements are the staple industries. The superb Gothic minster is 334 feet long and 167 across the transept; the western towers are 200 feet high. The 14th-century North Bar is the sole survivor of four old gates. Beverley arose out of a priory founded by St John of Beverley (d. 721). The name is a corruption of *Beverlac*, 'lake of beavers.' Incorporated in 1573, Beverley till 1870 returned two members. Pop. (1851) 10,058; (1891) 12,539; (1901) 13,183.

Beverloo', a village of Belgium, 12 miles NW. of Hasselt. Pop. 1097.

Beverly, a town of Massachusetts, on an arm of the Atlantic, opposite Salem, and 18 miles NE. of Boston by rail. It has a good harbour. Pop. 13,821.

Bewcastle, a village of East Cumberland, 10 miles NE. of Brampton. A headless stone cross in the churchyard, 14½ feet high, bears an Anglo-Saxon runic inscription of the year 670. Pop. of parish, 800.

Bewdley (formerly *Beaulieu*, from its pleasant situation), a town of Worcestershire, on the Severn, 3 miles WSW. of Kidderminster. A municipal borough since 1472, it returned one member till 1885. Pop. 2866. See Burton's *History of Bewdley* (1883).

Bex, a village in the Swiss canton of Vaud, 26 miles SE. of Lausanne, with great salt-mines, salt-works, and sulphur-baths. Pop. 3958.

Bexar. See San Antonio.

Bexhill-on-Sea, a Sussex watering-place and municipal borough (1902), 5 miles WSW. of Hastings. Pop. 12,500.

Bexley, a town of Kent, on the Cray, 3 miles W. of Dartford. Pop. 13,000.

Beyerland, an island-district, 15 miles long, of South Holland, between the Maas and the Hollandsche Diep.

Beypur', a seaport of Western India, in Malabar district, Madras, near the mouth of the Beypur River, 6 miles S. of Calicut. Since 1858 it is the terminus of a railway across India from Madras *viâ* Coimbatore. Pop. 6739.

Beyrout, or Beirût (*Bay-root'*; Old Test. *Berothai* or *Berothah*; anc. *Berytus*), a flourishing town, on the coast of Syria, and at the foot of Lebanon, 55 miles from Damascus, and 147 from Jerusalem. It is a great seaport and emporium of most of the trade with the shores of Syria, Palestine, and Cilicia, with a regular service of Egyptian, French, British, and other steamers. The roadstead is full of sand-banks, and large ships cannot approach within half a mile of the shore, but shelter is found during stormy weather in the Beyrout River, about 3 miles from the town. Commerce has trebled within the last fifty years. About half the total imports are from Great Britain. In 1859 a line of omnibuses was established here, and a French company completed in 1863 a good road to Damascus, and in 1895 a railway (across Lebanon) to Damascus was completed; in 1886 gas was introduced. Beyrout is an episcopal see of Greeks and Maronites, and has Catholic and Protestant missions, with an American college. Of 120,000 inhabitants only 30 per cent. are Mohammedans, and some 5000 are Europeans.

Bezdan, a market-town of Hungary, on the canal joining Theiss and Danube. Pop. 10,000.

Béziers (*Bayz-yay'*), a town in the French dep. of Hérault, 49 miles SW. of Montpellier, with pre-Roman remains, a noble Gothic cathedral, a bishop's palace, and manufactures of silks and woollens. Pop. 50,000.

Bezwada, a town in Madras, on the left bank of the Kistna, of growing importance. Pop. 25,000.

Bhagalpur', or Boglipoor, a town of Bengal, on the right bank of the Ganges (7 miles wide), 265 miles NW. of Calcutta. Pop. 76,000.

Bhagirathi (*Bageerut'tee*), a branching arm of the lower Ganges, divides the Murshidabad district into two portions, forms the boundary line between Nadiya and Bardwan districts, and joins the Jalangi at Nadiya town to form the Hooghly (q.v.).—Also a head-stream of the Ganges, rising

in Gangotri Peak, Garhwal, North-west Provinces, which joins the Alaknanda at Deoprayag.

Bhamo', a town of Burma, at the head of the navigation of the Upper Irawadi, 40 miles W. of the Chinese frontier, and 300 NNE. of Mandalay. Pop. 7500.

Bhandara, a town of India, in the Central Provinces, 40 miles E. of Nagpur. Pop. 13,150.

Bhanpura, or BHAMPURA, a walled town of Central India, in Indore state, on the Rewa, 60 miles S. of Kotah. Pop. 13,400.

Bhartpur', or BHURTPORE', the capital of a protected state in India, 35 miles W. of Agra by rail. Lord Combermere captured it in 1827. Pop. about 50,000. Area of state, 1974 sq. m.; pop. 645,540, mostly Játs.

Bhatgaon, a town of Nepaul, 8 miles SE. of Khatmandu. Pop. 30,000.

Bhaunagar, the capital of a Bombay native state, on the Gulf of Cambay, 60 miles NW. of Surat. Pop. 57,653. Area of state, 2860 sq. m.; pop. 400,323.

Bhilsa, a town of India, in Gwalior state, on the Betwa, 26 miles NE. of Bhopal. Pop. 7070.

Bhiwani (*Bee-wah'nee*), a town of the Punjab, 37 miles SE. of Hissar by rail. Pop. 35,487.

Bhopal, the capital of a native state in Central India, 325 miles SW. of Allahabad. Population, 77,000.—The *state* was founded in 1723 by Dost Mohammed Khan, and a treaty of dependence was concluded with Britain in 1818. Area, 13,000 sq. m.; pop. 1,500,000.

Bhuj (*Boodj*), the capital of Cutch (q.v.), 180 miles SE. of Hyderabad. Pop. 26,421.

Bhutan (*Boo-tan'*), a native state in the eastern Himalayas, bounded by Tibet, Assam, and Sikkim. It is divided into East and West Bhutan; and before the British annexation in 1841 and 1865 of the eighteen *Dwars* or passes which lead from the plains to the lofty terraces of Bhutan, the area was estimated at 20,000 sq. m.; since, it has been estimated at 17,000 sq. m. The whole surface is mountainous, with summits exceeding 24,000 feet. The central regions, at an elevation of 8000 or 10,000 feet above the sea, are covered with the finest forests of oak and pine, with beech, ash, birch, and maple. The Manás, a tributary of the Brahmaputra, is the chief river. The nominal religion is Buddhism. The government, almost purely ecclesiastical, is in the hands of a rapacious oligarchy. The Dharm Rajah, the nominal head, is treated rather as a god than as a sovereign; while the Deb Rajah, the actual head, is elected every three years by the chiefs from amongst themselves. Polygamy and polyandry are common. The Bhutias are neat joiners, and their houses have the appearance of Swiss chalets. The winter capital is Punakha, on the Bugui River, 96 miles NE. of Darjeeling. The summer capital is Tasichozong (Tassisudon), on the Gudada River, a centre of Lamaism. The original inhabitants, believed to be from Kuch Behar, were called Tephu; they were subdued by a band of Tibetan soldiers 200 years ago, who settled in Bhutan. The Bhutias speak a dialect of Tibetan. In 1772 the rajah of Kuch Behar received assistance from the British government against their invasions. Later raids led to the treaty of 1865, when the eighteen Dwars or passes of Bengal and Assam were ceded to the British government in return for a yearly subvention. Pop. variously estimated at from 20,000 to 200,000.

Bia'fra, BIGHT OF, a large bay on the west coast of Africa, at the head of the Gulf of Guinea, between Capes Formosa and Lopez. The principal rivers flowing into it are the Niger (q.v.), the New and Old Calabar rivers, the Rio del Rey, the Cameroon, and the Gaboon; its islands are Fernando Po (Spanish), and St Thomas' and Prince's Islands (Portuguese). Opposite Fernando Po are the Cameroons (q.v.).

Bial'ystok, a town of Russia, on the Biala, 55 miles W. by S. of Moscow by rail. Over thirty factories produce woollen stuffs. Pop. 59,926.

Biana. See BAYANA.

Biancavilla, a town of Sicily, on the south-west declivity of Mount Etna, 24 miles NW. of Catania. Pop. 13,021.

Biarritz (*Bee'ar-reets*), a watering-place in the French dep. of Basses-Pyrénées, on the Bay of Biscay, 6 miles SW. of Bayonne. Here, in 1855, Louis Napoleon built the Villa Eugénie for the empress, who already, as Countess de Téba, had been a frequent visitor. During the season (July–September) the place is often visited by 6000 guests. There is a good golf course. Pop. 13,000.

Biberach (*Bee'ber-ahh*), a town of Würtemberg, on the Reiss, 23 miles SSW. of Ulm. There are manufactures of machinery, artificial flowers, &c. Here the Austrians were defeated by Moreau in 1796, and in 1800 by Saint Cyr. Pop. 8938.

Biberich. See BIEBRICH.

Bicester (*Bis'ter*), a market-town of Oxfordshire, 12 miles NNE. of Oxford. There are manufactures of rope, clothing, sacking, and pale ale. The ruins of *Alia Castra*, or Alcester, lie 1½ mile to the south-west, on the ancient Roman Akeman Street. Pop. 3043.

Bicton Park, a Devonshire seat, 4 miles WSW. of Sidmouth, with splendid grounds.

Bidar (*Bee'dar*), a town in the Nizam's Dominions, near the right bank of the Manjera, a tributary of the Godavery, 75 miles NW. of Hyderabad. Pop. 13,000.

Bidasso'a, a river which, rising in Spain, bounds that country and France, and, after a course of 33 miles, falls into the Bay of Biscay at Fuenterabia.

Biddeford, a town of Maine, U.S., on the right bank of the Saco River, 6 miles from its mouth in the Atlantic Ocean, and 93 miles NNE. of Boston by rail. It has manufactures of cotton and woollen goods and machinery, and there is a large trade in timber. Pop. 16,500.

Bid'eford, a 'little white seaport town' and municipal borough of North Devon, on the Torridge, 3½ miles above its confluence with the Taw's estuary, and 9 miles SW. of Barnstaple. The name signifies 'by-the-ford,' and is pronounced *Bid-de-ford*, like that of its American daughter. The old bridge of 24 arches and 226 yards long, which unites the two divisions of Bideford, was widened in 1864. There are manufactures of ropes, sails, earthenware, and leather. Vessels of 500 tons can get up to the quay. Sir Richard Grenville was a native. Population, 8750.

Biebrich (*Bee'brihh*), a town on the right bank of the Rhine, 2½ miles S. of Wiesbaden. It has the castle of the dukes of Nassau. Pop. 12,500.

Biel (*Beal*), a beautiful Haddingtonshire seat, 4 miles SW. of Dunbar.

Biel. See BIENNE.

Bielefeld (*Bee'leh-felt*), a town in the Prussian province of Westphalia, picturesquely situated on

the little Lutter, at the foot of the Teutoburger-Wald, 28 miles SW. of Minden. It is the centre of the Westphalian linen-trade, and has extensive bleaching-grounds, manufactures of woollen thread, soap, leather, and its meerschaum pipes are celebrated. Pop. 65,000.

Bieleff', an ancient town of Russia, on the Oka, 160 miles SSW. of Moscow. Pop. 9171.

Bielitz, a town of Austrian Silesia, on the Biala, 60 miles SW. of Cracow. Pop. 17,060.

Biella, a town of North Italy, 56 miles NE. of Turin by rail. Pop. 15,662.

Biëlo-oz'ero ('White Lake'), a lake in the government of Novgorod, Russia, 25 miles long, 20 broad, and 432 sq. m. in area. It discharges into the Volga.—BIELOZERSK is an old wooden town on the south shore. Pop. 4286.

Bielo'pol, a town of Russia, 106 miles NW. of Kharkov, with brandy distilleries. Pop. 15,178.

Bielshöhle, a stalactite cavern, 230 yards long, in the Harz Mountains, was discovered in 1672.

Bielsk', a town of Russia, 112 miles NE. of Warsaw. Pop. 9763.

Bienne (*Bee-enn'*; Ger. *Biel*), a town in the canton of Bern, 56 miles SW. of Basel by rail, beautifully situated at the base of the vine-clad Jura, and at the foot of the Lake of Bienne. Population, 22,500, engaged in the manufacture of watches, leather, cotton, &c.—The LAKE OF BIENNE, lying 1424 feet above sea-level, and 252 feet deep, is 9 miles long by 3 broad. It receives the surplus waters of Lake Neuchâtel by the Thiel, by which river it again discharges its own. Towards its head is the Île St Pierre, to which Rousseau retired for two months in 1765.

Bies-Bosch (*Bees'-bosk'*), a marshy sheet of water of the Netherlands, 77 sq. m. in area, between the provinces of N. Brabant and S. Holland.

Biggar, a town of Lanarkshire, 28 miles SW. of Edinburgh. The collegiate church was founded in 1545; of Boghall Castle, the seat of the Flemings, hardly a vestige remains. Dr John Brown, author of *Rab and his Friends*, was born here; and John Gladstones (1693–1756), great-grandsire of W. E. Gladstone, is buried in the churchyard. Pop. 1366. See Hunter's *Biggar and the House of Fleming* (2d ed. 1867).

Biggleswade, a market-town of Bedfordshire, 41 miles NW. of London by rail, with a great corn-market. Pop. of urban district, 5120.

Big Horn, a navigable river of the United States, and the largest affluent of the Yellowstone, rises near Fremont's Peak in the Rocky Mountains, in the NW. of Wyoming territory, and flows 350 miles north-eastward.

Bigorre, a mountainous district of south-west France, mainly in the dep. of Hautes-Pyrénées. Tarbes is the chief town.

Big Sandy River, also called *Chatterawah*, a navigable affluent of the Ohio, formed by the junction of two branches which rise in Virginia.

Bihacz (*Bihatch*), a strong fortress-town of North-west Bosnia, on the Una, near the Croatian frontier. Pop. 4506.

Bihar. See BEHAR.

Bihé, a fruitful district of South Africa, E. of Benguela, and under Portuguese influence. It is an important caravan centre, being traversed by the only trans-continental route south of the Congo. Area, 2500 sq. m.; pop. 95,000. Kagnomba, the king's capital, is over 3 miles in circumference. See Major Pinto's *How I Crossed Africa* (1881).

Bijanaghur. See VIJAYANAGAR.

Bijapur (*Beejapoor'*), a decayed city in the Bombay Presidency, 160 miles SE. of Poona. It was for centuries the capital of a powerful kingdom; in 1686 was captured by Aurungzebe, in the 18th century passed to the Mahrattas, and became British in 1848. Now lofty walls of hewn stone enclose the desolate fragments of a once vast and populous city. The ruins are almost all Mohammedan, and consist of beautiful mosques, colossal tombs, a fort, &c. Pop. 23,800.

Bijawar, a petty native state in the Bundelkhand Agency. Area, 974 sq. m.; pop. 123,285.

Bijbharu', or BIJBAHAR, a town of Kashmir, India, on the Jhelum, 25 miles SE. of Srinagar.

Bijnaur', a town of the United Provinces, 3 miles E. of the Ganges. Sugar, Brahmanical threads, and cotton cloth are manufactured. Pop. 16,147.—The district of Bijnaur, in the N. of the Rohilkhand division, contains more than a dozen towns with a population of over 5000.

Bikaner', the capital of a Rajput state, lies in a desolate tract, 250 miles WSW. of Delhi. It is surrounded by a battlemented wall of 3½ miles in circuit, and from a distance presents a magnificent appearance; but many of its carved buildings are in narrow and dirty lanes. Pottery, stone-cutting and carving, the making of a white candy and of blankets, are amongst the industries. Pop. 54,000.—The state contains 23,340 sq. m.; pop. 585,000, mainly Jâts.

Bilba'o (Span. *Beel-bâh'o*), a town of Spain, the capital of the province of Vizcaya (Biscay), in a mountain gorge on the Nervion, 8 miles SE. of its mouth at Portugalete, and 63 miles N. by E. of Miranda by rail. Four bridges span the river, which divides the old town from the new. The city is purely commercial. There are docks for building merchant-vessels, and in the vicinity are iron and copper mines. The canalisation of the river in 1886 has since enabled steamers of 700 to 800 tons to come up to the town; but the narrow channel and the heavy sea on the bar still render the port equally difficult to enter or leave. Nevertheless, the annual amount of British tonnage entering Bilbao largely exceeds that of any other foreign port in Europe, except Antwerp. The chief imports are coal, coke, codfish, timber, petroleum, tin, sugar, coffee, and colonial goods. The exports, which include red wines and wool, are numerous and unimportant, with the exception of iron-ore, on which the prosperity of the port depends. Population, 75,000. Bilbao was founded in 1300 under the name of Belvao—i.e. 'the fine fort'—and soon attained great prosperity. It suffered severely in the wars with France, first in 1795, and again in 1808. During the Carlist struggles it stood two great sieges, Zumalacarreguy here receiving his death-wound in 1835, whilst in 1874 it was vainly besieged and bombarded by Don Carlos for four months.

Bil'bilis. See CALATAYUD.

Bilin', a town of Bohemia, on the Bila, 5 miles SW. of Teplitz. Its mineral springs, rich in native carbonate of soda, are largely sought by sufferers from gastric, catarrhal, or scrofulous complaints. Pop. 7604.

Billericay, an Essex market-town, 4 miles E. of Brentwood. Pop. 1394.

Billingsgate, a fish-market a little below

London Bridge. It was opened in 1558 as a landing-place for provisions; and in 1699 was made 'a free and open market for all sorts of fish.' The present handsome stone building was finished in 1874.

Billiton, or BLITONG, an island in the Dutch East Indies, between the SE. of Banca and the SW. of Borneo. It is about 50 miles in length by 45 broad, 1855 sq. m. in area, and in the north 3000 feet high. Tandjong is the harbour, Pandang the chief town. Pop. 48,779.

Billom (*Bee-yon^g'*), a decayed town of Auvergne, in the French dep. of Puy-de-Dôme, 14 miles ESE. of Clermont. Pop. 3930.

Bill Quay, on the Tyne, in Durham, 3 miles E. of Gateshead, the seat of shipbuilding yards, bottle-works, &c.

Bilma, a town of the Sahara, Central Africa, situated in 18° 40' N. lat., 14° E. long., on an oasis called the Wady Kawar.

Bilston, a town in South Staffordshire, 2½ miles SE. of Wolverhampton, and within its parliamentary borough. The centre of the hardware trade, it has extensive iron and coal mines, iron-smelting works, iron-foundries for making machinery, besides works for tin-plate goods, japanned and enamelled wares, nails, wire, screws, and coarse pottery. Pop. 25,000.

Biluchistan. See BELUCHISTAN.

Bima, a seaport of Sumbawa, one of the Sunda Isles, on the north coast, 100 miles E. of Sumbawa.

Bimbia, an African district on the south slope of the Cameroon Mountains, and on the river Bimbia, since 1884 part of the German protectorate. See CAMEROONS.

Binche (*Ban^gsh*), a town of Belgium, 10 miles E. of Mons. Pop. 10,100.

Bingen (*Bing'en*), a town of Hesse, on the left bank of the Rhine, 39 miles SE. of Coblenz. Below the town is the Bingerloch, formerly dangerous to navigation, but in 1834 the sunken rocks were blown up. In mid-river stands the Mäuseturm of Bishop Hatto. Nearly opposite Bingen, in the Niederwald, is the colossal statue *Germania*, erected 1877–83 to commemorate the war of 1870–71. Pop. 9215.

Bingham, a town in the county, and 8½ miles E. of the town of Nottingham. Lord Sherbrooke was a native. Pop. of parish, 1687.

Binghamton, a flourishing city of New York, at the junction of the Chenango and Susquehanna rivers, 215 miles NW. of New York City. It is an important railway centre, and manufactures flour, engines, carriages, leather, and cigars. Pop. 41,000.

Bingley, a town in the West Riding of Yorkshire, 5½ miles NW. of Bradford. It has worsted, woollen, cotton, and paper manufactures. Pop. 18,500.

Bintang, a Dutch East Indian island, 40 miles SE. of Singapore. Area, 454 sq. m.; pop. 18,000.

Binue. See BENUE.

Biobio, the largest river of Chili, flows 220 miles (100 navigable) WNW. from near the volcano of Antuco in the Andes to Concepcion on the Pacific Ocean. It is 2 miles wide at its mouth.

Bir, a town of Asiatic Turkey, on the Euphrates, 80 miles NE. of Aleppo. Pop. 9000.

Birbhum, a district in the Bardwan division of Bengal, with an area of 1756 sq. m. It is one of the greatest copper-fields of the world, though practically untapped as yet.

Birchington, a Kentish coast village, 3¼ miles W. by S. of Margate. Pop. of parish, 2122.

Birkenfeld, a German principality belonging to Oldenburg (q.v.), but surrounded by the Prussian Rhine Province. Area, 194 sq. m.; population, 43,500. The capital, Birkenfeld, has a pop. of 2500.

Birkenhead, a market-town, seaport, municipal, parliamentary, and county borough of Cheshire, lies opposite Liverpool, on the left bank of the Mersey. Birkenhead owes its origin to the Benedictine Priory of *Byrkhed*, founded in the 11th century. The crypt and other portions of the priory still remain. Birkenhead has only of late risen from comparative obscurity to its present important position. In 1836 it received the grant of a market, in 1861 obtained the privilege of returning a member to parliament, in 1877 was created a municipal borough, and in 1888 a county borough. The main streets are laid out with great regularity, crossing each other at right angles, and about 20 yards wide; but the back streets are narrow and the houses mean. The park, 180 acres in extent, was laid out at a cost of £140,000; and there is another park in Tranmere, called Mersey Park, of 29 acres and £33,000 cost, opened in 1885. The principal public buildings are the market-hall, the new town-hall, the new sessions and police courts, the borough hospital, the free library, and the public baths. A railway bridge over the Mersey at Runcorn, opened for traffic in 1869, shortened by 10 miles the distance between the Liverpool and Birkenhead docks; and the Mersey railway tunnel, 1230 yards long, was opened by the Prince of Wales in 1886. There is also communication with Liverpool by ferry-steamers. The idea of constructing docks here was due to the Messrs Laird, who in 1824 purchased from the Liverpool corporation, at a very low price, a large piece of ground on the borders of the Wallasey Pool. The first dock, however, was not opened till 1847. In 1857 the Birkenhead docks were amalgamated with those of Liverpool, and vested in one public trust, called 'The Mersey Docks and Harbour Board.' Including the Great Float, an immense harbour, constructed on the site of Wallasey Pool, with an area of over 140 acres, they extend from Woodside to Seacombe, a distance of about a mile, the total area being about 170 acres, with 9½ miles of quayage. The corn-warehouses at Seacombe constitute a vast pile of buildings, and a great deal of coal is shipped from the port. Birkenhead is celebrated for its shipbuilding yards, some of the largest iron ships afloat having been built here. In the neighbourhood of the docks are the Canada Works for the construction of gigantic bridges, the Britannia Machinery Works, the Birkenhead Forge, &c. There are also oil-cake mills, extensive flour-mills, wagon-works, and several smaller engineering works. St Aidan's College, an Anglican theological college, is in the suburb of Claughton. Pop. (1821) 236; (1861) 54,649; (1891) 99,857; (1901) 110,915.

Birket-el-Hadji ('lake of the pilgrims'), a small lake 10 miles NE. of Cairo, where the Mecca pilgrims assemble and separate.

Birmah. See BURMA.

Birmingham, a city and a municipal, parliamentary, and county borough, the chief town of the Midlands, is celebrated for its metallic manufactures throughout the world. It stands near the centre of England, in the north-west of Warwickshire, with suburbs extending into Stafford-

shire and Worcestershire, 112½ miles NW. of London. It is picturesquely situated on the east slope of three undulating hills, on the Rea and the Tame, and though rather irregularly built, has been greatly improved in this respect within recent years, while its water-supply and sanitary arrangements are admirable. There are seven public parks in the suburbs. The public buildings include the Corinthian town-hall (1832–52), the scene of triennial musical festivals and great political meetings; the market-hall, dating from 1838; the Italian municipal buildings (1874–78), at a cost of nearly £200,000; the corn exchange (1847); the Gothic exchange buildings (1863–65); and the post-office. Queen's College (1867) and the Mason Science College, founded in 1875 by Sir Josiah Mason, were incorporated in Birmingham University in 1900. Other institutions are the Birmingham and Midland Institute, the museum and art gallery, the school of art, the technical school, the libraries, King Edward VI.'s grammar-schools, and the blue-coat school. Birmingham became the see of a bishop in 1904. Its mayor has been a Lord Mayor since 1896. There are more than a dozen statues or memorials of Birmingham worthies (including Watt, Priestley, Bright, Chamberlain, Mason, Dawson), and other eminent men. The parish church of St Martins, erected in 1873 at a cost of nearly £30,000, stands on the site of the old building, dating from the 13th century; and the Catholic cathedral of St Chad (Birmingham being the seat of a Catholic see) was erected from the designs of Pugin, at a cost of over £30,000.

In Leland's *Itinerary* (1538) Birmingham is referred to as the abode of 'smiths and cutlers.' In cutlery goods it has been completely superseded by Sheffield, but in all other kinds of the finer metal manufactures it is unrivalled by any other town in the world. Iron and brass founding are carried on, and steam-engines and various kinds of machinery are made; but the principal manufactures are the finer kinds of gold, silver, copper, brass, steel, mixed metal, plated metal, glass, papier-maché, japanned and electrotyped articles, including firearms, ammunition, swords, metal ornaments, toys, jewellery, coins, buttons, buckles, lamps, pins, steel-pens, tools, arms, and locks. Over 560,000 gun-barrels were manufactured in 1891; and other specialties, of which an enormous quantity are manufactured, are steel-pens, buttons, nails, and screws. 'Brummagem' is colloquially used to denote anything sham or fictitious, such as cheap jewellery, now no longer made here so much as in London and in Germany. Near Handsworth, a little to the north of Birmingham, were the famous Soho Works, founded by Watt and Boulton. The Bermingeham of Domesday was later known as Bromwychham (whence Brummagem). During the Civil War the town supplied the Parliamentarians with swords, but it was taken by Prince Rupert in 1643. It suffered severely from the plague in 1665–66. The celebration by a number of Radicals, 14th July 1791, of the capture of the Bastille, was the occasion of a serious riot by the upholders of church and king, who attacked Dr Priestley's house, and destroyed his library. Subsequently Birmingham was prominently associated with the reformers of 1832 and the Chartists, and it was the famous headquarters of what was known as the Liberal 'caucus.'

Baskerville, the printer, carried on his business in Birmingham. Wilmore and Pye, the engravers, David Cox, and Burne-Jones were Birmingham men. Dr Joseph Priestley was a Unitarian minister in Birmingham; here, too, was the chapel of the brilliant lecturer George Dawson. Birmingham, which, Mr Joseph Chamberlain claims, is the best-governed city in the world, was incorporated in 1838, and became a county borough and a city in 1888. In 1867 the number of parliamentary representatives was increased from two to three, and in 1885 it was divided into seven parliamentary districts, each returning one member. The population in 1770 was 30,806, which by 1801 had increased to 60,822, by 1851 to 232,841, by 1871 to 343,787, by 1881 to 400,774, by 1891 to 478,113, by 1901 to 533,040.

See Hutton's *History of Birmingham* (1781), and Bunce's *History of the Corporation* (1885); Langford's *Century of Birmingham Life* (2 vols. 1868); and Dent's *Old and New Birmingham* (2 vols. 1879–80), and *The Making of Birmingham* (1894).

Birmingham, the capital of Jefferson county, Alabama, and the most important seat of the iron industry of the southern states, is situated at the junction of several railways, 95 miles NNW. of Montgomery. It has numerous foundries, mills, factories, and machine-shops; and the development of the iron interests of its immediate vicinity has caused a marvellous growth of the city. Pop. 40,000.

Birnam, a Perthshire hill, 1324 feet high, near Dunkeld. Birnam Wood, forming part of an ancient royal forest, is immortalised by Shakespeare in *Macbeth*. Opposite Dunkeld is the pretty village of Birnam; pop. 394.

Birni, a ruinous town, the former capital of Bornu (q.v.), 100 miles W. of Lake Chad.

Birr. See Parsonstown.

Birrenswark. See Brunswark.

Birstal, a woollen manufacturing town in the West Riding of Yorkshire, 7 miles SSW. of Leeds. Dr Priestley was born hard by. Pop. 6558.

Biru', a kingdom of Soudan, Western Africa, bounded on the E. by the Niger.

Bisaccia (*Bisat'cha*), a town of Italy, 60 miles E. of Naples. Pop. 6189.

Bisacquino (*Bisaques'no*), a town of Sicily, 27 miles S. of Palermo. Pop. 9588.

Bisalnag'ar, a town of India, in Baroda, 220 miles NW. of Mhow. Pop. 21,000.

Bisalpur', a town of India, in the United Provinces, 24 miles E. of Bareli. Pop. 10,000.

Bis'cay, or Vizcaya, the most northerly of the Basque Provinces of Spain, is bounded N. by the Bay of Biscay. Area, 833 sq. m.; population, 312,000. Chief town, Bilbao (q.v.).

Biscay, Bay of (Fr. *Golfe de Gascogne*), that portion of the Atlantic Ocean which sweeps in along the northern shores of the Spanish peninsula from Cape Ortegal to St Jean de Luz, at the western foot of the Pyrénées, and thence curves northward along the west shores of France to the island of Ushant. The depth of water varies from 20 to 200 fathoms. The whole of the south coast is bold and rocky, but great parts of the French shores are low and sandy. Navigation of 'the bay' is frequently rendered dangerous by the prevalence of strong winds, especially westerly ones. Rennel's Current sweeps in from the ocean round the north coast of Spain.

Bisceglia (*Bishel'ya*), an Italian seaport, on the Adriatic, 21 miles NW. of Bari. Pop. 31,675.

Bischoff, Mount, a post-town of Tasmania, 60 miles W. of Launceston. Here were discovered

in 1872 some of the richest tin-mines in the world, the yield of pure tin from the ore being from 70 to 80 per cent. The mount takes its name from the chairman of a land company (1828). There is railway communication with Emu Bay, 45 miles distant. Pop. 1420.

Bischweiler (*Bishvī'ler*), a town of Alsace, on the Moder, 17 miles N. of Strasburg. Pop. 7810.

Bisham Abbey, a Tudor mansion, in Berkshire, on the Thames, opposite Great Marlow. Elizabeth resided here in Mary's reign.

Bishop-Auckland, a town in the county, and 9½ miles SW. of the city, of Durham, stands on an eminence 140 feet above the confluent Wear and Gaunless. Its abbey-like palace of the bishops of Durham was founded about 1300 by Bishop Antony Bek, and rebuilt by Bishop Cosin about 1665. There are a fine town-hall of 1863 with a spire 100 feet high, engineering-works, and large neighbouring collieries. Pop. (1851) 4400; (1891) 10,527 ; (1901) 11,969.

Bishop's Castle, a municipal borough (incorporated 1885) of Shropshire, 9½ miles WNW. of Craven Arms junction by a branch line (1865). Till 1832 it returned two members. The bishops of Hereford had a castle here. Pop. 1386.

Bishop-Stortford, a town of Hertfordshire, on the Stort, 12 miles ENE. of Hertford. In Saxon times it was the property of the bishops of London. Pop. 7150.

Bishop's Waltham, a town of Hampshire, 9½ miles SE. of Winchester. It has been immemorially the property of the bishops of Winchester. There are remains of their castle (1135). Pop. of parish, 2309.

Bishopwearmouth. See SUNDERLAND.

Bisigna'no, a cathedral city of South Italy, 10 miles N. of Cosenza by rail. Pop. 4255.

Biskra, a town of Algeria, 150 miles S. of Constantine by rail, in an oasis watered by the Wady Biskra and by springs. The Roman *Zaba*, under the Moors it became a large town—71,000 people died of the plague in 1663. Pop. 8609.

Bisley, (1) a market-town of Gloucestershire, 3 miles E. of Stroud. Population, 2500.—(2) A common in Surrey, 3½ miles WNW. of Woking, the successor in 1890 to Wimbledon as the meeting-place of the National Rifle Association.

Bismarck, a thriving town, since 1889 capital of North Dakota, U.S., stands in the centre of the state on the east side of the Missouri, here crossed by the Northern Pacific Railway on an iron bridge which cost $1,000,000. Pop. 3500.

Bismarck Archipelago, the official name for New Britain, New Ireland, New Hanover, and several smaller adjoining islands in the South Pacific, since in 1884 they became a German dependency. See NEW BRITAIN, &c.

Bismark, a Prussian town of 2599 inhabitants, 35 miles N. of Magdeburg.

Bissa'gos, or BIJUJA ISLANDS, a group of thirty small volcanic islands, off the west coast of Africa, opposite the mouth of the Rio Grande. Thickly wooded, and many of them densely peopled, they have several fine ports, but the climate is excessively dangerous for Europeans. The principal islands belong to the Portuguese.

Bissão, an island and Portuguese station closer to the African coast than the Bissagos.

Bistritz, a Transylvanian town on the Bistritza River, 50 miles NE. of Klausenburg. Pop. 9063.

Bisutun. See BEHISTUN.

Bitche (Ger. *Bitsch*), a German town of Lorraine, in a wild and wooded pass of the Vosges, 49 miles NNW. of Strasburg. Its citadel crowns a precipitous rock in the middle of the town. The Prussians tried vainly to surprise it in 1793; it resisted the Germans for seven weeks in 1815, and only surrendered three weeks after the close of the war of 1870–71. Pop. 3849.

Bithur', a town in India on the Ganges, 12 miles NW. of Cawnpore. Pop. 6685.

Bithynia, an ancient division of Asia Minor, separated from Europe by the Propontis (Sea of Marmora) and the Bosphorus.

Bitlis, a town of Turkish Armenia, 120 miles SE. of Erzerum. It lies 5470 feet above the sea, in a deep ravine traversed by the river Bitlis, a head-stream of the Tigris. Pop. 35,000.

Bitonto, a cathedral city of Italy, 5 miles from the sea, and 10 WSW. of Bari. Near it the Spaniards defeated the Austrians, 25th May 1734. Pop. 32,726.

Bitter Root Mountains, a range of the Rocky Mountains between Idaho and Montana.

Bizerta, or BENZERTA, a seaport of Tunis, at the head of a bay of the Mediterranean, is the most northerly town in Africa, being 38 miles NW. of Tunis. Pop. 10,000. The ancient *Hippo Diarrhytus* or *Zaritus*, Bizerta since 1881 has been held by the French, who have strongly fortified it, and made it a great naval station.

Bjela, a town in the Polish government of Siedlce, on the Krzna River. Pop. 10,500.

Blackadder, a Berwickshire stream, flowing 20 miles to the Whitadder.

Blackburn, a town of Lancashire, 21 miles NNW. of Manchester, and 9 E. of Preston, stands on a stream from which it appears to derive its name, a branch of the Ribble. It had acquired some importance as a market-town in the 16th century, and in the middle of the 17th it was noted for its *Blackburn Checks*, a kind of linsey-woolsey, afterwards superseded by the *Blackburn Grays*, so called from their being printed unbleached. During the 18th century the cotton manufacture became the chief industry of the place, which is now the largest and most important cotton manufacturing town in the world, the number of cotton-factories being very great, and many of them employing from 1000 to 2000 operatives. Great improvements in machinery for the cotton manufacture have been made in Blackburn—e.g. the invention of the spinning-jenny by James Hargreaves, a native of the town, in 1767. The chief public buildings are the town-hall (1856), an Italian edifice built at a cost of £30,000; the Gothic exchange (1865); the infirmary (1862); and St Mary's Church, of very ancient foundation, but almost entirely rebuilt (1826–57). There is a corporation park of 50 acres, part of which is 700 feet above sea-level, and commands a wide view; a new Queen's Park of 35 acres was opened on Jubilee day, 1887. The grammar-school was established by Queen Elizabeth in 1567; in 1888 the Prince of Wales laid the foundation-stone of the technical school. Mr John Morley was born here. Blackburn has returned two members since 1832; it received its municipal charter in 1851, and in 1888 became a county borough. Pop. (1831) 36,629; (1891) 120,064; (1901) 129,216. See Abram's *History of Blackburn* (1878).

Black Country, a region of mines and works on the border of Stafford and Warwick shires, between Wolverhampton and Birmingham.

Black Down, (1) the highest part (1067 feet) of the Mendip Hills, in Somerset; (2) a hill-ridge (900 feet) on the border of Somerset and Devon, near Wellington, crowned by a Wellington obelisk; (3) a hill-ridge (817 feet) of NW. Dorset, near Portisham, with a column to Nelson's Hardy.

Black Forest (Ger. *Schwarzwald*), a wooded mountain-chain in Baden and Würtemberg, running parallel with the course of the Rhine after its great bend near Basel, often only a few miles distant from it, and also bounded by the Rhine upon the south. The chief rivers rising in the Black Forest are the Danube, Neckar, Murg, Kinzig, Elz, Enz, and Wiessen. The chain attains its greatest elevation in the bare and round-topped Feldberg (4903 feet). The great mass called the Kaiserstuhl (Emperor's Chair), situated near Breisach, is quite isolated. Silver, copper, cobalt, lead, and iron are found in greater or less quantity in the principal chain, which is luxuriantly wooded, its name Schwarzwald being derived from the dark-tinted foliage and immense number of its fir-trees. The district is also rich in mineral waters—e.g. the baths of Baden-Baden (q.v.) and Wildbad (q.v.). On the Rhine side the descent is precipitous, but towards the Danube and the Neckar it is gradual. Among its numerous valleys, the Murgthal is the most famous for its natural beauties; but, indeed, the whole of the country is here rich in picturesque scenery, gemmed with cascades and deep mountain-lakes, around which cluster the legends of many centuries. The rearing of cattle, and the manufacture of wooden clocks and other articles, form the chief industry of the inhabitants. See Seguin's *Black Forest* (2d ed. 1886).

Blackheath, a high-lying open common of 70 acres, in the county of Kent, 7 miles SE. of London, near Greenwich Park. It is a favourite holiday resort for Londoners. Blackheath was the first place in England where the ancient Scottish game of golf was introduced, most likely in 1608. On it stands Morden College, founded in 1695 by Sir John Morden for decayed Turkey merchants. Of schools innumerable, the chief is the Proprietary (1830). Blackheath was formerly the scene of several insurrections, including those of Wat Tyler (1381), Jack Cade (1450), and the Cornishmen under Lord Audley (1497).

Black Isle, the peninsula in Easter Ross lying between the Beauly and Moray Firths and Cromarty Firth.

Black Mountains, a range (2631 feet) in South Wales, between Brecknock and Carmarthenshires.

Blackness Castle, Linlithgowshire, on the Firth of Forth, 3½ miles ESE. of Bo'ness, was once a state prison, and since 1874 has been the central Scotch ammunition depot.

Blackpool, a flourishing watering-place of Lancashire, on the Irish Sea, between Morecambe Bay and the estuary of the Ribble, 18 miles WNW. of Preston. The population has risen from 1664 in 1851 to 23,846 in 1891, and 47,348 in 1901; but the numbers who resort here during the bathing-season far exceed the permanent residents, for Blackpool is one of the most frequented watering-places in the west of England, the sands being excellent, the views delightful, and the climate bracing. There are three fine piers, one of them with a splendid pavilion; a promenade 3 miles long, with electric trams; an Eiffel-like tower (1895), 500 feet high; winter-gardens, an aquarium, a free library, theatres, and several large hotels. Blackpool was constituted a municipal borough in 1876.

Blackrod, a Lancashire town, with cotton-mills and collieries, 5 miles SSE. of Chorley. Pop. 3875.

Black Sea, or EUXINE (anc. *Pontus Euxinus*), is an inland sea lying between Europe and Asia, extending from 41° to 46° 38′ N. lat., and from 27° 30′ to 41° 50′ E. long. Its greatest length from east to west is 720 miles; its greatest breadth, near the west end, 380 miles; and its area, exclusive of the Sea of Azov, is 163,711 sq. m. On the south-western extremity it communicates by the Bosphorus, the Sea of Marmora, and the Dardanelles, with the Mediterranean, and on the north-east by the Strait of Kertch, or Yenikale, with the Sea of Azov. The Black Sea drains nearly one-fourth of the surface of Europe, and also about 114,000 sq. m. of Asia. Throughout its whole extent it has but one island, and that a small one, lying opposite the mouths of the Danube, called *Adassi*, or Isle of Serpents, on which is a lighthouse. In the centre its depth ranges between 1000 and 1070 fathoms. All the coasts are high, with good harbours, except between the mouths of the Danube and the Crimea; there the land is low, and the danger of navigation greatly increased in winter by the presence of floating ice; for, from the many large rivers which flow into this sea and that of Azov (Danube, Dniester, Bug, Dnieper, Don, Kuban, and Rion, in Europe; and the Kizil-Irmak and Sakaria, in Asia), the waters are fresher than those of the Mediterranean, and consequently easily frozen. There is no tide in this sea, but the large rivers flowing into it give rise to currents, which are particularly strong in spring when the snows melt. There is a strong flow out through the Bosphorus.

From the fall of Constantinople (1453), all but Turkish vessels were excluded from its waters, until the treaty of Kainardji (1774), when the Russians obtained the right to trade in it. Ten years after, Austrian ships were privileged to trade here; and by the Peace of Amiens in 1802 British and French ships were admitted. By the Treaty of Paris (1856) it was opened to the commerce of all nations, and closed to ships of war, while the erection of arsenals was forbidden; but this article was repudiated by Russia in 1870, and in the following March, at a conference in London, the neutralisation of the sea was abrogated. The Bosphorus and Dardanelles are still closed to ships of war other than Turkish and Russian, but the sultan can open them at need to allies.

Blackstairs, a range (2610 feet) between Carlow and Wexford counties.

Blackwall, a suburb of London, in Middlesex, at the junction of the Lee with the Thames, 3½ miles ESE. of St Paul's.

Blackwater, the name of numerous rivers and rivulets in Great Britain and Ireland, of which the longest are: (1) The Blackwater of Munster, 100 miles in length, which enters the sea at Youghal harbour; (2) the Blackwater of Ulster, 50 miles long, falling into the south-west corner of Lough Neagh; (3) the Blackwater of Essex, 40 miles long, falling into the North Sea.

Blackwood, Nithsdale, Dumfriesshire, 6 miles SSE. of Thornhill, the birthplace of Allan Cunningham.

Bladenoch, a large distillery near Wigtown.

Bladensburg, a village of Maryland, on the

east branch of the Potomac, 6 miles NE. of Washington. Here the British won the battle deciding the fate of the capital, August 24, 1814.

Blaenavon, a town of Monmouthshire, with ironworks, 6 miles NNW. of Pontypool. Pop. 10,869.

Blagovestschensk, a town of the Amur province of Russian Asia, at the confluence of the Amur and Seja rivers. Pop. (1880) 8000; (1900) 33,000.

Blairadam, a seat in Kinross-shire, near Lochleven.

Blair-Athole, a Perthshire village, at the confluence of the Garry and Tilt, 20 miles NNW. of Dunkeld. Blair Castle (Duke of Athole) dates from the 13th century, and as restored in 1872 is a fine baronial structure. Claverhouse was buried in the old church of Blair. Pop. 366.

Blairgowrie, a Perthshire town, on the Ericht's right bank, 20 miles NNE. of Perth by a branch line (1855). It has flax spinning and weaving factories. Pop. 3378.

Blakesware, a vanished Hertfordshire mansion (Lamb's 'Blakesmoor'), 4 miles E. of Ware.

Blanc, Le, a town in the French dep. Indre, 68 miles SSE. of Tours. Pop. 6065.

Blanc, Mont. See Mont Blanc.

Blanco, Cape, a remarkable headland on the west coast of Africa, in 20° 47′ N. lat., and 16° 58′ W. long., the extremity of a rocky ridge which projecting westward, and then bending southward, forms a commodious harbour, the Great Bay. It was first discovered by the Portuguese in 1441.—Cape Blanco (i.e. 'white cape') is also the name of headlands in Spain, Greece, America, and the Philippines.

Blandford, a town in Dorsetshire, on the Stour, 10 miles NW. of Wimborne. It suffered much in 1579, 1677, 1713, and 1731, from fire, only twenty-six houses escaping on the last occasion. It is built of brick, and is neat and regular; its chief charm is Bryanston Park, Lord Portman's seat. It was formerly famed for its bandstrings and lace; now shirt-buttons are made here. Pop. of municipal borough, 3700.

Blankenberghe, a summer resort on the coast of West Flanders, 9 miles N. of Bruges by rail. Pop. 4328.

Blankenburg, (1) a town, 37 miles SSE. of Brunswick, on the borders of the Harz Mountains. Pop. 10,300.—(2) A watering-place in the Rudolstadt division of Schwarzburg-Rudolstadt, 25 miles S. by W. of Weimar. Pop. 2120.

Blan'tyre, or High Blantyre, a village of Lanarkshire, near the right bank of the Rotten Calder, 8¼ miles SE. of Glasgow by rail, in a coal and iron mining district. Pop., with Auchenwraith and Causewaystones, (1901) 2521. Low Blantyre, or Blantyre Works, 1¾ mile NE., has dyeworks, and a weaving factory where young David Livingstone, a native of the place, worked as a 'piecer;' here also are his memorial church and statue. Pop. 1505.—Also the name of a Scottish mission-station founded in 1876, to the south of Lake Nyassa, Central Africa. It is situated on the heights between the Upper Shiré and Lake Shirwa, in a well-wooded district.

Blarney Castle, a ruined tower, 4 miles NW. of Cork, with a stone, difficult of access, to kiss which endows one with eloquence.

Blaydon, a manufacturing town of Durham, on the Tyne, 5 miles W. by S. of Newcastle. Pop. 19,371.

Blaye (anc. *Blavia*), a river-port in the French dep. of Gironde, 20 miles NNW. of Bordeaux. It lies on the right bank of the Gironde, here 2½ miles broad, at the base of a rocky eminence crowned with Vauban's citadel (1652). Pop. 4157.

Bleiberg, an Austrian village in Carinthia, 8 miles W. of Villach, in the valley of the Drave, near the Bleiberg (Lead Mountain). Pop. 3500.

Blekinge (*Blay'king-eh*) is a province in Sweden, also called after Carlskrona (q.v.).

Bléneau (*Blay-no'*), a village in the French dep. of Yonne, 29 miles WSW. of Auxerre. Here Turenne defeated Condé in 1652.

Blenheim (Ger. *Blindheim*), a village of Bavaria, 23 miles NNW. of Augsburg. It gives name to the great victory of Marlborough and Prince Eugene over the French and Bavarians, August 13, 1704. The battle, however, really took place at the neighbouring village of Höchstädt, and to the Germans is so known.

Blenheim, capital of Marlborough district, New Zealand, on the Wairau River, near the coast, 20 miles S. of Picton by rail. Population, about 5000.

Blenheim Park, near Woodstock, Oxfordshire, the seat of the Duke of Marlborough, was designed by Vanbrugh, and gifted by the nation to the victor of Blenheim. It stands in a park 12 miles round.

Blessington, a market-town of Wicklow, on the Liffey, 18 miles SW. of Dublin. Pop. 302.

Bletchingley, an ancient town of Surrey, 5 miles NE. of Reigate. Till 1832 it returned two members. Pop. of parish, 2128.

Bletchley, a railway junction in Buckinghamshire, 47 miles NW. of London, 31 NE. of Oxford, and 45 SW. of Cambridge.

Blewfields. See Bluefields.

Blida (*Blee-da*), a thriving town of Algeria, 32 miles SW. of Algiers by rail, with orange orchards. Pop. 16,628.

Block Island, formerly called Manisees, is situated in the Atlantic, 9 miles S. from Rhode Island, United States, to which it belongs. It is 8 miles long, and contains the township of New Shoreham, a summer resort. A breakwater on the east side of the island forms a harbour of refuge. Pop. 1447.

Bloemfontein (*Bloomfon'tine*), capital of the Orange River Colony, on the Modder, 200 miles W. by N. of Durban. It is the seat of an Anglican bishopric and of a college. Pop. (1904) 33,890.

Blois (*Blwah*), capital of the French dep. Loir-et-Cher, on the Loire, here spanned by a bridge (1717) 1000 feet long, is 36 miles SW. of Orleans. It has an archiepiscopal cathedral, and an old castle, the scene of many historical events. After 1814 it was used as a barrack; but since 1845, especially in 1880–87, a great part of it has been restored at great cost. Natives have been King Stephen of England, Louis XVI., and the physicist Papin, of whom a statue has been erected. Blois has manufactures of porcelain and gloves, with a trade in brandy, wine, and wood. Pop. 23,500.

Bloomington, (1) capital of M'Lean county, Illinois, 126 miles SSW. of Chicago, is an important railway centre, and has a brisk trade and large railway-works, with foundries, furnaces, and coal-mines. There is a Wesleyan university in the town; and near it is the Illinois Normal University. The population is over 25,000.—(2) A town in Indiana, seat of the state university,

between the branches of the White River, 60 miles SSW. of Indianapolis. Pop. 7018.

Bluefields, Escondida, or Rio del Desastre, a river of Nicaragua flowing eastward to the Caribbean Sea. Here is a small town of the same name.

Blue Mountains, (1) a branch of the Dividing Range, New South Wales, running very nearly parallel with the coast, about 80 miles inland. Their highest point, Mount Beemarang, is 4100 feet high. See Jenolan Caves.—(2) The Blue Mountains, in the centre of Jamaica, attain in the West Peak 7105 feet.

Blumenau, a German colony in the Brazilian state of Santa Catharina (q.v.), 50 miles inland of the capital, Desterro. The population in 1905 was 40,000, mainly German; the township of Blumenau has 7000 inhabitants.

Blyth (*Blīth*), a seaport of Northumberland, at the mouth of the river Blyth, 9 miles SE. of Morpeth. Pop. 5553.

Bobbio, a Lombard town, 3 miles SSE. of Pavia, near the confluence of the Bobbio and the Trebbia. Here Columbanus founded a monastery in 612. Since 1014 it has been the seat of a bishopric. Pop. 4635.

Bobruïsk, a town of Russia, on the Beresina, 87 miles SE. of Minsk by rail. Pop. 30,079.

Boca Tigre, the Portuguese translation of the Chinese name *Hu-mun*, 'tiger's mouth,' given to the upper portion of the estuary of the Canton River (q.v.).

Bochnia, a town of Austrian Galicia, 24 miles ESE. of Cracow by rail, with rock-salt mines. Pop. 11,000.

Bocholt (*Bŏh'holt*), a town of Prussia, on the Aa, 13 miles N. of Wesel by rail, with manufactures of cotton and machinery. Pop. 20,576.

Bochum (*Bŏh'hoom*), a Prussian town, 35 m. NE. of Düsseldorf by rail. Besides great steel and iron works, it has manufactures of carpets, &c., with coal-mines near. Pop. 70,000.

Boddam, a fishing-village of Aberdeenshire, 3½ miles S. of Peterhead. Pop. 800.

Boden-See. See Constance, Lake of.

Bodmin, the county town of Cornwall, in the middle of the county, 30 miles NNW. of Plymouth. It arose out of a priory, founded in 936 or earlier; and till 1868 returned two members, then till 1885 one. Pop. 5500.

Bodyke, an estate in County Clare, 16 miles N. of Limerick, well known through its evictions (1887).

Body's Island, a long, narrow strip of sand, off North Carolina, with a lighthouse (150 feet), the highest in the United States.

Bœotia, an ancient political division of Greece, now forming with Attica a province of the modern kingdom, with an area of 2472 sq. m., and a joint pop. of 314,000.

Boghaz-Keui (anc. *Pteria*), a village of Asia Minor, in Angora province, 150 miles S. of Sinope. In its vicinity is a vast ruined temple.

Bognor, a Sussex watering-place, 9½ miles SE. of Chichester by rail. Founded in 1786 by a London hatter, Sir R. Hotham, it has an iron pier (1865) 1000 feet long, and a good esplanade. Pop. 6200.

Bogodukhof, a cathedral town of Russia, 43 miles NW. of Kharkoff. Pop. 10,904.

Bogotá, under Spanish rule Santa fe de Bogota, in South America, the federal capital of the United States of Colombia. It is on a tableland 400 sq. m. in area, and 8694 feet above the sea, which separates the basin of the Magdalena from that of the Orinoco, is bounded on all sides by mountains, lofty enough to give shelter, yet below the line of perpetual snow. This extensive plain—a temperate zone on the verge of the equator, with a salubrious climate and a mean temperature of 60° F.—is exceedingly fertile, being as rich in pasture as in grain. The greater number of its people, however, are sunk in poverty. This is largely due to the difficulty of transport. Bogotá is 65 miles from its port, Honda, the head of navigation on the Magdalena; and from this point goods must be conveyed over the mountains in packages of not more than 125 lb. The few manufactures of the place include soap, leather, cloth, and articles made from the precious metals. Bogotá was founded in 1538, and in 1598 became the capital of the Spanish vice-royalty of New Granada; since 1554 it has been the seat of an archbishop. It is regularly and handsomely built, teems with churches, and has likewise an unfinished capitol, a mint, a university, &c. Pop. (1800) 21,464; (1897) 100,000.—The river Bogotá, otherwise called the Funcha, is the single outlet of the waters of the tableland, having found a passage for itself towards the Magdalena. At the cataract of Tequendama the waters plunge over a precipice 625 feet high.

Boguslav, a town of Russia, 70 miles SSE. of Kieff. Pop. 9030.

Bohemia (Ger. *Böhmen*), formerly one of the kingdoms of Europe, now forms the most northern province of the Austro-Hungarian monarchy. It has an area of 19,980 sq. m., or about two-thirds that of Scotland; pop. (1880) 5,560,819; (1900) 6,318,697. Prague, the capital of the kingdom, and third city of the empire, has over 200,000 inhabitants; Pilsen has about 70,000, Budweis 40,000, and Reichenberg 35,000. The country is surrounded on all sides by lofty mountain-ranges, the principal of which are the Riesengebirge on the north-east, dividing Bohemia from Silesia, highest peak the Schneekoppe (5330 feet); on the north-west, the Erzgebirge (4182); on the south-west, the Böhmerwald (4783). The country belongs to the upper basin of the Elbe, and is well watered by its many affluents, the Moldau, Eger, Iser, &c. The climate is mild and pleasant in the valleys, but raw and cold in the mountainous regions. A remnant of volcanic action still continues in the eruptions of carbonic acid gas which have established so many mineral springs of deserved repute, at Carlsbad, Eger, Marienbad, Teplitz, and elsewhere. The mineral wealth is varied and extensive, consisting of silver, tin, copper, lead, iron, cobalt, bismuth, antimony, alum, sulphur, graphite, and porcelain clay, with some precious and ornamental stones. More coal is produced than in all the rest of the Austrian empire.

The soil is generally fertile; more than one-half of the area is arable land, and forests cover nearly a third. Flax and hops are plentiful, and much fruit is exported. Some wine is produced near the Moldau and the Elbe. Bohemia is a great centre of dyeing and calico-printing, of linen and woollen manufactures. Other important branches of industry are the manufacture of paper, ribbons, lace, chemicals, porcelain-ware, and the Turkish fez. The glass-works of Bohemia are celebrated, and afford employment to some

27,000 persons, and there are many ironworks. Beet-root sugar is manufactured extensively, and so are beer and brandy. Its position secures Bohemia a large transit-trade.

The bulk of the people are Czechs, a Slavonic race, speaking their own Czech tongue, which has an old and varied literature. They dwell chiefly in the centre and east of the country, and number 4¼ millions. The German population, amounting to over 2 millions, reside mainly in the north-east, and in the cities; their influence on industry, trade, and commerce is great in proportion to their numbers. The distinction between Czech and German is very sharply drawn, and the demand of the Czechs for fuller Home Rule than the provincial diet and administration afford, and for the restoration of the crown-rights of the Bohemian kingdom, has maintained a long standing political controversy with the Austrian government. There are about 100,000 Jews. The vast majority of the population belong to the R. C. Church; of the 120,000 Protestants most are Calvinists. Education is much more widely diffused than in any other Austrian province. Since 1882 the university of Prague is divided into a German and a Czech university. The number of students is over 4000, of whom 1200 attend the German lectures. Bohemia sends 110 members—more than a fourth of the total—to the Lower House of the Austrian Reichsrath.

The country derives its name from the Celtic Boii, who were expelled about the Christian era by the Germanic Marcomanni; and by the 5th century, we find the country peopled by the Slavonic Czechs. In 1086 the dukes of Prague were made kings by the emperor, and Bohemia became a state of the German empire. In the 15th century took place the religious movement of John Huss and Jerome of Prague. In 1458, after a long war, the kingdom became elective, and the Hussite George of Podiebrad was chosen king. His successor, the Polish Ladislaus, became also king of Hungary (1490); and on his son's death at the battle of Mohacz (1526), the crowns of both kingdoms passed to Ferdinand of Austria, and the history of Bohemia merges in that of Austria. The withdrawal of religious liberty in 1608 led to the troubles which ended in the election of the Protestant Frederick V. of the Palatinate to be king of Bohemia, and the Thirty Years' War, in which Bohemia suffered so severely, the Hapsburgs being restored, and Protestantism stamped out in blood. There are histories in German by Pelzel (1817), Palacky (1836), Tomek (1882), and others.

Bois-de-Boulogne. See BOULOGNE.

Boise (pron. *Boiz*; formerly called Boisé City), the capital of Idaho, U.S., and a centre of the silver industry, near the Boise River, 520 miles NE. of San Francisco. Pop. 7311.

Bois-le-Duc (*Bwah-leh-Dük'*; Dutch *'s Hertogenbosch*, 'Duke's Forest'), a Dutch city, capital of N. Brabant, at the junction of the Dommel and the Aa, 28 miles SSE. of Utrecht by rail. Strongly fortified till 1876, it is the seat of a Catholic archbishop, and has a very fine cathedral (1312–1498), arsenal, &c. Iron-founding, book-printing, the making of beer, spirits, woollens, cigars, jewellery, linen-thread, ribbons, and cutlery are industries. Bois-le-Duc was founded in 1184 by Godfrey III., Duke of Brabant, in a wood, hence its name. Surrendered to the Dutch in 1629, in 1794 it was taken by the French, in 1814 by the Prussians. Pop. 35,000.

Bojador (*Bo-ya-dor'*), CAPE, a headland on the west coast of Africa, in 26° 7′ N. lat., 14° 29′ W. long. The Portuguese doubled this cape in 1432.

Bojano (*Bo-yah'no*), an Italian cathedral city, 13 miles SW. of Campobasso. Pop. 3506.

Bokhara (*Bok-hah'ra* or *Bo-hah'ra*), the portion of Turkestan under the rule of the khan (or emir) of Bokhara, nominally independent, but practically a vassal state of Russia. It lies between Russian Turkestan on the N., the Pamir on the E., Afghanistan on the S., and the Kara-kum desert on the W. Area, 90,000 sq. m.; pop. 1,800,000. Only in the neighbourhood of the rivers is cultivation possible. The rest of the soil is composed of a stiff arid clay, interspersed with low sand-hills. Bokhara has only three rivers of any importance—the Amu-Daria or Oxus, the Zarafshan, and the Karshi, of which the first reaches the Sea of Aral, the other two are absorbed in the desert sands. Outlying provinces of Bokhara, separated by mountains, are Darwaz, Karategin, Hissar, and Kulab. The climate is healthy, but subject to great extremes of heat and cold. The sands of the Oxus yield gold, and salt, alum, sulphur, and sal-ammoniac are found. The other products include rice and cotton, wheat, barley, beet-root, vegetables, hemp for making *bhang*, silk, fruits in immense abundance, tobacco, and the sweet gum or manna of the camel's thorn. The industry includes the manufacture of silk-stuffs, cotton-thread, shagreen, jewellery, cutlery, and firearms. Its geographical position secures Bokhara the transit-trade between Russia and the south of Asia; and the Transcaspian Railway has increased its prosperity. The population consists chiefly of the aboriginal Tajiks of Persian, and of the dominant Uzbegs and Turkomans of Turkish origin. Persian slaves are numerous. The army numbers 30,000, since 1885 drilled by Russian officers.

Bokhara, corresponding in the main to the ancient Sogdiana, was conquered in the beginning of the 8th century by the Arabs, who were dispossessed of it in 1232 by Genghis Khan. It fell into the hands of Timur in 1403, and in 1505 was taken by the Uzbegs, its present masters. With the accession of the Khan Nasrullah (1826) the country became an object of rivalry to Britain and Russia, who in vain sent envoys to cultivate his friendship. After the capture of Tashkend by the Russians in 1865, the khan was compelled to oppose them, but was utterly defeated at the battle of Irdjar, May 20, 1866; and in July 1868 a peace was concluded by which Samarkand was ceded to the czar. During the invasion of Khiva in 1873 the khan assisted the Russians, and was rewarded by a large addition to his territory from the Khivan possessions. In 1882 a Russian political agent was appointed.

BOKHARA, the capital, is situated on a plain a few miles from the Zarafshan, in the midst of trees and gardens. It is between 8 and 9 miles in circumference, and surrounded by embattled mud walls about 24 feet high, and pierced by eleven gates. The houses are built of sun-burned bricks on a wooden framework. The palace of the khan occupies an eminence over 200 feet in height in the centre of the city. The mosques, which are said (fabulously) to be 365 in number, form one of the greatest features of Bokhara, which is the centre of religious life in Central Asia. The city has long been celebrated as a seat of learning, and contains about 80 colleges, said to be attended by some 5000 students. Bokhara is still the most important

commercial town in Central Asia, although the gradual drying up of the Zarafshan, through the Russian irrigation-works at Samarkand, has lessened the population by about a half. Silks, woollens, and swords are manufactured, and large slave-markets are held; but the most striking feature of the town is its numerous bazaars, filled with the richest wares of Europe and of Asia. Bokhara was in 1888 connected by the Transcaspian Railway with Merv, and so with the Caspian ports. The pop. is estimated at 70,000. See TURKESTAN; the *History of Bokhara*, by Vambéry; Wolff's *Narrative of a Mission to Bokhara* (1845); and works on Central Asia, by Vambéry (1874-85), Boulger (1879), Von Hellwald (1874), Lansdell (1885), and Curzon (1888).

Bolan' Pass, a narrow, precipitous gorge, ascending nearly 55 miles north-westward to the broad plateau of Dasht-i-Bidaulat, in Beluchistan, and lying pretty directly between Sind and Kandahar. Its entrance and its outlet are respectively 800 and 5800 feet above the sea, it thus having an average gradient of fully 90 feet to the mile. Down the pass pours a torrent, now at many points bridged by a good military road; and in 1885-86 a military railway was laid. In parts of it there are three rails, the central one being toothed to catch a cogwheel on the engine. The route is highly defensible, and is commanded by the fortress at Quetta (since 1877 British), 25 miles from the upper end. It is overhung by eminences attaining a height of 800 feet.

Bolbec, a busy town in the French dep. of Seine-Inférieure, 19 miles ENE. of Havre by rail. It manufactures woollens, linen, cotton, and chemicals. Pop. 12,000.

Bolchov. See BOLKHOV.

Bolgary, a village of 150 houses in the Russian government of Kazan, near the Volga. It occupies the site of Bolgar, the old Bulgarian capital.

Bolgrad, a town in the Russian province of Bessarabia, 28 miles NW. of Ismail, at the head of Lake Yapuch. Pop. 13,000.

Boli, an ancient town of Asia Minor, on the left bank of the river Boli, 136 miles E. by S. of Constantinople. Pop. 5000.

Bolingbroke, a ruined castle, Lincolnshire, 3½ miles W. by S. of Spilsby. Henry IV. was born here.

Bolivar (*Bolee'var*), the name of several states of South America.—(1) A state of Colombia, W. of the Magdalena. Area, 21,345 sq. m.; pop. 300,000. Capital, Cartagena; chief port, Barranquilla.—(2) A state of Venezuela; pop. 50,289.

Bolivia, a republic on the west side of South America, deriving its name from the liberator Bolivar, and formed in 1825, till which year, as Upper Peru, it had formed part of the viceroyalty of Buenos Ayres. It is enclosed by Peru, Brazil, Paraguay, the Argentine Republic, and Chili. Its coast provinces Bolivia lost to Chili through the war carried on by Bolivia and Peru against Chili in 1879-83. The area of the republic is now 536,000 sq. m., and the population is probably under 1,800,000, though some estimates give 2,300,000. Bolivia contains the greater part of the loftiest and most mountainous district of America, as comprising a section of the Andes system at its broadest extension. The lofty plateau of Oruro, with an average height of 13,000 feet, and about 150 miles broad, is enclosed between the Andes proper (now the western boundary of Bolivia), and the Cordillera Real, to the east. There are also intermediate ranges and isolated groups; of the volcanoes, all the western region, Sahama, Illampu, and Illimani, are over 21,000 feet high. The great plateau falls into two parts, of which the northern is the more inhabited, as containing the Lake of Titicaca and many well-watered valleys round it. The southern and lower tableland is chiefly a desert. The Cordillera Real system descends abruptly, on the north, to the plain of the Amazon: but its eastern edge is a series of terraces, sinking gently to the plains of eastern Bolivia, which in the north belong to the Amazon basin, and in the south to the pampas of the Plata.

Although situated entirely within the tropics, Bolivia, from its varied elevation, possesses a wide range of climate and productions. In the *punas* (over 11,000 feet high) the climate is cold and dry, and the vegetation scanty. The valleys of the eastern terraces, between 9500 and 11,000 feet, have a temperate climate, and wheat and maize are produced; in those between 5000 and 9500 feet, tropical fruits flourish. East of the inner Cordillera lie the plains under the 5000 feet limit. This district, with its numerous streams, its luxuriant tropical vegetation, its rich forests of valuable trees in the north, and its immense open savannahs in the south, surpasses most countries of South America in fertility and resources. Coffee, rice, cacao, coca, pineapples, bananas, tobacco, cotton, and the valuable cinchona are cultivated; and among other important plants are the copal and caoutchouc trees. In the *punas* are found the guanaco, llama, alpaca, vicuña, and the chinchilla; in the east, jaguars and tapirs. Mining is the most important industry of the country; for its gold, silver, copper, and tin ores have long been famous, in spite of the excessive cost of transport. The mines of Potosi are estimated to have produced since 1545 over £600,000,000 sterling of silver. Potosi, Oruro, and the richest mine, Huanchaca, still produce large quantities annually. From the landlocked position of the republic, its foreign trade labours under heavy disadvantages, for its great rivers, flowing mainly by the Madeira to the Amazon, and by the Pilcomayo to the Parana, are rendered unnavigable by rapids. More is to be hoped for from the railways, which have reached Bolivia from Chili, Peru, and Argentina; telegraphs also connect Bolivia with the outer world. The exports are stated to have an annual value of £1,800,000—two-thirds silver, and the imports £1,200,000. The exports to Great Britain vary from £140,000 to £200,000; the imports from thence from £45,000 to £160,000, being chiefly iron, cotton, woollen, and manufactured goods.

The population of Bolivia is a mixture of half-caste Spaniards and Indians, and a few negroes. The Indians are partly civilised (Quichuas and Aymáras), partly semi-civilised (Chiquitos and Moxos), and partly wild. The religion of the country is Roman Catholic, but others are tolerated. There are five universities; but only 5 per cent. of the children of school age attend the schools.

The executive is vested in a president, with two vice-presidents, and a ministry divided into five departments; while the legislature consists of a congress of two chambers, the Senate and the House of Representatives, both elected by universal suffrage. The public revenue, between £700,000 and £800,000, is usually greatly exceeded by the expenditure. The public debt is set down at about £2,000,000. The seat of the execu-

tive government, formerly La Paz, was transferred in 1869 to Oruro, and now changes between Oruro and Sucre. The chief towns are La Paz (45,000), Cochabamba (14,705), Chuquisaca or Sucre (12,000), and Potosi (11,000). Bolivia declared its independence 6th August 1825. Its history has been largely a series of restless and purposeless revolutions. Slavery was abolished in 1836. In 1879 a war broke out between Chili and Bolivia allied with Peru, of which the issue was disastrous to the allies.

See, besides books of travel in German or French by Tschudi (1856), D'Ursel (1879), and Wiener (1880), works on Bolivia by Church (1873), Mathews (1879), and Child (New York, 1894).

Bolkhov, a cathedral city of Russia, on the river Nugra, 37 miles N. of Orel. Pop. 26,395.

Bollington, a Cheshire town, 3 miles N. by E. of Macclesfield, with cotton and silk factories. Pop. 5913.

Bologna (*Bolon'ya*), one of the most ancient cities of Italy, beautifully situated on a fertile plain at the foot of the lower slopes of the Apennines, 82 m. N. of Florence, and 135 SE. of Milan by rail. An irregular hexagon, it is enclosed by a high brick wall, 5 to 6 miles in extent, with twelve gates, and is intersected by the canal of Reno. It has many fine palaces of the nobility; over 70 churches, including the cathedral and San Domenico, with the tomb of St Dominic, richly ornamented by Michael Angelo; and two remarkable leaning towers (c. 1100)—the Asinella, with a height of 274 feet, and a lean of 3½ feet, and the Garisenda, with a height of 137 feet, and a lean of 8½ feet. The university of Bologna, the oldest in Europe, celebrated its eighth centenary in 1888. Medicine has long superseded law as the principal study, and the discovery of Galvanism by one of its professors has shed a lustre on the university, which was the earliest school for the practice of dissection of the human body. For centuries learned female professors have prelected within its walls. The number of students, stated at 10,000 in 1262, now is only about 1400. Bologna also possesses an academy of music (1805), at which Rossini studied. The university library contains 160,000 vols. and 6000 MSS., and there is besides a city library of 120,000 vols. The Accademia delle Belle Arti is particularly rich in the works of those native artists who founded the Bolognese school of painting. Bologna has given eight popes and more than 200 cardinals to the Church. There are some manufactures, including silk goods, velvet, crape, wax candles, musical instruments, chemical products, paper, cards, and 'polony' sausages. Pop. (1872) 115,957; (1901) 152,000. The Etruscan *Felsina*, and afterwards as *Bononia* the chief town of the Boii, Bologna in 189 B.C. was made a Roman colony. After the fall of the Roman empire, it passed into the hands of the Longobards and Franks; by Charlemagne was made a free city, but in 1506 came under the papal supremacy.

Bolor-Tagh, a lofty border-ridge of the Pamir plateau, ranging SW. to NE., which falls abruptly to Kashgaria.

Bolsena (*Bolsay'na*; anc. *Volsinii*), a town on the north shore of the Lake of Bolsena (*Lacus Volsiniensis*), 20 miles NNW. of Viterbo. It now has only 2214 inhabitants; but prior to 280 B.C. it was one of the twelve Etruscan cities.—The lake, about 10 miles long and 8 broad, occupies a volcanic hollow.

Bol'sover, a village of Derbyshire, 6 miles E. of Chesterfield. Bolsover Castle belongs to the Duke of Portland. Pop. of urban district, 6844.

Bolsward, an old town of Friesland, 15 miles SW. of Leeuwarden. Pop. 6939.

Bolton, or **Bolton-Le-Moors**, an important manufacturing town and parliamentary, municipal, and county borough in South Lancashire, on the Croal, 11 miles NW. of Manchester. It was celebrated as far back as the time of Henry VIII. for its cotton and its woollen manufactures, introduced by Flemish clothiers in the 14th century. Emigrants from France and the Rhenish Palatinate subsequently introduced new branches of manufacture; and the improvements in cotton-spinning of the middle of the 18th century rapidly increased the trade of the town. Though Arkwright was at one time a resident, and Crompton lived all his life in Bolton parish, the opposition of the working-classes long retarded the adoption, in the town, of their inventions—the spinning-frame and the mule. Bolton, containing more than 100 cotton-mills, with about 4 million of spindles, is now one of the principal seats of the cotton manufacture in Lancashire. Muslins, fine calicoes, quiltings, counterpanes, dimities, &c., are manufactured. There are also extensive foundries and ironworks, bleaching-mills, chemical works, paper-mills, and dyeworks, with many neighbouring coal-mines. Bolton has public libraries and a museum, a public park and recreation grounds, a town-hall (1873), which cost £170,250, market-hall, fish-market, exchange, mechanics' institute, &c., and a water-supply from Entwisle Moor, 5 miles away. Bolton was the birthplace of the daily evening press. During the Civil War the Parliament garrisoned Bolton; in 1644 it was stormed by the Earl of Derby, who was beheaded here in 1651 on a spot now marked by his statue. Since 1832 it has returned two members. Pop. (1871) 92,655; (1881) 105,973; (1891) 115,002; (1901) 168,215.

Bolton Abbey, Yorkshire, on the river Wharfe, 6 miles E. of Skipton, and 21 NW. of Leeds. Founded for Augustinian canons about 1150, it is celebrated in Wordsworth's *White Doe of Rylstone* and *The Force of Prayer*. The remains range from Early English to Perpendicular; and the nave of the church has been restored for service. The gateway, familiar through Landseer's picture, has been incorporated in Bolton Hall, a seat of the Duke of Devonshire.

Boma, the capital of the Congo State (q.v.).

Bo'marsund, a Russian fortress on Åland Island, commanding the Gulf of Bothnia. In 1854 it was destroyed by an Anglo-French force, after a six days' bombardment. The Treaty of Paris bound Russia not to restore it.

Bombay, the western province of India. Including Sind and Aden (q.v.), it comprises 26 British districts and 19 native or feudatory states, and contains 194,189 sq. m., of which 69,045 are in native states. The Nerbudda River divides the 'presidency' into two portions: in the north is Guzerat, chiefly consisting of alluvial plains, with the Cutch and Kathiawar peninsulas; to the south is the Mahratta country, which includes parts of the Deccan, Carnatic, and Konkan or coast-districts. The small territories of the Portuguese—Goa, Daman, and Diu—have an area of 1062 sq. m. The coast-line is irregular, broken by the gulfs of Cambay and Cutch, with several fine natural harbours, Bombay and Karachi (Kurrachee) being the most important; in the north are the Khirtar, in the south-east are

the western Aravalli mountains; the Sahyadris or Western Ghats run almost parallel with the coast; the Satpura range runs east, and forms the watershed between the Tapti and Nerbudda. Sind is fertilised throughout by the Indus; the Subarmati and Mahi flow through North Guzerat; the Nerbudda pursues a western course into the Gulf of Cambay. The Tapti flows through Khandesh, entering the sea above Surat. The Runn of Cutch (q.v.), in the west of Guzerat, covers about 8000 sq. m., and is the great source of salt-supply. There are few minerals, and no coal; iron is mined at Teagar in Dharvar, and there is gold amongst the quartz. Good building-stone is abundant, with limestone and slate. In the dry sandy districts of Sind, the thermometer has reached 130° in the shade; the mean temperature in Lower Sind, during the hottest months, is 98° in the shade. The coast-districts are hot and moist, with a heavy rainfall during the monsoon. The tableland of the Deccan has an agreeable climate, except during the hot months.

Of late years, manufacturing industries have been extremely active in Bombay, which commands the richest cotton-fields in India. The stoppage of the American cotton-supply during the civil war gave a grand impulse to the trade of Bombay, where the first mill had been started in 1854, the exports of cotton during the five years 1861–66 averaging in value £21,582,847 a year. The wealth poured into Bombay at this period led to a vast extension of the trade, which partly continued after the period of inflation had passed. Not only does Bombay now compete with Manchester in the Indian market; it exports its own manufactures. After cotton, the other great staples are opium, wheat, and seeds. The trade in opium is worth nearly five millions sterling annually, two millions being the clear revenue derived by government from a pass duty of 550 rupees a chest. Although of recent origin, the wheat trade has assumed large proportions. Other principal exports are sugar, tea, raw wool, woollen shawls, fibres, and drugs; while among the imports are machinery, metals, oils, coal, and liquors. There is a considerable trade in Arab horses. Silk-weaving is carried on at Ahmedabad, Surat, Nasik, Yeola, and Poona; carpets are made at Ahmednagar; cutlery, armour, and gold and silver work in Cutch. Pop. (1891) of native states, 8,059,298; of British territory, 18,901,123 —reduced by 1901 by famine and plague to 6,908,648 and 18,559,561 respectively.

Bombay City occupies the entire breadth of the SE. end of Bombay Island or Peninsula, bordering at once on the harbour inside, and on Back Bay outside. The island, now permanently connected by causeways and breakwaters with Salsette Island and the mainland, is over 11 miles long by from 3 to 4 broad. The island-studded harbour is one of the finest in the world; the space available for shipping being about 14 miles in length by 5 broad. Bombay is the most European in appearance of all the cities in India. In the business part there are several streets continuously lined with splendid buildings; while the bazaars, which extend from the fort towards Mazagaon, are traversed by fairly wide streets, extensive lines of tramways passing through even the most crowded parts. Many of the private houses of European residents are built on the suburb of Malabar Hill, the ridge running into the sea forming the west of Back Bay; and at Breach Candy looking seaward. On the esplanade, facing Back Bay, are the secretariat, the university, senate-hall, high court, offices of public works, sailors' home, and statue of the Queen. In the neighbourhood of the fort are the town-hall, the mint, cathedral, and custom-house. The terminus of the Great Indian Peninsular Railway, opened in 1876, cost upwards of £300,000. The harbour is defended by batteries and ironclads. It has an extensive system of quays, wharves, and docks, extended in 1904–11 at a cost of 35,000,000 rupees. Mazagaon Bay, the centre of shipping activity, is at the head of the harbour. The city water-supply, equal to 100,000,000 gallons a day, has since 1892 been drawn from the Tansa valley, 65 miles N. Always favourably situated for foreign trade, Bombay has profited largely by being the first important port reached by vessels from Europe, and by being the terminus of the mail line to India by Suez and Aden, so that it stands next to Calcutta in amount of trade. The chief articles of export are cotton, wheat, shawls, opium, coffee, pepper, ivory, and gums; the chief imports, piece-goods, thread, yarn, metals, wine, beer, tea, and silk. The chief industries of the city are dyeing, tanning, and working in metal. The imports of the province of Bombay in the period 1885–1903 varied in annual value from £20,000,000 to £30,000,000; the exports from £23,000,000 to £31,000,000. With 60 large steam-mills, Bombay in one aspect resembles a city in Lancashire. Pop. (1881) 773,196; (1891) 821,764; (1901, after famine and plague) 776,000. In 1509, about a year before the capture of Goa, the Portuguese visited the island; and by 1532 they had made it their own. In 1661 they ceded it to Charles II. of England, as part of Catharine of Braganza's dowry, and in 1668 he granted it for an annual payment of £10 to the East India Company, which in 1685 transferred what was then its principal presidency to Bombay from Surat. Bombay was the birthplace of Dean Farrar, Sir Monier Williams, and Rudyard Kipling. See Sir W. Hunter's *Bombay* (1892).

Bommel, a town of Holland, on the Waal, 20 miles SSE. of Utrecht. Pop. 3835.—The Bommelerwaard is a fertile island-district (16 by 6 miles), formed by the Waal and Maas.

Bona (Fr. *Bône*), a seaport of Algeria, on a bay of the Mediterranean, near the mouth of the Sebus, 220 miles W. of Tunis by rail. It has good bazaars, manufactures of tapestry, saddlery, and native clothing; and a trade in wool, hides, corn, &c. The exposed roadstead has been made into a fair harbour. There are iron and copper mines near Bona, and some scanty remains of Hippo Regius, St Augustine's episcopal seat, destroyed by Calif Osman in 646. Pop. 32,500.

Bonaire. See Buen-Ayre.

Bonar, a Sutherland village, at the head of Dornoch Firth, 14 miles WNW. of Tain. Pop. 366. Telford's bridge (1812) here was destroyed in 1892, but has been rebuilt.

Bona Vista, a bay, cape, and seaport (pop. 2500) on the east coast of Newfoundland.

Bonchurch, a village, Isle of Wight, 1 mile E. of Ventnor.

Bondu, a country of French Senegambia, Africa, to the W. of Bambouk, on the lower Senegal and Falemé rivers, lying between 14°—15° N. lat. and 12°—13° W. long. The Fulah inhabitants are Mohammedans. Pop. variously estimated at from 30,000 to 100,000.

Bo'ness, or Borrowstounness, a seaport in Linlithgowshire, on the Firth of Forth, 23 miles WNW. of Edinburgh. It has a wet-dock of 7½ acres (1881), a large shipping trade in coal, and

manufactures of salt, soap, malt, vitriol, iron, earthenware, &c. *Graham's Dyke*, otherwise Antoninus' Wall, traverses the parish. Dugald Stewart spent his last twenty years at Kinneil House (Duke of Hamilton's) in the neighbourhood. Pop. (1851) 2645; (1901) 9306.

Bonhill, a Dumbartonshire town, with dye-works, on the Leven's left bank, opposite Alexandria, and 4 miles N. of Dumbarton. Bonhill was the seat of the Smolletts. Pop. 3343.

Boni, a small state in the south-west peninsula of Celebes, now practically Dutch, with an area of 935 sq. m. The inhabitants, called Bugis, have an allied language to the Macassars, and as enterprising merchants and sailors are found in every port of the East Indian Archipelago. The pop. by some estimates amounts to 200,000. The capital, Boni, stands on the east coast of the peninsula.—The GULF OF BONI, 200 miles long, and 40–80 broad, separates the south-east and south-west peninsulas of Celebes.

Bonifacio, STRAIT OF (*Bŏneefat'cho*), the strait between Corsica and Sardinia, only 7 miles wide at the narrowest. It is named from the Corsican seaport of Bonifacio; pop. 3397.

Bonillo (*Boneel'yo*), a town of Spain, 34 miles WNW. of Albacete. Pop. 4996.

Bonin', or (Japanese) OGASAWARA ISLANDS, a volcanic group in the Pacific Ocean, 700 miles SSE. of Japan, where 27° N. lat. crosses 142° E. long. Area, 30 sq. m.; pop. 1500. Discovered by Quast and Tasman in 1639, they were taken possession of by Britain in 1827; but in 1878 the Japanese reasserted their sovereignty, with the view of making them a penal settlement. The harbour is Port Lloyd.

Bonn (anc. *Bonna*), a town of Rhenish Prussia, beautifully situated on the left bank of the Rhine (here 600 yards wide), 21 miles SSE. of Cologne by rail. The Minster, said to have been founded by the Empress Helena in 320, but dating chiefly from the 11th and 13th centuries, has five towers, the middle one 311 feet high. Near it is a monument to Beethoven, who was born in the Rheingasse; and at Bonn are buried Niebuhr, Bunsen, and Schumann. The university, founded in 1777–86, in 1802 was transformed into a lyceum, but was re-established in 1818, receiving from government the beautiful electoral palace (1717–30) and other buildings, with an annual revenue of nearly £15,000 sterling. It has 126 professors and lecturers, and over 1200 students. Among its professors have been Niebuhr, A. W. Schlegel, Arndt, Welcker, Dahlmann, Hermes, and Simrock; Prince Albert was a student here. It has a library of above 250,000 volumes, a splendid laboratory (1868), an art museum (1884), a botanic garden, &c. The manufactures—jute, soap, chemicals, &c.—are unimportant. Pop. (1871) 26,030; (1890) 38,805; (1900) 50,737, chiefly Catholic.

Bonny, or BONI, a town and a river of Guinea, now in the British Niger protectorate. The river forms an eastern debouchure of the Niger, and falls into the Bight of Biafra. On the east side, near its mouth, is the town of Bonny, notorious from the 16th to the 19th century as the rendezvous of slave-trading ships.

Bonnyrigg, a Midlothian town, 7 miles S. of Edinburgh. Pop. 2924.

Bonyhad, a market-town of Hungary, 150 miles S. of Budapest. Pop. 5970.

Bonsall, a Derbyshire village, 2 miles SW. of Matlock. Pop. of urban district, 1360.

Booby Island, a level rock in Torres Strait, in 10° 36′ S. lat., and 141° 53′ E. long., 3 feet above high water, and ¼ mile in diameter.

Boodroom. See BUDRUN.

Boom, a town of Belgium, 10 miles S. of Antwerp, with great brick and tile works, breweries, tanneries, rope-walks, sailcloth manufactures, salt-works, &c. Pop. 16,239.

Boondee. See BUNDI.

Boone, a city of Iowa, 43 miles NW. of Des Moines, in a coal-mining district, with flour-mills, potteries, and tile-works. Pop. 10,000.

Booneville, a city of Missouri, on the Missouri River, 40 miles NW. of Jefferson City. Pop. 5000.

Bootan. See BHUTAN.

Boothia Felix, a peninsula on the north coast of North America, in which is the most northern part of the continent, Murchison Point, 73° 54′ N. lat. It was discovered by Sir John Ross (1829–33), and named, like the neighbouring Boothia Isthmus and Boothia Gulf, after Sir Felix Booth (1775–1850), a London distiller, who had furnished £17,000 for the expedition. Here, on the western coast, near Cape Adelaide, Ross discovered the magnetic pole, 70° 5′ 17″ N. lat., and 96° 46′ 45″ W. long.

Bootle, a municipal (1868) and county borough of Lancashire, to the north of and adjoining Liverpool, which includes a large portion of the Mersey dock system. It has a municipal technical college (1900). Pop. (1861) 6500; (1881) 27,112; (1891) 49,217; (1901) 58,556.

Booton, or BOUTON, an island off the coast of the south-eastern ray of Celebes. The people are Malays. The sultan, who resides at Bolio, is in allegiance to the Dutch. Area, 1700 miles; pop. 17,000.

Boppard (anc. *Baudobriga*), a town of Rhenish Prussia, on the left bank of the Rhine, 10 miles S. of Coblenz. Pop. 5894.

Bordeaux (*Bor-do'*), the third seaport of France, and chief town in the dep. of Gironde, is beautifully situated in a plain on the left bank of the Garonne, about 60 miles from its mouth in the Atlantic, and 359 miles SSW. of Paris by rail. Transatlantic steamers can easily ascend with the flood to Bordeaux, which is accessible at all times to vessels of 600 tons. The commerce both by the Garonne and by railways is very extensive, and the long and crescent-shaped harbour, providing anchorage for 1200 ships, has a singularly noble appearance. The river is crossed by a bridge 532 yards long, erected in 1811–21. The archiepiscopal cathedral of St André, consecrated in 1096, is remarkable for its beautiful towers, designed and built by English architects during the English occupation. Bordeaux contains a faculty of science and letters (rebuilt in 1885–87, and constituting part of the university of France, with 1500 students), schools of theology, medicine, art, and navigation, an academy of arts and sciences, a valuable gallery of paintings, a museum, and an observatory. The Grand Théâtre is one of the largest and finest buildings of its kind in France. The public library has upwards of 160,000 volumes. Pop. (1872) 190,682; (1891) 247,890; (1901) 257,638.

The principal branches of industry are the production or preparation of sugar, brandy, liqueurs, vinegar, tobacco, printed calicoes, woollen goods, casks, paper, earthenware, glass bottles, capsules, labels, and chemical products. There are large dockyards, but little shipbuilding. The old Canal du Midi connects Bordeaux with the Medi-

terranean. Except those of Champagne, no French wines have been so much exported to foreign countries as those grown in the dep. of Gironde, especially the Médoc, and known as Bordeaux wines. Some of them are red (known in England as *Claret*), others white. Brandy, vinegar, fruit, fish, lace, jewellery, ready-made clothing, and skins are also among the principal exports, the largest trade being with England and South America. Bordeaux is an important centre of the French cod-fishing ships for Newfoundland and elsewhere.

Remains of the Roman *Burdigala*, which was made by Hadrian the capital of Aquitania Secunda, are the so-called 'palace of Gallienus,' really the ruins of a large amphitheatre. Having suffered successively from Vandals, Goths, Franks, and Moors, Bordeaux was taken by Charles Martel in 735; as the capital of the duchy of Guienne, in 1152 passed, by the marriage of Eleanor of Guienne with the future Henry II. of England, under English dominion; and was finally restored to France in 1451. It was the birthplace of the poet Ausonius, Richard II. of England, and Rosa Bonheur.

Bordelais (*Bordelay'*), the country round about Bordeaux, was a recognised division of Guienne.

Bordentown, a town of New Jersey, on the Delaware, 28 miles ENE. of Philadelphia. It has iron-foundries, machine-shops, shirt-factories, and shipyards. Pop. 4232.

Borders, the tract of country lying immediately on both sides of the frontier line between England and Scotland, which runs diagonally north-east or south-west, between the head of the Solway Firth at the latter extremity, and a point a little north of the mouth of the Tweed at the other extremity; the counties touching upon this line being Cumberland and Northumberland on the English side, and Dumfries, Roxburgh, and Berwick on the Scottish side. The distance between the two extremities is nearly 70 miles as the crow flies; but, following the frontier line in its irregularities, about 110 miles. The line of division is for the most part a natural one. The middle portion, extending 35 miles, is formed by the high barrier of the Cheviot range. Leaving the Cheviots in the south-west, the line descends for nearly 22 miles by Kershope Burn, and the waters of the Liddel, Esk, and Sark, to the Solway Firth. From the north-east extremity of the Cheviots, the windings of the Tweed, for about 13 miles eastward, form the natural boundary. But at a point about 5 miles from the mouth of that river, the line strikes out semicircularly in a north-easterly direction, till it reaches the east coast a few miles north of the town of Berwick-on-Tweed; the space thus enclosed, embracing within it what are known as the 'Liberties' of that town, having been at one time regarded as neutral territory between the two kingdoms. On the western Border, near the Solway, was a corresponding tract of country claimed by both kingdoms, and hence called the 'Debateable Land.' For the history, traditions, minstrelsy, &c., of the Border country, see works by Ridpath (1776), Scott (1803), Veitch (1878), and Groome (1887), with others upon the counties.

Bordighera (*Bordigay'ra*), a winter-resort in the Italian Riviera, on a hill overlooking the Mediterranean, 7 miles WSW. of San Remo by rail. It was founded in 1470, but its modern progress dates from the opening of the Cornice road in 1823, and of railway communication. Pop. 4556.

Bor'eray, a Hebridean island, Inverness-shire, 1 sq. m. in area, 3 miles W. of North Uist. Pop. 112.

Borgerhout, an Antwerp suburb, on the Schyn, has tapestry and tobacco factories, and dye and bleaching works. Pop. 36,388.

Borgo, a name given to a number of towns and villages in Italy and Southern Tyrol, and indicating the growth of the town or village around a castle or castellated rock, the original Borgo. Thus there are the *Borgo*, the north part of Rome, on the right bank of the Tiber; *Borgo-Manero*, an Italian town in the province of Novara, with 4821 inhabitants; *Borgo San Donnino*, in the province of Parma, with 4493, &c.

Borgu, or Bussanga, a country in the basin of the middle Niger (right bank), of which the western (and larger) part is now French and the eastern is a province of (British) Northern Nigeria. At Boussa or Bussang (now British) on the Niger Mungo Park lost his life in 1805.

Borissov, a town in the Russian government of Minsk, on the Beresina, 418 miles WSW. of Moscow by rail. Pop. 14,235.

Borkum, an East Frisian island, at the mouth of the Ems, 25 miles NW. of Emden. Pop. 684, increased in summer by over 2000 visitors.

Bormio, an Italian village with eight hot sulphur-baths, on the borders of Tyrol, 27 miles NNE. of Tirano. Pop. 1744.

Borna, a town of Saxony, on the Wyhra, 17 miles SSE. of Leipzig by rail. Pop. 8350.

Borneo, next to Australia and New Guinea the largest island in the world, is situated in the Indian Archipelago, in 7° 3′ N.—4° 10′ S. lat., and 108° 53′—119° 22′ E. long. It is bounded on the E. by the Sea of Celebes and the Macassar Strait, S. by the Sea of Java, W. and N. by the Gulf of Siam and the China Sea. Its length is about 800 miles, with a breadth of 700, and an area of about 284,000 sq. m. The population is estimated at 1,875,000. In the far north rises the magnificent mass of Kinabalu (13,698 feet high), the culminating peak of the Indian Archipelago. Throughout the narrow northern portion of the island there runs a kind of central ridge in a general south-west direction, with highest points ranging from 4000 to 8000 feet; and this can be traced far to the south-west. Of modern volcanic activity there is in Borneo no trace. Many of the rivers are navigable far inland for boats of considerable burden, but their value as waterways is lessened by the bars which usually prevent the entrance of sea-going vessels, and in their upper reaches by frequent rapids and occasional waterfalls. There are many lakes. The climate in the low grounds is humid, hot, and unhealthy for Europeans; but in the higher parts towards the north the temperature is generally moderate, the thermometer at noon varying from 81° to 91° F. Vegetation is extremely luxuriant. The forests produce ironwood, bilian, teak, ebony, sandalwood, gutta-percha, dyewoods, benzoin, wax, dragon's blood, sago, camphor, various resins, vegetable oils, and gums. Nutmegs, cloves, cinnamon, pepper, betel, ginger, rice, millet, sweet potatoes, yams, cotton, sugar, indigo, tobacco, coffee, pine-apples, cocoanuts, &c., are cultivated. The mountains and forests contain many monkeys, among them the orang-outang. Tapirs, a small kind of tiger, small Malay bears, swine, wild oxen or banteng, and various kinds of deer abound. The elephant is found in the north, and the rhinoceros in the north-west. The few domesticated animals are

buffaloes, sheep, goats, dogs, and cats; horses are seen in Banjermassin. Among the birds are eagles, vultures, Argus-pheasants, peacocks, flamingos, pigeons, parrots, and the swallows which construct the edible nests prized by the Chinese for making soup. The rivers, lakes, and lagoons swarm with crocodiles, and many kinds of snakes, frogs, lizards, and leeches. Fish are plentiful, and the coasts are rich in tortoises, pearl-mussels, oysters, and trepang. Brilliant butterflies and moths are in great variety. Among the mineral products are coal, gold, and copper; antimony, iron, tin, platina, nickel, diamonds and other precious stones, rock-crystals, porcelain-clay, petroleum, and sulphur.

The population consists of the aboriginal heathen Dayaks or Dyaks, who constitute the great bulk of the population; the Mohammedans or 'Malays;' and the Chinese. The Dyaks live chiefly in the interior. The Malays on the coasts are traders and bold sailors. The Chinese engage in trade and mining, and are unwearied in their efforts to make money and then return to their native country. They have always endeavoured to live as independent republics under chiefs chosen by themselves. The principal exports are gold, gold-dust, diamonds, coal, ratans, gutta-percha, edible nests, cotton, wax, timber, dye-woods, mats, resins, sandalwood, camphor, &c.; the imports, earthenware, iron, steel, and copper work, piece-goods, yarns, woollen and silk fabrics, medicines, provisions, wines, spirits, rice, sugar, tea, tobacco, opium, gambir, gunpowder, &c.

Borneo has never formed a political unity, and there is no native designation for the island as a whole. The name Borneo (Burneï or Bruneï) originally applied to nearly the whole of the north-west of the island, under a sultan with absolute authority. The capital, Bruneï, 20 miles from the coast, on the river of the same name, has at most 20,000 inhabitants; the total population of Borneo proper or Bruneï may now be stated at 125,000. Its area was reduced by the erection of Sarawak (q.v.) into a practically independent principality by Sir James Brooke (1841–68), and by the establishment of the British North Borneo Company under the charter of 1881. The company has been successful in appropriating and developing its territory, which, with an area of 31,000 sq. m., and a coast-line of 900 miles, is divided into nine provinces, and has its capital at Elopura or Sandakan (pop. 5000). The population of the territory is estimated at 200,000. Since 1888 both Bruneï and Sarawak have been under British protection; and since 1891 Labuan is administered by the company. But by far the largest part of the island is ruled directly or indirectly by the Dutch, who have divided it into the Residency of the Western Division of Borneo, and that of the Southern and Eastern, the former having Pontianak (q.v.) as the seat of government, the latter Banjermassin (q.v.). The population of the Dutch portion of the island is about 1,200,000, of whom 800 are Europeans, and 32,000 Chinese. The chief towns in Borneo are Sambas (10,000), Pontianak (9000), Banjermassin (30,000), Bruneï (20,000), and Kuching (12,000).

See Wallace, *Malay Archipelago* (1869); Burbidge, *Garden of the Sun* (1880); Bock, *Head-hunters of Borneo* (1881); Frank Hatton, *North Borneo* (1885); the *Handbook of British North Borneo* (periodical); and Posewitz, *Borneo* (1889; Eng. trans. 1892).

Bornholm (*l* pronounced), a rock-bound Danish island in the Baltic, 90 miles E. of Zealand. Area, 226 sq. m. It is traversed by a hill-ridge (511 feet). The capital is Rönne or Rottum, on the west coast, with 7000 inhabitants. Pop. 45,364.

Bornu, or Bornoro, a powerful but declining state of Central Africa, somewhat larger in extent than England, bounded on the E. by Lake Chad, and N. by the Sahara. By treaty with France of 1890 it is within the British sphere of influence. The greater part of the country is perfectly level, and much of it is liable to be overflowed in the rainy season, which lasts from October to April. The heat from March to June is excessive, ranging from 104° to 107° F. The two principal rivers are the Shari and the Komaduga Yaobe, both of which fall into Lake Chad. The soil is fertile, yielding plentiful crops of maize, millet, and other tropical produce. Wild beasts are very numerous. The population, which is estimated at about five millions, is mostly of negro race, and called Bornuese or Kanuri. The ruling race, called Shuwas, are of Arab descent and bigoted Mohammedans; but many traces of fetichism remain among the masses. Whatever they have of civilisation is derived from the Arabs. The slave-trade is eagerly prosecuted in Bornu. In the beginning of the 19th century, Bornu was conquered by the Fellatahs, whose yoke, however, was soon shaken off. Dr Nachtigal, who visited Bornu in 1870, described it as rapidly decaying. The ruins of Birni, the old capital, on the Yaobe, may still be seen. Kuka or Kukawa, the present capital, on the west shore of Lake Chad, has a pop. of about 60,000. Gornu, to the south-east, is still more populous, and has one of the most important markets of Central Africa.

Boro Budor ('the great Buddha'), the ruin of a splendid Buddhist temple in Java, near the junction of the Ello and Progo. Built probably between 600 and 1430 A.D., it is a pyramid 520 feet square, and 118 high.

Borodino (*Borodee'no*), a village of Russia, 70 miles W. of Moscow. It is on the Kaluga, an affluent of the Moskwa, and gave name to the great but indecisive battle between Napoleon and the Russians, 7th September 1812. The French name the battle from the Moskwa.

Boroughbridge, a market-town of Yorkshire, on the Ure, 22 miles NW. of York. Edward II., in 1322, defeated the Earl of Lancaster here. Hard by are three great monoliths, the 'Devil's Arrows,' 16 to 22 feet high. Pop. 824.

Borovitchi, a town of Russia, on the river Msta, 98 miles E. of Novgorod. Pop. 10,375.

Borovsk, a town of Russia, 49 miles NNE. of Kaluga. Pop. 9505.

Borris, a village 17 miles S. of Carlow. Pop. 518.

Borrodale, an Inverness-shire estate, on Loch-na-Nuagh, 35 miles W. by N. of Fort William. Prince Charles Edward landed here (1745).

Borrome'an Islands, a group of four small lovely islands in the western arm of Lago Maggiore, Northern Italy. They are named after the ancient family of Borromeo.

Borrowdale, a beautiful valley of Cumberland, 5 miles S. of Keswick, ascending from the head of Derwentwater towards the Honister Pass. Here is the Bowder Stone, 89 feet in circumference, and 1971 tons in weight. The famous plumbago mine at Seathwaite in Borrowdale was closed in 1850.

Borrowstounness. See Bo'ness.

Borsad, a town of northern Bombay; pop. 13,000.

Borstal, a suburb of Rochester, with a reformatory for 'juvenile-adult' criminals.

Borth, a Cardiganshire watering-place, 8 miles N. of Aberystwith.

Borthwick, a peel-tower with memories of Queen Mary, 13½ miles SSE. of Edinburgh.

Bosa, a cathedral city on the W. coast of Sardinia, 85 miles NNW. of Cagliari. Pop. 6696.

Boscastle, a Cornish coast-village, 20 miles W. of Launceston.

Bos'cobel, on the eastern verge of Shropshire, 37 miles N. of Worcester, was, after the defeat of Worcester (3d September 1651), for two days the hiding-place of Charles II. His 'Royal Oak' is represented by a tree grown from one of its acorns; but Boscobel House still stands.

Bosco Reale (*Re-ah'leh*), an Italian village, 10 miles ESE. of Naples. Pop. 8190.

Bosna-Seraï. See SARAJEVO.

Bosnia and Herzegovina, a province lying between Dalmatia and Slavonia, which has made rapid progress in prosperity since the Berlin Treaty of 1878 transferred it from Turkey to Austria. (*Herzegovi'na*, locally pron. *Hertzegöv'ina*, is a Slav word for 'duchy' formed from the German *Herzog*.) Although not formally incorporated by treaty, these provinces form virtually a portion of the empire-monarchy, and enjoy the advantages of a settled government. Area, 19,725 sq. m., of which 16,197 belong to Bosnia, and 3528 to Herzegovina; population, 1,650,000. The Dinaric Alps, here attaining a maximum altitude of 7663 feet, form the water-parting between the Adriatic and Danube basins; and four rivers—the Unna, the Vrbas, the Bosna (from which Bosnia takes its name), and the Drina—flow northwards to the Save. Flocks and herds are largely reared. The commerce is largely in the hands of Jews, the majority of whom reside in Sarajevo, the capital, which is now connected by rail both with Budapest and the Adriatic. With the exception of the Jews, Gypsies, and some Osmanli who live in the larger towns of Bosnia, all the inhabitants of the Illyrian Alps are Slavs, and in Herzegovina their characteristics are most strongly marked. The Bosnians themselves, though united by race, are divided by religion, Mussulman against Christian, Greek-Orthodox against Roman Catholic. Hence, in spite of every natural advantage, they were, unlike their Servian brethren, unable to emancipate themselves from the Turkish yoke. Although they form little over a third of the population, the Mussulmans possess more than their share of landed property. The original population were doubtless of Illyrian (Albanian) stock, but were partly extruded, partly Slavonised, during the great Slav migrations of the early Christian centuries. The country was long dependent on Hungary, but became a kingdom some thirty years before the first Turkish invasion (1401). Soon after 1463 Bosnia was permanently conquered by the Turks, and thousands of the inhabitants were carried off as slaves, the boys were trained to be janissaries; the most obstinate Christians emigrated, and the bulk of the remainder accepted Islam more or less completely. Rebellions against the Osmanli power have been frequent, the Christian element became more powerful, and in 1878 the time for an Austrian occupation (bitterly resisted by the Mohammedan natives) seemed to have come.

See Evans, *Through Bosnia and Herzegovina on Foot* (1876); Asboth's work (Eng. trans. 1889); Laveleye's (trans. 1887) and Miller's (1896) on the Balkans; and Munro's *Bosnia* (2d ed. 1900).

Bos'phorus, or BOSPORUS (Latinised forms of a Greek word meaning 'ox-ford'), the ancient name of the channel which separates Europe from Asia, and connects the Black Sea (*Euxine*) with the Sea of Marmora (*Propontis*). It was so called, according to the legend, from Io, who swam across in the form of a cow. Afterwards, as the same name was bestowed upon other straits, this was designated the *Thracian Bosporus*. Its shores are elevated, and throughout its length the strait has on either side seven bays or gulfs, with corresponding promontories on the opposite side. One of these gulfs forms the harbour of Constantinople, or, as it is often called, the Golden Horn. Across the Golden Horn is Pera, and opposite the imperial city, on the other side of the Bosphorus, is Scutari. The length of the Bosphorus is about 17 miles, with a breadth of from little more than ¼ mile to 2 miles, and its average depth is about 30 fathoms. None but Turkish war-ships may navigate it without consent of the Sublime Porte. See BLACK SEA and KERTCH.

Bostan' (EL), 'the Garden,' a town of Asiatic Turkey, on the Sihun, 40 miles NW. of Marash. Pop. 8500.

Boston, a parliamentary and municipal borough and seaport in Lincolnshire, on the Witham, 30 miles SE. of Lincoln and 107 miles NE. of London by rail. Its name is a contraction of 'Botolph's town,' and it is supposed to occupy the site of the Benedictine abbey founded on the Witham by St Botolph in 654, and destroyed in 870 by the Danes. Under the Normans, Boston became a place of importance, in 1204 paying the largest dues (£780) of any English port but London (£836). In Edward III.'s reign many foreign traders settled, and the merchants of the Hanseatic League established a guild in Boston. After their departure, the town declined, and the suppression of the monasteries by Henry VIII. further injured it; but his grant of a charter of incorporation, and Mary's subsequent grant of extensive lands, partly compensated for this. The parish church measures 283 by 99 feet, and is one of the largest without transepts in England. The Perpendicular tower ('Boston Stump') is 263 feet high, and terminates in an octagonal lantern, doubtless intended for a lighthouse by land and by sea. The clearing of the river of silt, the formation of a new channel in 1881, and the opening of a new dock in 1884, have greatly promoted the trade of Boston, for ships of 2000 tons can now reach the heart of the town. The chief exports are coal, machinery, corn, and wool; and the imports consist of timber, maize, cotton-seed, and general merchandise. Boston is a great market for cattle and sheep, and has manufactures of canvas, sail-cloth, ropes, sacking, beer, iron, brass, leather, bricks, whiting, and hats, with some shipbuilding. Fox the martyrologist, Conington, Jean Ingelow, J. Westland Marston, and H. Ingram (founder of the *Illustrated London News*) were natives. Since 1885 Boston returns only one member to parliament. Pop. (1851) 14,733; (1901) 15,667 (parliamentary borough, 20,456).

Boston, capital of Massachusetts, and fifth in size of the cities of the United States, is situated on an inlet of Massachusetts Bay, called Boston Harbour, at the mouths of the Charles and

Mystic rivers, 234 miles NE. of New York by rail. It is connected with Cambridge, on the other side of the Charles, by several bridges. Boston possesses an excellent harbour, protected by several forts, and covering 75 sq. m., with a minimum depth of 23 feet at low tide; it has four fine lighthouses, and is dotted with more than fifty islands. Eight lines of railway converge here. Boston is reputed to be the wealthiest city of America in proportion to its population. The chief imports are sugar, wool, hides (for its large boot and shoe manufactories), chemicals, flax, and cotton goods; the principal exports, meat and dairy products, cattle, breadstuffs, cotton, and tobacco. Its manufactures are very varied; and its wool market comes next after that of London in importance. The Charlestown government navy yard is within the present limits of Boston, and the city, besides being the seat of many varied local manufactories, is the headquarters of heavy railroad, mining, and insurance interests. Boston is exposed to east winds, and pulmonary complaints are very prevalent; but otherwise its climate is healthy. It is one of the best built cities in the United States, prominent among its specimens of elaborate architecture being Trinity Church and the R. C. cathedral, the former erected at a cost of $750,000. The older buildings include the State-house (1795), with a conspicuous gilded dome, the Old State-house (1712), Christ Church (1723), Faneuil Hall (1743), afterwards termed 'The Cradle of Liberty,' and King's Chapel (1754). Among later public buildings and institutions may be noted Tremont Temple, the headquarters of New England Baptists, containing an audience-hall; the Free Public Library; the Post-office and Sub-treasury building, of granite, erected at a cost of about $6,000,000; the Lowell Institute, for the support of free public lectures; besides hospitals, homes, asylums, orphanages, dispensaries, &c. Among the higher institutions of learning are the Boston College (Catholic); the Boston University (Methodist); schools of technology and industrial science; two conservatories of music, schools of law and divinity; and the Massachusetts Medical College, connected with Harvard University, which, though located in Cambridge, is virtually a Boston institution. The 'Hub of the Universe' has long been noted for the interest taken by its citizens in literature, science, and art. It has been the birthplace of many famous men, including Franklin, J. S. Copley the painter, and his son Lord Lyndhurst, Chancellor of England, E. A. Poe, Emerson, Ticknor, Sumner and Parkman, as Cambridge was of Holmes and Lowell; while associated with it and Cambridge have been Hawthorne, Longfellow, Agassiz, Whittier, Motley, Bancroft, Prescott, Channing, T. Parker, Dana, Margaret Fuller, Thoreau, Aldrich, the Alcotts, the Jameses, and Howells. The city possesses some 250 literary, musical, and kindred associations. The number of newspapers and periodicals (including the *Atlantic Monthly*) here published is about 250. Originally founded in 1630 as Trimountain (from three hills on which it was built), upon the Shawmut peninsula, it was afterwards named Boston, after Boston in Lincolnshire, the native place of some of its colonists. The city now comprises what were formerly the separate towns of Roxbury (annexed in 1867), Dorchester (1869), and Charlestown, West Roxbury, and Brighton (1873). The conspicuous part borne by the town in the early troubles with England brought about the 'Boston Massacre' of 1770, in which several people were killed by the fire of the soldiery; and after the destruction of the British-taxed tea in the harbour (1773), the port was practically closed, and the town occupied by a British force, which, in March 1776, was finally compelled to evacuate the place (see BUNKER HILL). From 1830 to 1860 Boston was the headquarters of the movement for the suppression of slavery. The city has suffered from several destructive conflagrations, notably that of 1872. Pop. (1800) 24,937; (1840) 93,383; (1860) 177,840; (1880) 362,839; (1890) 448,447; (1900) 560,892. See Winsor's *History of Boston* (4 vols. 1880–82).

Boston Spa, a pretty watering-place in the West Riding of Yorkshire, on the Wharfe, 3½ miles NW. of Tadcaster.

Bosworth, or MARKET BOSWORTH, a market-town, Leicestershire, 12 miles W. by S. of Leicester. On a moor 2 miles S. Richard III. was defeated and slain (1485). Pop. of parish, 836.

Böszörmeny, a town of Hungary, 10 miles NNW. of Debreczin. Pop. 25,238.

Botany Bay, a shallow inlet of New South Wales, 5 miles S. of Sydney, discovered by Cook in 1770, and named by him from the number of new plants in its vicinity. In 1787 Botany Bay received England's first penal colony in the east; and though it was supplanted next year by Port Jackson, a better harbour to the north, it long continued to be the popular designation of the Australian convict settlements generally.

Bothnia, GULF OF, that part of the Baltic Sea (q.v.) which lies to the north of the Aland Islands, having on its eastern shore Finland, on the western and northern Sweden and Lapland. It extends from 60° to 66° N. lat. and 17° to 25° 35′ E. long., its greatest length being 415 miles, and its average breadth 100 miles. Its depth varies from 20 to 50 fathoms, but both along its shores and in the middle are many islets, sandbanks, &c., which render the navigation difficult. In winter it is usually so hard frozen that it can be crossed by sledges.

Bothwell, a Lanarkshire village, on the Clyde's right bank, 8 miles SE. of Glasgow. Bothwell Brig here was the scene of Monmouth's bloody defeat of the Covenanters in 1679; and a mile from the village are the stately ruins of Bothwell Castle, at whose base the Clyde washes the fair scenery of 'Bothwell Bank,' famous for centuries in Scottish song. Held before that by Olifards and Murrays, Bothwell Castle was possessed by the Douglases from 1365 till 1455; and to them it reverted in 1492, being now owned by their representative, the Earl of Home. Bothwellhaugh, 2 miles ESE., gave designation to James Hamilton, assassin of the Regent Moray. Joanna Baillie was a native of Bothwell. Pop. 3015.

Botoshani, a town of Moldavia, on the Shiska, 62 miles NW. of Jassy. Pop. 31,024.

Botzen, or BOZEN (Ital. *Bolzano*), an important trading town of the Austrian Tyrol, on the Eisach, 35 miles NNE. of Trent by the Brenner Railway. It manufactures silk, linen, hosiery, leather, &c. Pop. 13,641.

Bouches-du-Rhone (*Boosh-dü-Rōn*; 'mouths of the Rhone'), a dep. in the south-east of France, formerly a part of Provence, with an area of 1971 sq. m. It is divided into the three arrondissements of Marseilles, Aix, and Arles. Pop. (1872) 554,911; (1891) 630,622; (1901) 734,347.

Boufarik, a town of Algeria, 23 miles S. of Algiers by rail. Pop. 5275.

Bougie, a port of Algeria, on the Bay of Bougie, 120 miles E. of Algiers. The *Saldæ* of the Romans, and the 'Little Mecca' of the Arabs, it had sunk to a small village in 1833, when the French captured the place. Their extensive works have since rendered it a strong fortress and a commercial centre. Pop. 12,500.

Bouillon, a duchy, originally German, now part of Belgian Luxemburg, consists of a woody and hilly district in the Ardennes, about 145 sq. m. in extent. It was the possession of the famous crusader, Godfrey de Bouillon. The principal town is Bouillon, between steep hills on the Semoy, 9 miles NNE. of Sedan. Pop. 2765.

Boulak, or Bulak, a town of Egypt, on the Nile, opposite an island of the same name, 1 mile NW. of Cairo, of which it forms a suburb and the port. Pop. 20,000.

Boulge, a Suffolk parish, 3 miles NNW. of Woodbridge. Edward FitzGerald is buried here.

Boulogne (*Boo-loñ'*), a SW. suburb of Paris, on the Seine's right bank. It has numerous villas, and over 400 wash-houses on the river, which is here crossed by a fine stone bridge of twelve arches. Population, 37,500. The Bois de Boulogne, the Parisian's favourite place of recreation, is traversed by many walks and drives (see Longchamp). At the entrance of the wood lies Auteuil (q.v.). During the Revolution the trees of the older walks were mostly cut down; but when Napoleon chose St Cloud for his summer residence, new walks were planted and laid off. All traces of the injuries inflicted during the siege of 1870–71 have now disappeared.

Boulogne-sur-Mer, a fortified seaport in the French dep. of Pas-de-Calais, situated at the mouth of the Liane in the English Channel, 27 miles SW. of Calais, and 158 N. by W. of Paris by rail. The town consists of two parts—Upper and Lower Boulogne. The upper town, formerly strongly fortified, contains the hôtel-de-ville, on the site of the castle where Godfrey de Bouillon was born in 1061, and the former cathedral, rebuilt (1827–66) in the Italian style, with a dome 300 feet high, and with a miraculous image of the Virgin. The lower town, the seaport proper, is newer, more populous, and more lively, inhabited chiefly by merchants, mariners, and fishermen. Boulogne has extensive and excellent salt-water baths; and, on account of its fine sands, it is a favourite, though somewhat expensive resort for sea-bathing. The English residents have recently become much less numerous. Pop. (1872) 39,700; (1901) 44,416, actively engaged in the manufacture of linen, cordage, iron, steel pens and buttons, oil, soap, and chemical products. Boulogne is the chief station in France of the North Sea fisheries. It has an active coasting trade, and ranks with Calais as one of the nearest and most frequented places of passage between France and England, steamers plying daily to London, and twice a day to Folkestone. Paris is reached by railway in 4½ hours. About 5000 vessels, most of them English, of over 1,000,000 tons burden, enter or clear the port annually. The principal imports are woollen, cotton, and silk material; the exports are manufactured fabrics, leather, and wine. A new and vast deep-sea harbour was constructed in 1880–1904. The works include outer moles or breakwaters with a length of over 4400 yards, and an inner mole or traverse, 1200 yards long and 200 wide, alongside which steamships may lie at all states of the tide. The *Portus Gesoriacus* of the Romans, and later *Bononia* or *Bolonia*, Boulogne in 1435 came into the possession of the Duke of Burgundy, and was united with the crown of France by Louis XI. in 1477. It was taken by the English in 1544, and restored to the French in 1550. Here, in 1804, Napoleon encamped 180,000 men and collected 2400 transports, ready at any favourable moment to swoop down on Britain. The poets Churchill and Campbell, and Le Sage, the author of *Gil Blas*, died here.

Bourbon, Isle de. See Réunion.

Bourbonnais (*Boorbonnay'*), in the centre of France, from 1327 to 1523 formed the duchy of Bourbon, and afterwards, as a crown domain, formed a province. It now constitutes the dep. of Allier and part of Cher. The capital was Moulins.

Bourbonne-les-Bains (*Boorbonn'-leh-Ban²*), a town in the French dep. of Haute-Marne, 29 miles ENE. of Langres. Its saline springs reach a temperature of over 130° F. Pop. 4766.

Bourboule, a bathing-resort in the French dep. of Puy-de-Dôme, on the Dordogne, with hot mineral springs of 88°–129° F. Pop. 2161.

Bourgas. See Burgas.

Bourg-en-Bresse (*Boorg-on²-Bress*), the chief town of the French dep. of Ain, on the Reyssouze, 37 miles NE. of Lyons. The church of Brou here, built by Margaret of Austria in 1505–36, contains a superb monument to Philibert of Savoy. Bourg manufactures mineral waters and pottery. Pop. 18,500.

Bourges (*Boorzh;* anc. *Avaricum*), capital of the French dep. of Cher, at the confluence of the Auron and the Yèvre, 144 miles S. of Paris, and 69 SSE. of Orleans. Its houses are antique, and its streets crooked and dirty. The cathedral (1220–1538) is a splendid Gothic edifice, the interior one of the noblest in France, being 405 feet long and 117 high. A university (1465) was suppressed at the Revolution. The hôtel-de-ville dates from 1443. Brewing is carried on, and there are nurseries. Chosen in 1861 to be an arsenal, Bourges has a cannon foundry, and has greatly increased in strategical importance since the loss of Metz. Louis XI. and Bourdaloue were natives. Pop. 47,500.

Bourget, Le (*Boorzhay'*), a village 6½ miles NE. of Paris, during the siege in 1870 the scene of a series of bloody struggles disastrous to the French.—The Lac du Bourget, the largest wholly French lake, in Savoie dep., lies 780 feet above sea-level, and measures 7½ by 3 miles.

Bourne, a town of Lincolnshire, 9½ miles W. of Spalding. Lord Burghley, Dr Dodd, and Worth 'of Paris' were natives. Pop. 4500.

Bournemouth, a favourite Hampshire health resort, on Poole Bay, 37 miles SW. of Southampton, and 116 of London. It is included within the parliamentary borough of Christchurch, from which it is 4 miles distant, and in 1890 it was made a municipal borough. Its rise has been rapid; until 1838 it consisted of but a few fishermen's huts and a coastguard station. It is situated for the most part in the pine-clad valley of the Bourne Brook, the banks of which are laid out as public gardens. The sands extend for 3 miles. The climate is fine, the air soft without being relaxing, and the country around is beautiful. Two piers, one 800, the other 840 feet long, were erected in 1861 and 1879. Of several churches the finest is St Peter's (1864), with memorial windows to Keble, who died at Bournemouth: in its churchyard are the graves of Godwin, Mary Wollstonecraft, and Mary

Shelley. Pop. (1861) 1940; (1871) 5906; (1881) 18,607; (1901) 47,100.

Bourneville, a Worcestershire suburb of Birmingham, built since 1879 as a garden city by Mr George Cadbury for the employees in his great cocoa-works, admirably equipped for family and social life. Pop. 4000.

Boussa, or BUSSANG, a walled town of (British) Northern Nigeria, off an island in the Niger, in 10° 20′ N. lat. Mungo Park perished here in 1805. Pop. 10,000.

Bouvines (*Boo-vean'*), a village in the French dep. of Nord, 8 miles SE. of Lille, the scene of Philip Augustus's victory over Otho IV. in 1214, and of struggles in 1794 between the Austrians and the victorious French army of the north.

Bovino (*Bovee'no*), a cathedral city of South Italy, 20 m. SSW. of Foggia. Pop. 7388. The imperialists defeated the Spaniards here in 1734.

Bowdon Downs. See ALTRINCHAM.

Bowling, a Dumbartonshire village, on the Clyde, 3½ miles ESE. of Dumbarton. Pop. 1018.

Bowling Green, a town of Kentucky, 114 miles S. by W. of Louisville by rail. Pop. 8803.

Bowmore, a seaport of Islay island, Argyllshire. Pop. 748.

Bowness, (1) a town of Westmorland, on the east side of Lake Windermere, 8 miles NW. of Kendal. Pop. 2662.—(2) A seaport of Cumberland, on the Solway Firth, 12 miles WNW. of Carlisle. Pop. of parish, 1322.

Box Hill. See DORKING.

Boxtel, a town of Holland, 38 miles S. by E. of Utrecht. An Anglo-Dutch army was here defeated by the French in 1794. Pop. 6703.

Box Tunnel, 3195 yards long, on the Great Western Railway, 5 miles NE. of Bath.

Boyacá, a dep. of Colombia, touching Venezuela. Area, 33,351 sq. m.; pop. 650,000. Capital, Tunja, 6000 inhabitants.

Boyle, a town in County Roscommon, on the river Boyle, above its expansion into Lough Key, 108 miles NW. of Dublin by rail. Pop. 2474.

Boyne, a river of Ireland, rises in the Bog of Allen, and flows 80 miles through Kildare, King's County, Meath, and Louth, past Trim, Navan, and Slane, and enters the Irish Sea 4 miles below Drogheda. It receives the Mattock and Blackwater, and is navigable for vessels of 250 tons to Drogheda, for barges of 70 tons to Navan. In the battle of the Boyne, fought on its banks, 3 miles W. of Drogheda, on 1st July 1690, William III. defeated James II.

Bozen. See BOTZEN.

Bozrah (mod. *el-Busaireh*), a town of Edom, in the mountain district to the south-east of the Dead Sea, about 300 B.C. capital of the Nabatæans, but now an unimportant village.

Bozzolo (*Bot'zolo*), a town of North Italy, 14 miles WSW. of Mantua. Pop. 4154.

Bra, a town of North Italy, 31 miles SSE. of Turin by rail. Pop. 9856.

Brabant' was the name formerly given to an important province of the Low Countries, extending from the left bank of the Waal to the sources of the Dyle, and from the Maas and the plain of Limburg to the Lower Scheldt. After many changes, Brabant was made a part of the kingdom of Holland, at the Congress of Vienna; but since the revolution of 1830, the three provinces of Brabant have been divided as follows: North or Dutch Brabant, the Belgian province of Antwerp, and South Brabant, also Belgian.

Brabourne, a parish of Kent, 6 miles E. of Ashford.

Brackley, a market-town of Northamptonshire, on the Ouse, 7 miles WNW. of Buckingham. It is a municipal borough, reincorporated in 1886, and till 1832 returned two members. Pop. 2500.

Braddock, a borough of Pennsylvania, on the Monongahela, 10 miles by rail SE. of Pittsburgh, with steel and car works. Here General Braddock fell in 1755. Pop. 16,500.

Bradfield, in Berkshire, 7½ miles W. of Reading, the seat of a public school, St Andrew's College (1850). Pop. of parish, 1458.

Bradford, an important manufacturing town in the West Riding of Yorkshire, on a tributary of the Aire, at the meeting of three vales, 9 miles W. of Leeds, 34 SW. of York, and 191 NNW. of London by rail. Bradford in 1832 was created a parliamentary borough, in 1847 a municipality, in 1888 a county, and in 1897 a city. Municipal and parliamentary boroughs were made conterminous in 1885; in 1899 the municipal (county and city) was extended to include Idle. For parliamentary purposes it falls into 3 districts, each returning one member. Bradford is the chief seat in England of the spinning and weaving of worsted yarn, and the great mart for the long wools used in worsted fabrics. It has developed of late worsted coating, velvet, and plush industries. The first mill was built in 1798; there are now more than 300. Coal and iron mines occur near Bradford, and the ironworks at Bowling and Lowmoor are very large and important; the making of machinery is a considerable industry; and there are neighbouring stone quarries. The parish church of St Peter is a fine Perpendicular building, with a tower of later date, and a number of interesting monuments. Bradford has also a town-hall (1873) of medieval design, which cost over £100,000, with campanile and carillon; mechanics' institute (1870); St George's Hall (1853); exchange (1867); extensive wholesale and retail markets, which have cost £150,000; grammar-school; technical college (1882); free library (1872); post-office, a fine building in the Italian style (1887); &c. Of its seven parks the older are Peel Park (56 acres), Lister or Manningham Park (56 acres), Horton Park (39 acres), Bowling Park (53 acres), and Bradford Moor Park (15 acres). In the civil wars, the people of Bradford took the parliament side, and twice defeated the royalists, but were afterwards themselves defeated by the Earl of Newcastle. The worsted trade, introduced to Bradford at the end of the 17th century, made rapid progress after the invention of the steam-engine. In a riot at Bradford against the introduction of worsted powerlooms in 1826, two of the rioters were shot dead by the defenders of the mill which contained the obnoxious machinery, and many more were wounded. In 1825 a strike for increased wages, in which 20,000 persons were concerned, lasted six months. Its trade suffered severely owing to the McKinley tariff in the United States. This town is the seat of the first English temperance society (1830). There are statues of Sir Robert Peel, Richard Oastler, Sir Titus Salt, S. C. Lister, and W. E. Forster. Pop. (1851) 103,778; (1881) 194,495; (1891) 216,361; (1901) of parl. borough, 216,375, and of mun. and county borough, 279,767. See James's *History of Bradford* (2 vols. 1841–66).

Bradford, a Pennsylvanian town, 65 miles S.

of Buffalo, with oil-wells and sawmills. Pop. 15,544.

Bradford-on-Avon (Sax. *Bradanford*, 'broad ford'), a town of Wiltshire, on the Avon, and on the Kennet and Avon Canal, 9 miles SE. of Bath. Formerly it was the seat of important woollen manufactures, and kerseymeres were first made here. The tiny church (38 feet long) of St Lawrence, built by St Aldhelm between 675 and 709, is the only perfect building of pre-Norman times now remaining in England. It had been used for two centuries as a school and dwelling-house, when in 1856 it was rescued from profanation. On the summit of Torr Hill are the ruins of a 14th-century chapel of the Virgin; and the town bridge retains its desecrated chapel. At Bradford, Cenwalh, king of the West Saxons, gained a great victory over the Welsh in 652. Pop. 4557.

Brading, a small but ancient town, once a parliamentary borough, in the Isle of Wight, 4 miles S. of Ryde by rail. In its churchyard is buried the 'Dairyman's Daughter;' and in 1880 the remains of a Roman villa, with a tessellated floor, were unearthed near the town. Pop. 1994.

Braemar, a Highland district, occupying the south-west corner of Aberdeenshire (q.v.), in the heart of the Grampian Mountains, and traversed by the upper waters of the Dee. In the east part is Balmoral; and near its centre, 61 miles W. by S. from Aberdeen, is the small village of Castleton of Braemar, where in 1715 the Earl of Mar raised the Pretender's standard. Pop. 516.

Braeriach (*Bray-ree'ahh*), a summit (4248 feet) of the Cairngorms, on the border of Aberdeen and Inverness shires.

Braga, the capital of the Portuguese province of Minho, 34 miles NE. of Oporto by rail. It has the palace of the primate of Portugal, a fine Gothic cathedral (12th century), and manufactures of linen, hats, cutlery, firearms, jewellery, &c. The *Bracara Augusta* of the Romans, it retains ruins of a temple, an amphitheatre, and an aqueduct. Near it is a celebrated place of pilgrimage. Pop. 24,755.

Bragança, two considerable towns in Brazil. (1) A seaport, 100 miles NE. of Para, at the mouth of the Caite. Pop. of town and district, 6000. (2) An inland city of 10,000 inhabitants, 50 miles NE. of São Paulo.

Braganza, or Bragança, capital of the Portuguese province Traz-os-Montes, on the Fervença, 26 miles NW. of Miranda. It is the see of a bishop, and gives name to the ruling House of Braganza. Pop. 5495.

Brahmanbaria, a town of India, Tipperah district, in the presidency of Bengal, on the Titas River. Pop. 17,438.

Brahmaputra ('son of Brahma'), one of the largest rivers of India, rises in Tibet, and, after partially mingling with the Ganges, flows into the Bay of Bengal. From explorations (1878–82) by one of the Asiatics attached to the Indian Survey, it was rendered certain that the Sanpo is the highest source of the Brahmaputra (and not, as had been sometimes said, of the Irawadi). The Sanpo has its rise in Lake Manasowar in Western Tibet, in an elevated tableland, from which also spring the Sutlej and the Indus; flows eastward for 1000 miles on the plateau of Tibet; then, turning SE., it pierces the Himalayas to descend to the valleys of Assam. Here known as Dihong, it unites with the Dibong and the Brahmakunda, the three rivers forming the Brahmaputra, which flows SW. and S. The entire length from the latter source exceeds 900 miles; from the former 1800 miles. The united stream bears along a vast body of water, broken by many islands, and throwing off branches; it flows from NE. to SSW. for about 450 miles, leaves Assam near Dhoobri; flows S. round the Garo Hills; for 180 miles its course is through the plain of East Bengal, till it joins the Padma, or main stream of the Ganges, at Goalanda. Here the conjoint delta of these rivers begins; the great body of its waters flowing SE. reaches the sea by the estuary known as the Meghna. During the rains the Brahmaputra floods hundreds of sq. m. of country, reaching a height of 30 to 40 feet above its usual level. This supersedes artificial irrigation, and the plains so watered yield abundantly rice, jute, and mustard. The Brahmaputra is navigable for steamers to Dibrugarh, 800 miles from the sea.

Brahui. See Beluchistan.

Braidwood, a Lanarkshire village, 7 miles WNW. of Carstairs Junction. Pop. 587.

Braila, or Brahilov, a river-port of Roumania, on the left bank of the Danube, 10 miles above Galatz, and 142 NE. of Bucharest by rail. The seat of a Greek cathedral, it was a free port till 1883, has new docks (1886–92), and exports large quantities of corn and other products. Braila was burned by the Russians in 1711, and Gortschakoff crossed here in 1854. Pop. 56,715.

Braine-le-Comte (*Brain-le-Comt*), a town of the Belgian province of Hainaut, on the Senne, 19 miles SSW. of Brussels. Pop. 8176.

Braintree, a market-town of Essex, 45 miles NE. of London by rail. It has manufactures of silk, crape, straw-plait, &c. Pop. 5333.

Brambanan, a district of the province of Surakarta, Java, rich in remains of Buddhist temples.

Brambor, a Sussex village, on the Adur, 4½ miles NNW. of New Shoreham. It has a ruined castle, and till 1832 returned two members.

Bramblotye House, a ruined Jacobean mansion, in Sussex, near East Grinstead.

Brampton, a very ancient town of Cumberland, 9 miles ENE. of Carlisle by rail, once a great centre of hand-loom weaving. The moot-hall is a magistrate's office. Near it is Lanercost Abbey (q.v.). Pop. of parish, 2790.

Bran, a feeder of the Tay, with fine falls, near Dunkeld.

Branco, Rio, a river of Northern Brazil, rising in the Parima Mountains, and flowing 400 miles southward to the Rio Negro, of which it is the principal tributary, on its way to the Amazon.

Brandenburg (*a* as *oo*), a central province of Prussia, formed the nucleus of the present monarchy, and almost all a low plain. Area, 15,410 sq. m.; population, 3,200,000.—The *town* of Brandenburg (anc. *Brennabor* of the Wends), on the Havel, 38 miles WSW. of Berlin, has a castle and a cathedral (14th century), with a fine crypt, on an island in the river. Pop. 50,000.

Brandenburg, Neu. See Neubrandenburg.

Brandeston, a Suffolk parish, on the Deben, 3½ miles SW. of Framlingham. It was the residence of the great lawyer, Charles Austin.

Brandon, a quaint old market-town, mostly on the Suffolk side of the Little Ouse, 7½ miles NW. of Thetford, and 86 NE. of London by rail. In the neighbourhood are Neolithic flint-workings known as the *Grimes Graves*. Gun flints are

still made here, chiefly for the African market; and the continuity of this industry can be traced at Brandon in unbroken sequence to an early prehistoric period. Pop. of parish, 2334.

Brandon, a town of Manitoba, Canada, on the Canadian Pacific Railway, below the junction of the Assiniboine and Little Saskatchewan rivers, in a prolific wheat-growing district. It was founded in 1881, and in the following year had over 1500 houses. Pop. 7000.

Brandywine Creek, a stream rising in Chester county, Pennsylvania, flowing south-eastward into Delaware, and emptying into Christiana Creek at Wilmington. Here, September 11, 1777, 13,000 Americans, under Washington, were defeated by 18,000 British, under Lord Howe.

Brantford, a town on the Grand River, Ontario, 24 miles SW. of Hamilton by rail. Pop. 18,000.

Brantwood. See CONISTON LAKE.

Branxholm, a quondam Border castle, Roxburghshire, 3 miles SW. of Hawick.

Brass River, a deltaic arm of the Niger (q.v.).

Brattleboro, in Windham county, Vermont, on the Connecticut River, 110 miles S. of Montpelier. Pop. 6000.

Braunsberg, a town of East Prussia, on the navigable Passarge, 8 miles from its mouth, and 38 SW. of Königsberg by rail. It manufactures machinery, felt, and leather goods. Pop. 12,759.

Bray, (1) a Berkshire parish, on the Thames, 1½ mile S. by E. of Maidenhead. *The* 'Vicar of Bray' was Simon Aleyn, from 1540 to 1588, during the reigns of Henry VIII., Edward VI., Mary, and Elizabeth.—(2) A seaside town, partly in Dublin county, but chiefly in Wicklow, 13 miles SE. of Dublin by rail. The beauty of its situation has raised it from a small fishing-village to a watering-place, popularly known as the 'Irish Brighton.' Pop. 7500—doubled in the season.

Bray is a district of Normandy, now the south-eastern part of Seine-Inférieure, famous for its cattle and dairy produce.

Brazil, the largest state of South America, covering nearly half of the South American continent, is little less in area than the whole of Europe; even if it be found that the estimated area, 3,288,000 sq. m., should be reduced to 3,219,000. It has a length of 2660 miles, and a breadth of 2705 miles between extreme points. It borders on every state in South America except Chili. The name was given by early explorers from thinking that the red dyewood (Brazil-wood) found here was identical with the East Indian dyewood known to them as *Brasil*. Brazil is a triangular-shaped country, occupying the eastern angle of the continent. It lies almost wholly within the tropics, and is still in great part unexplored and unsettled. On the north and west are the great depressions of the Amazon and Paraguay rivers, which comprise large areas of flood-plains and swamps, heavily wooded, and almost uninhabitable. The northern coast is bordered by low, alluvial bottom-lands and sandy plains, full of lakes, and in places very sterile; while the southern angle of the country is rolling *campo* land, bordered by a low sandy coast. Above its eastern angle a large area of coast-lands and neighbouring plateau is subject to periodical devastating droughts. The interior of the country, however, is a high plateau, with a general elevation of 1000 to 3000 feet, irregularly ridged by mountains and deeply cut by large rivers. The mountainous ranges of the maritime system form the eastern margin of this plateau, the easternmost of which is known as the Serra do Mar. This range plays an important part in the development of Brazil, for it is a costly barrier to communication with the interior, and turns nearly all the great rivers inland to find outlets through the distant Amazon and La Plata. The mountains are composed almost exclusively of uplifted strata of great geological age, gneiss and metamorphic schists, with granite and other eruptive rocks. The great elevated plains are composed of horizontal strata dating from the Silurian age. Brazil possesses three great river-systems—the Amazon, La Plata, and San Francisco. The Amazon and its tributaries drain fully a half of the country. To the east of the Madeira these tributaries are tableland rivers, broken by rapids and freely navigable for comparatively short distances. West of the Madeira they are lowland rivers, sluggish, bordered by extensive flood-plains, and afford free navigation for long distances. The La Plata system drains nearly one-fifth of the country through its three branches —the Paraguay, Paraná, and Uruguay. The first of these is a lowland river, freely navigable for a long distance, while the other two are tableland rivers, full of obstructions, and without free outlets for their upper-level navigation. The San Francisco is a tableland river, flowing north-east between the Goyaz and maritime mountains, and then, breaking through the latter, south-east to the Atlantic. It is not freely navigable because of the Paulo Affonso Falls. The other coast-rivers are generally short. The climate of Brazil varies greatly—the lowlands of the Amazon and a great part of the coast being hot, humid, and unhealthy, while the tablelands and some districts of the coast swept by the trade-winds are temperate and healthy. The vegetation of Brazil is luxuriant and varied. The vast forests of the Amazon contain hundreds of species of trees, draped and festooned by climbing plants, lianas, orchids, &c. Rosewood, Brazil-wood, and others supply valuable timber; whilst tropical fruits are abundant. The number of species of animals is also very large, but the individuals in each are comparatively few. Beasts of prey are the jaguar, puma, tiger-cat, and ocelot; the other animals include the monkey, tapir, capybara, peccary, ant-eater, sloth, and boa-constrictor. Alligators, turtles, porpoises, and manatees swarm in the Amazon; and among birds the parrots and humming-birds are especially numerous. The population of Brazil, according to an official estimate of 1900, was 14,500,000, of whom some 2,000,000 were negroes, 400,000 Indians, and the remainder pretty equally divided between whites and half-breeds. In the coast-towns the whites predominate. The proportion of non-producers is very large, the natural conditions of the country rendering labour but slightly necessary to meet the ordinary requirements of life. The institution of slavery has had much to do with this state of things. The African slave-trade was prohibited in 1831, but did not actually cease until 1854. In 1871 a gradual emancipation law was adopted, and in 1885 a more thorough one; and finally, by the law of 13th May 1888, immediate and unconditional emancipation was decreed. The Roman Catholic is the established religion, and is supported by the state; but all other sects are tolerated. There are, however, less than 30,000 non-Catholics in the country. Education is still in a very backward condition. The language is Portuguese, with dialectal varieties.

Since the revolution of 1889, Brazil, as the

'United States of Brazil,' is a federative republic: each of the old provinces, also the federal district around the capital, Rio Janeiro, is a state, and is administered by its own authorities at its own expense: while defence, customs, postage, banking, &c., are the concern of the union. The central executive authority consists of the president, a vice-president, and a ministry. The legislative authority resides in a national congress of two chambers, the chamber of deputies and the senate. Each state has its own administrative, legislative, and judicial authorities. The army is raised by obligatory military service, and consists of about 30,000 men, besides 15,000 gendarmerie. The navy comprises 3 seagoing and 6 coast defence armour-clads, 14 torpedo boats, besides unarmoured cruisers, corvettes, gunboats, and transports, manned in all by 7000 officers and men. The revenue has since 1900 varied from £15,000,000 to £25,000,000; the expenditure has of late years been—nominally at least—covered by the revenue. The debt, external, internal, and floating, is about £110,000,000.

The industries of Brazil are confined almost exclusively to agriculture, mining, and forest products. Stock-raising has totally failed to keep pace with the domestic consumption of jerked-beef, which is largely imported. The coast fisheries have also been neglected, although Brazil is a large consumer of codfish. The forest products are rubber, maté, nuts, cocoa, medicinal plants, cabinet and dye woods, &c.—the first ranking third in importance as an article of export. Of agricultural products, coffee occupies the first place, and furnishes about two-thirds of the total exports of the whole empire. Sugar ranks second. The production of cotton and tobacco has considerably decreased, and that of tapioca has nearly disappeared. Rice, maize, and many other products are easily grown, but have been overshadowed by coffee and sugar, and to some extent discouraged by the high cost of internal transportation. In colonial times the mining industries yielded large results; they are now comparatively unimportant. Gold and diamonds are found in Minas Geraes, Paraná, and Bahia, but the annual production at present is not large. Iron ores of superior quality exist in several provinces, but the absence of coal is a serious obstacle. The total exports varied in 1900–3 from £35,000,000 to £44,000,000 a year, the imports from £22,000,000 to £24,000,000. The annual exports to Great Britain vary from £4,000,000 to £5,000,000; the imports (which have declined) have a like range. The inhabitants of the southern provinces of the empire are broadly distinguished by their energy from the more indolent northerners. It is in the southern provinces that the numerous German colonies (comprising some 220,000 Germans) are mostly established. Steam communication with Europe was opened in 1850, and telegraphic communication in 1874. The first railway was opened in 1854; Brazil now possesses some 9800 miles of railway and 17,400 miles of telegraph. The milreis, the unit of the monetary system, fluctuates very much in value—from 2s. 3d. (1890) to 11¾d. (1902).

Brazil was discovered by Pinzon in 1500, and taken possession of, for Portugal, by an expedition under Cabral in the same year. In 1808 the royal family of Portugal expelled by the French took refuge in the colony, which became a kingdom in 1815, an empire in 1822. The emperor Dom Pedro II. was expelled in 1889, and a republic established, which has been much perturbed by rebellions. Since 1891 civil war had been going on desultorily in some parts of the republic, especially around Rio Janeiro, in the province of Rio Grande, and in Minas Geraes, which in 1892 declared itself a separate state. In 1893 the capital was bombarded by the navy in rebel hands, but in 1894 the rebellion collapsed. There was a minor rising in 1897 under a religious fanatic; and a more important plot against the government in the same year was frustrated.

See works on Brazil or the Amazon valley by Southey (history, 1819), Agassiz (1870), Hartt (1870), A. R. Wallace (1870), Bates (1873), Mulhall (1877), Fletcher and Kidder (frequently reprinted, Phila.), H. H. Smith (1880), and Wells (1886).

Brazos, a river of Texas, U.S., rising in a tableland called the Staked Plain, in the NW. of the state, and running 950 miles south-eastward to the Gulf of Mexico, 40 miles SW. of Galveston.

Brazza, the largest and most populous of the Dalmatian islands of the Adriatic, with an area of 152 sq. m., and a pop. of 25,000. It rises to 2578 feet, and is richly wooded. San Pietro is the chief town.

Breadal'bane, a district of NW. Perthshire, among the Grampians, giving the title of earl to a branch of the Campbells.

Brechin (*Bree'hhin*), a town of Forfarshire, on the South Esk, 8½ miles W. of Montrose. With Montrose, &c. it returns one member. Linen and paper are manufactured, with bleaching, distilling, and brewing. David I. founded a bishopric here about 1150. Part of the cathedral is now the parish church, at whose south-west angle rises the Round Tower (*c.* 983, 87 feet high) of a Culdee college, similar to the Irish ones, and to the one at Abernethy, the only other example in Scotland. Brechin Castle, the ancient seat of the Maules, and now of the Earls of Dalhousie, was taken by Edward I. in 1303 after a twenty days' siege. The town itself was burned by Montrose in 1645; and near it Huntly defeated the rebellious Crawfords in 1452. Dr Guthrie was a native. Pop. (1851) 6638; (1901) 8941.

Brecknock, or Brecon, the capital of Brecknockshire, at the confluence of the Usk and Honddu, 183 miles W. by N. of London by rail, and 40 NE. of Swansea. It lies in the midst of fine mountain scenery, and has beautiful public walks, the triple-peaked Brecon Beacons (2910 feet) rising to the south. From 1536 to 1885 Brecon returned one member to parliament. Flannels, coarse woollens, and hats are manufactured. Bernard de Newmarch founded the town, and built a castle here in 1094. Henry VIII. in 1541 converted a Dominican friary into a college, which was rebuilt in 1864; the priory, now the parish church, was restored in 1862. Mrs Siddons was a native. Pop. (1881) 6372; (1901) 5875.

Brecknockshire, or Brecon, an inland county of South Wales. The maximum length is 39 miles; its breadth ranges between 11½ and 30 miles; and its area is 719 sq. m., of which only 43 per cent. is cultivated. Brecknockshire is one of the most mountainous counties in South Wales, and has deep, beautiful, and fertile valleys. Two principal mountain-chains, the highest in South Wales, culminating in the Brecon Beacons at 2910 feet, intersect the county in the north and south, and occupy, with their offshoots, a great part of the surface. The chief rivers are the Wye and Usk; and Llangorse Lake covers nearly 1800 acres. The agriculture, though still defective, especially in the higher districts, has

been greatly improved by the Brecknockshire Agricultural Society, instituted in 1775. The mineral produce is small, consisting of iron, especially along the south border; coal and limestone are also found in the south and west. The Brecon Canal connects the county with the Bristol Channel. There are several small factories of woollens and worsted hosiery; also several important ironworks, but the ore is chiefly obtained from adjoining counties. Brecknockshire returns one member to parliament. Pop. (1801) 32,325; (1871) 61,627; (1901) 54,213. The chief towns are Brecon (the county town), Builth, Crickhowell, Hay, and Llanelly. There are many remains of British and Roman camps, Roman roads, cairns, cromlechs, mounds, and castles, throughout the county. The Normans wrested the county from the Welsh princes in 1092. Llewelyn, the last British prince of Wales, was killed at Llanafanfechan, near Builth, in 1282. Welsh is still the language of the middle-class and the peasantry. See Jones's *History of Brecknockshire* (2 vols. 1805–9).

Breda, a town of Holland, at the confluence of the navigable Mark and Aa, 60 miles ENE. of Flushing by rail, and 30 NNE. of Antwerp. Its Gothic cathedral (1510) has an octagonal steeple 311 feet high; whilst the castle (1350) received its present shape from William III. (1696), and in 1828 was converted into a military academy. There are manufactures of carpets, linen, hats, soap, leather, &c., and dyeworks, breweries, and rope-walks. The population is about 30,000. Fortified until 1876, Breda was captured by the Spaniards (1581), by the Dutch under Maurice of Orange (1590), by Spinola (1625), again by the Dutch (1632), and twice by the French (1793–95), who were finally driven out in 1813.

Bredfield, a Suffolk parish, Edward Fitz-Gerald's birthplace, 3 miles N. of Woodbridge.

Breedé (*Bray'deh*), a river in Cape Colony, flowing SE. to the Indian Ocean at St Sebastian's Bay, 60 miles NE. of Cape Agulhas. It is navigable for vessels drawing not more than 10 feet of water to a distance of 40 miles.

Bregenz (*Bray-gentz'*; anc. *Brigantium*), a town of Austria, capital of the Vorarlberg, on the east shore of the Lake of Constance; it is the terminus of the Arlberg railway (from Innsbruck), with a great tunnel, opened 1884. Pop. 7736.

Breisach, Alt (*Brī-suhh*; anc. *Mons Brisiacus*), a town of Baden, situated on an isolated basalt hill (804 feet) on the right side of the Rhine, 14 miles W. of Freiburg. The minster is a 13th-century structure. Pop. 3506.

Breisgau (*Brīse'gow*), a German district extending along the right bank of the Rhine, from the episcopal territory of Strasburg to Basel, embracing Freiburg and the southern Black Forest. Since 1810 it has been part of Baden.

Breitenfeld (*Brī'tenfelt*), a Saxon village, 5 miles N. of Leipzig. In the first of three battles here (17th September 1631), Gustavus Adolphus defeated the imperialists under Tilly; the second (2d November 1642) was also a victory of the Swedes over the imperial forces; and the third was one act of the great 'Battle of the Nations' at Leipzig, 16th October 1813.

Bremen (*Bray'men*), a free city of Germany, on the Weser, 39 miles by rail SSE. of Bremerhaven, and 76 NW. of Hanover. Pop. (1875) 102,177; (1900) 163,297. Bremen is divided into the Old and the New Town—the former on the right, the latter (dating from 1620) on the left bank of the river, which is spanned by four bridges. The ramparts and bastions round the old town have been formed into public promenades. Among the principal buildings are the cathedral (1043–70; reconstructed 13th to 17th centuries), the Gothic town-hall (1409), with its famous wine-cellar, the 'Schütting' or guildhall (1537), the exchange, the museum, the post-office, and the observatory of Dr Olbers, who here discovered the planets Pallas and Vesta. Bremen is a very thriving place, and now ranks as the second commercial city in Germany. Large vessels stop at Bremerhaven. Bremen carries on an extensive commerce with Great Britain, North and South America, the West Indies, Africa, the East Indies, and China; its great foreign trade, however, is with the United States. Bremen ships about 50 per cent. of all emigrants sailing from Germany, principally to the United States. The chief imports are tobacco, coffee, sugar, cotton, rice, skins, dyewoods, wines, petroleum, timber, and hemp. The exports consist of woollen goods, linens, glass, rags, wool, hemp, hides, oil-cake, colours, and wooden toys. Large quantities of tobacco are re-exported. There are manufactures of woollens and cottons, cigars, paper, and starch, and breweries, distilleries, rice-mills, and sugar-refineries. Bremen is the headquarters of the North German Lloyd Steamship Company (1857).

Bremen first became of historical note in the 8th century, when it was erected into a bishopric by Charlemagne. It soon attained considerable commercial importance, and became one of the principal cities of the Hanseatic League. In 1810 it was incorporated with the French empire, but recovered its independence in 1813, and by the Congress of Vienna was admitted in 1815 as one of the Hanse towns into the Germanic confederation. In 1867 it became a member of the North German confederation, and now it forms part of the German empire. The area of the territory is 99 sq. m.; pop., including the town of Bremen (1900) 224,882.

Bremerhaven (*Braymerhäh'fen*), the port of Bremen, on the Weser estuary, nearly 10 miles from the open sea, and 39 NNW. of Bremen. It was founded by Bremen in 1827, and rapidly became a thriving place. A second dock was opened in 1866, a third in 1874; and in 1888 a great port, with docks, was undertaken at Nordenham, on the opposite bank. The Geeste separates it from Geestemünde (q.v.). The population has risen from 3500 in 1850 to over 21,000.

Brenner Pass, a pass (4588 feet) in the Central Tyrol Alps, on the road between Innsbruck and Botzen, connecting Germany with north-east Italy. Open at all seasons of the year, it is the lowest pass over the main chain of the Alps. In 1867 a railway through the pass was opened. The distance from Innsbruck to Botzen in a direct line is only 52 miles, but frequent windings extend the railway to 78 miles. It passes over numerous viaducts and bridges, and through twenty-seven tunnels, one of them 935 yards long.

Brenta (*Medoacus Major*), a river of North Italy, issuing from a small lake in the Tyrol, and flowing 120 miles southward and eastward to the Gulf of Venice at the haven of Brondolo.

Brentford, the county town of Middlesex, 10 miles W. of Paddington station, at the influx of the Brent to the Thames, which is crossed here by a bridge leading to Kew. Consisting chiefly of one long irregular street, it has gin-distilleries, a brewery, sawmills, a soap-work, the Grand

Junction Water-works, &c. There are many market-gardens in the vicinity. Here Edmund Ironside defeated the Danes in 1016; in 1558 six martyrs were burned at the stake; and in 1642 Prince Rupert defeated the Parliamentarians. Pop. 15,500.

Brentwood, a market-town in Essex, 10 miles SW. of Chelmsford by rail. It has a richly endowed grammar-school (1567). Population, 4932.

Brescia (*Bresh'ya;* anc. *Brixia*), a city of Lombardy, on the rivers Mella and Garza, 51 miles E. of Milan by rail. It has two cathedrals—the old (dating from the 7th century), and the new (1604–1825); the Tosi Gallery or Town Museum, adorned with frescoes; the 12th-century Broletto Palace; the *Biblioteca Quiriniana*, with 40,000 volumes, founded in 1750 by Cardinal Quirini; and the Temple of Hercules, which, built by Vespasian, and excavated in 1822, forms a repository for classical antiquities. The cemetery (1810) is regarded as the finest in Italy. A statue of Arnold of Brescia was unveiled in 1882. Brescia manufactures woollens, silk, leather, paper, arms, cutlery, &c., and its wine is of good quality. Pop. 71,000.

Breslau (*Brez'low*), capital of Prussian Silesia, 150 m. SE. of Frankfort-on-Oder by rail, is situated at the confluence of the Ohlau and Oder. It has a university founded by the Emperor Leopold I. in 1702, with over 1200 students, and a library of 300,000 volumes; a cathedral (1148–1680); and the Protestant church of St Elizabeth, with a steeple 298 feet in height, and a splendid organ. Linen fairs are held, and Breslau is a great wool-mart. It has manufactures of linens, woollens, cotton, silks, lace, jewellery, machines, earthenware, soap, alum, starch, &c., with many distilleries. Breslau is a city of Slavonic origin, and was for many centuries occupied alternately by the Poles and the Bohemians. It afterwards passed to Austria, from which it was taken by Frederick II. of Prussia in 1741. Six years afterwards it was captured by the Austrians after a bloody battle, but retaken by Frederick in about a month. It was often besieged from that time until 1814, when its fortifications were completely demolished; since 1890, however, it has again been made a first-class fortress. Pop. (1870) 207,997; (1900) 422,800.

Bressay, one of the Shetland Isles, separated from Lerwick by Bressay Sound. It is 6 miles long, 1 to 3 broad, and 10¾ sq. m. in area. The coast is rocky, there are several caverns, and the highest point is 724 feet above sea-level. Pop. 699, chiefly fishermen. Bressay Sound is one of the finest natural harbours in the world. In its west centre is the harbour of Lerwick with lighthouse. East of Bressay, with a narrow and dangerous sound between, is a rocky isle, Noss, 6 miles in circuit, rising abruptly from the sea to a height of nearly 600 feet, with a flattish top. A detached rock or holm, on the south-east side, in former years communicated with Noss by means of a cradle or wooden chair run on strong ropes stretched across a yawning gulf.

Brest, a strongly fortified city in the dep. of Finistère, one of the chief naval stations of France, is situated 389 miles by rail W. of Paris, on the north side of the Bay or Road of Brest. One of the finest harbours in Europe, the roadstead is formed by the promontory of Finistère on the north and Kelerun on the south, and is broken up into various bays formed by the mouths of streams as they enter the bay. The only entrance to the bay is by a narrow channel called *Le Goulet*, which is scarcely a mile wide, and is strongly defended by batteries; the difficulty and danger of access to hostile ships being increased by rocks in the middle of the channel. The roadstead from this entrance to the mouth of the Elon is about 6 miles in length. Under Napoleon III. £600,000 was expended on harbour and fortification works, and a further sum of £1,500,000 between 1883 and 1894. The small river Penfeld flows through the town; on its left bank is the town proper, on its right the suburb of *Recouvrance*, connected by a splendid iron swing-bridge (1861), 65 feet high, and 347 long. The manufactures include leather, waxcloth, paper, and rope; the exports are chiefly beer, grain, brandy, and fish. Brest has extensive shipbuilding yards, rope-walks, storehouses, quays, arsenals, and dry-docks; its industry is chiefly confined to the equipment of the navy in its various branches. The splendid position of Brest made it an object of contention to French, English, and Spaniards. In 1631 Cardinal Richelieu resolved to make it a naval station, and commenced the fortifications, which were completed by Vauban, but have since been greatly extended. In 1694 the English under Lord Berkeley were repulsed here with great loss; in 1794 the French fleet was defeated off Brest by the English fleet under Howe. Pop. (1872) 66,272; (1891) 75,854; (1901) 84,285.

Brest Litovsk (Polish *Brzesc*), a strongly fortified town of Russian Poland, on the Bug, 132 miles ESE. of Warsaw, and 682 WSW. of Moscow. It has vast magazines and military stores, and an extensive trade in its cloth manufactures, Russian leather, soap, and wood. Pop. 47,981.

Bretagne. See BRITTANY.

Bretigny (*Breteenyee'*), a village in the French dep. of Eure-et-Loir, 20 miles S. of Paris by rail. Here, in 1360, Edward III. concluded a peace with France.

Bretten, a town of Baden, the birthplace of Melanchthon, 16 miles ENE. of Karlsruhe by rail. Pop. 4932.

Brezowa (*Brez'ova*), a market-town of Hungary, 20 miles NW. of Leopoldstadt. Pop. 5549.

Briançon (*Breeon^{g}son^{g}'*; anc. *Brigantium*), a town in the French dep. of Hautes-Alpes, 162 miles NNE. of Marseilles by rail, on the Durance. It is the highest town in France—4330 feet above sea-level. As the principal arsenal and depot of the French Alps, it is so strongly fortified as to be deemed impregnable. Pop. 5638.

Briansk (*Bree-ansk*), a town of Russia, on the Desna, 77 miles W. of Orel by rail. Pop. 26,403.

Briare (*Breeâhr'*), a town in the dep. of Loiret, on the Loire, 102 miles SSE. of Paris by rail. The Canal de Briare (35 miles long), uniting the Loire and Seine, was the first constructed in France (1642). Pop. 5651.

Bridgend, a market-town of Glamorganshire, 17 miles W. of Cardiff, with ironworks and collieries. Pop. 6062.

Bridgenorth. See BRIDGNORTH.

Bridge of Allan, a beautiful village on Allan Water, 3 miles N. of Stirling by tram. Sheltered by the Ochils, it owes its prosperity partly to the mineral saline wells of Airthrey, and partly to its delightful situation and mild climate. Pop. (1861) 1803; (1901) 3240.

Bridge of Earn, a village of Perthshire, on the Earn, 4 miles SSE. of Perth. Pop. 365.

Bridge of Weir, a Renfrewshire village, on the Gryfe, 7 miles W. by N. of Paisley. Pop. 2242.

Bridgeport, a city and port of entry of Connecticut, U.S., at the entrance of the Pequannock into an inlet of Long Island Sound. It is 53 miles SW. of Hartford, and 57 NE. of New York. It has a safe harbour for small vessels, a considerable coasting trade, several fine public parks, and a system of street railways. Golden Hill, commanding fine views of the sound and shore, is covered with good residences, many of the inhabitants belonging to New York. The manufactures are extensive, particularly of carriages, harness, machinery, metallic cartridges, and sewing-machines. Pop. (1870) 18,869; (1880) 27,643; (1890) 48,866; (1900) 70,996.

Bridgeton, a city and port of entry in New Jersey, U.S., on Cohansey Creek, 38 miles S. of Philadelphia. It has the West Jersey Academy, South Jersey Institute (1870), a public library, and manufactures of woollen goods, iron, leather, carriages, machinery, and canned fruits. Pop. 15,000.

Bridgetown, the capital of Barbadoes (q.v.), is situated on the west coast of the island along the north side of Carlisle Bay, which forms its roadstead. The inner harbour is protected by a breakwater known as the Mole Head. Founded in 1628, the town took the name Indian Bridge, and later its present appellation, from a rude aboriginal structure which spanned a neighbouring creek. It suffered much from fire in 1666, 1766, and 1845; in 1831 from a hurricane. A railway of 23 miles in length to the parish of St Andrew was completed in 1882. Population, about 35,000.

Bridgewater Canal, a canal in Lancashire and Cheshire, 42 miles long, uniting Worsley with Runcorn and Manchester. It was formed in 1762–72 by the Duke of Bridgewater and Brindley, and bought (1888) by the Manchester Ship Canal Company. It is carried over the Manchester Ship Canal at Barton-upon-Irwell (q.v.) by a great swing-bridge.

Bridgnorth, a municipal borough of Shropshire, 19 miles SE. of Shrewsbury. The Severn divides it into the upper or 'High Town,' and lower or 'Low Town,' the two connected by an inclined railway (1892) with a vertical rise of 111 feet. The High Town is built on a red sandstone rock rising 180 feet above the right bank of the river. This rock was formerly crowned by a royal fortress, a huge leaning fragment being all now left of the keep. Bridgnorth has a grammar-school existing in Henry VIII.'s reign, carpet, worsted, and tanning industries, and agricultural trade. Until 1868 it returned two members, and until 1885 one. The Danes wintered here in 896, and the site of a Saxon castle, built by the princess Ethelfleda, is still distinctly marked. Robert de Belesme (a kinsman of the Conqueror) built the Norman castle, and unsuccessfully defended it against Henry I. It was also besieged by Henry II. and Edward II. The castle was demolished by the Parliamentarians after a three-weeks' siege, during which the 'High Town' was destroyed by fire, one of the few houses surviving being the fine old Tudor mansion, still standing, in which, Bishop Percy was afterwards born (1728). Baxter began his ministry here. The population is over 6000.

Bridgwater, a municipal borough and river-port of Somersetshire, on the Parret, 6 miles in a direct line, and 12 by the river, from the Bristol Channel, and 29 miles SW. of Bristol. It stands on the border of a plain between the Mendip and Quantock Hills, in a well-wooded country. The Parret, which admits vessels of 700 tons up to the town, rises 36 feet at springtides, and is subject to a bore, 6 or 8 feet high; a canal gives water communication with Taunton. Bath or scouring bricks, of which Bridgwater has a monopoly, are made here of a mixture of sand and clay found in the river, and there are carriage-works and potteries. The Conqueror granted the manor to one Walter de Douay, and its name thereupon became *Burgh-Walter*, of which *Bridgwater* is a mere corruption. A castle was built here in the reign of John, and an Augustinian abbey about 1230. Admiral Blake was a native of Bridgwater, which in the great rebellion was forced by Fairfax to surrender, the castle being dismantled. The battle of Sedgemoor (q.v.) was fought in 1685 near Bridgwater, whose corporation had proclaimed Monmouth as king. Bridgwater formerly returned two members, but was disfranchised in 1870. Pop. (1851) 10,317; (1901) 15,209. See the history of the town by S. J. Jarman (1889).

Bridlington, or BURLINGTON, a town in the East Riding of Yorkshire, 6 miles SW. of Flamborough Head, and 23 SSE. of Scarborough. An old-fashioned place, with narrow irregular streets, it is supposed to have been the site of a Roman station. An Augustinian priory of immense wealth, founded in Henry I.'s reign, is represented by the nave of its splendid church, mixed Early English and Perpendicular in style. On Bridlington Bay, 1 mile SE., is Bridlington Quay, the port of the town, which has risen into repute as a watering-place, with fine sands, a parade, ornamental gardens, a chalybeate mineral spring, and hot and cold baths. The bay has good anchorage, and the harbour is enclosed by stone piers. In 1643 Henrietta Maria landed here from Holland with arms and ammunition bought with the crown-jewels, when Bridlington was cannonaded for giving her refuge. In 1899 it became a municipality. Pop. 13,000.

Bridport, a municipal borough of Dorsetshire, at the confluence of the Asker and the Brit, 2 miles from the English Channel, and 16½ W. of Dorchester by rail. It stands on an eminence surrounded by hills, and has a town-hall (1785), and a good cruciform parish church. Till 1867 Bridport returned two members to parliament; and till 1885, one. The chief manufactures are ropes and cordage (a 'Bridport dagger' was proverbial for a halter in Leland's day), besides twine, shoe-thread, fishing-nets, and sailcloth. Vessels of 250 tons can enter the harbour, which is 1½ mile below the town. The population is about 6000.

Brieg (*Breeg*), a town of Prussian Silesia, on the Oder, 27 miles SE. of Breslau by rail. The 13th-century church of St Nicholas has a splendid organ, and towers added in 1884–85. Brieg manufactures machinery, ironwares, sugar, leather, tobacco, &c. Pop. 25,000.

Briel (*Breal*), or BRIELLE, sometimes THE BRILL, a fortified seaport town of South Holland, situated on the north side of the island of Voorne, near the mouth of the Maas. Pop. 4562, chiefly pilots and fishermen. Briel may be considered as the nucleus of the Dutch republic, having been taken from the Spaniards in 1572. De Witt and Tromp were natives.

Brienne-le-Château (*Bree-enn'-le-Shâhto'*), a town (pop. 1680) in the dep. of Aube, on the

Aube, 35 miles ENE. of Troyes. At the military school here (suppressed in 1790) the great Napoleon spent five years. Here, too, he was defeated by the allies in January 1814.

Brienz (*Bree-entz'*), a Swiss town at the foot of the Bernese Alps, on the NE. shore of the lake of Brienz, 30 miles ESE. of Bern. Pop. 2758.—The lake, 8¾ miles long and 1½ broad, is an expansion of the river Aar, and is believed to have been at one time united with Lake Thun. It lies 1857 feet above the sea, is 859 feet deep at one point, and is surrounded by lofty mountains. The Giessbach Cascades, a series of fine falls, are accessible by a cable tramway.

Brierfield, an urban district, Lancashire, 2¼ miles NE. of Burnley. Pop. 7500.

Brierley Hill, a town of Staffordshire, 2½ miles NE. of Stourbridge. It has numerous collieries, large ironworks, glassworks, brickworks, and potteries. Pop. 13,000.

Brigg, a market-town of Lincolnshire, 24 miles N. of Lincoln. Pop. 3500.

Brighouse, a manufacturing town in the West Riding of Yorkshire, 4 miles ESE. of Halifax, a municipal borough since 1893. Pop. 22,500.

Brightlingsea, an Essex seaport, on the Colne's estuary, 8 miles SE. of Colchester. It has oyster fisheries. Pop. 5000.

Brighton, a parliamentary, municipal, and county borough and fashionable watering-place in Sussex, 50½ miles S. of London by rail (1¼ hour). Its former name, *Brighthelmstone* (1252–1810), was superseded about 1800 by *Brighton*, which occurs, however, as early as 1660. The town is built on a slope ascending eastward to a range of high chalk-cliffs; to the west, these hills recede from the coast; and the nearest point of the South Downs is the Devil's Dyke, 5 miles distant. Ancient Brighthelmstone was a mere fishing-village on a level under the cliff. It suffered much at the hands of French, Flemings, and Spaniards, and still more from the sea, whose inroads in 1699, 1703, and 1706 undermined the cliffs and destroyed many houses. Further inroads are prevented by a sea-wall of great strength (60 feet high and 23 feet thick at the base), extending along the east cliffs, and built between 1827 and 1838 at a cost of £100,000. The writings of Dr Richard Russell, a celebrated physician, first drew public attention about 1753 to Brighton as an eligible watering-place, and the discovery of a chalybeate spring in the vicinity increased its popularity. The visit of the Prince of Wales in 1782, and his subsequent yearly residence there, finally opened the eyes of the fashionable world to Brighton's immense attractions, and it thenceforth became the crowded resort of a health-seeking population, in which the opening of the Brighton Railway in 1841 greatly assisted. It was made a parliamentary borough (returning two members) in 1832, a municipal one in 1854; its progress has been very rapid, and the town is still steadily increasing. As becomes a favoured retreat of wealth and aristocracy, Brighton is for the most part extremely well built, consisting of new and elegant streets, squares, and terraces. The public hotels are magnificent; besides these there are the boarding-houses and nearly 1000 lodging-house keepers. A range of splendid houses fronts the sea for upwards of 3 miles, the promenade—asphalted from end to end, and exceptionally well lighted—being almost on a dead level, within a few feet of the sea, for the greater part of its length, but rising at the east end of the town to a height of 60 feet, on the top of the sea-wall already referred to. Beneath this is the Madeira Road, a fine drive and promenade a mile in length, and sheltered effectually from the north wind. The population is greatly increased during the fashionable seasons (especially in late summer and autumn) by the influx of visitors, the average number being 50,000, chiefly from London, for which reason it is sometimes called London-super-Mare. Of over twenty churches, St Nicholas, dating from the time of Henry VII., is the only ancient one; Holy Trinity Church has been rendered famous from the ministry of F. W. Robertson. The public buildings include the town-hall, the town-hall in the adjoining township of Hove (part of the parliamentary borough, but not included for municipal purposes), the unrivalled aquarium (1872), museum of British birds, school of science and art, Brighton college, theatre, and the Sussex county hospital. At Queen's Park, in the east of the town, is the German Spa establishment, and at St Anne's well and wild gardens in the west is a chalybeate spring. In the north of the town is the Preston public park of 62 acres (1884), which cost £50,000, the money being left to the town by the 'leviathan' bookmaker, Mr W. E. Davies (1819–79).

Near the centre of the town is the Royal Pavilion or Marine Palace, a fantastic oriental or Chinese structure, with domes, minarets, and pinnacles, and Moorish stables, begun for the Prince of Wales in 1784, and finished in 1827. It was purchased in 1850 for £53,000 by the corporation, and with its fine pleasure-grounds it is devoted to the recreation of the inhabitants. The concert-hall known as the 'Dome,' formerly the royal stables, can accommodate 3000 people. Adjoining are the public library and museum and picture-gallery. The famous chain pier (1823), 1136 feet in length, was destroyed in a storm in 1896; the much wider 'West Pier' (1866) is 1115 feet long; and the New Pier and Marine Palace (1900) is 1700 feet long. Pop. (1801) 7339; (1821) 24,429; (1841) 46,661; (1861) 77,698; (1881) 107,546; (1891) 115,873; (1901) 123,478; of parliamentary borough, two members (1901), 153,386. See works by Erredge (1862), J. Bishop (1875–80), Sawyer (1878), Sala (1895), and on the 'Brighton Road' by C. G. Harper (1892).

Brignoles (*Breen-yoll'*), a town in the French dep. of Var, 42 m. ESE. of Aix by rail. Pop. 4298.

Brihuega (*Bree-way'ga*), a town of New Castile, Spain, on the Tajuña, 20 miles ENE. of Guadalajara. Pop. 3700. Here, in 1710, the English general Stanhope was defeated by the Duc de Vendôme, and compelled to surrender.

Brindában, or BINDRABAN, a town of the North-west Provinces, on the Jumna, 6 miles N. of Muttra. It is one of the holiest cities of the Hindus; and through the munificence of wealthy devotees there are a large number of costly temples and shrines. Here, as at Benares, the immediate margin of the river is occupied by flights of steps, or ghauts. Pop. 22,717.

Brin'disi (anc. *Brundisium* or *Brundusium*), a seaport town of Southern Italy, on a small promontory in a bay of the Adriatic, 346 miles SE. of Ancona by rail. It was the principal naval station of the Romans in the Adriatic, with a pop. of 100,000. Horace has made a journey to Brundisium the subject of one of his satires (*Sat.* i. 5), and Virgil died here (19 B.C.) on his return from Greece. With the decline of the crusades it sank into insignificance, and subsequently it

suffered greatly from wars and earthquakes. The principal buildings are the archiepiscopal cathedral (1150), now in a somewhat ruinous state; and the castle, commenced by the Emperor Frederick II., and finished by Charles V. Since the establishment of the Overland Route to India, Brindisi has greatly increased, and as the terminus of the Mont Cenis and other railway routes, it has become a great point of departure for passengers for the East. It is about 60 hours from London by rail; and the weekly steamers to Alexandria make the passage in three days. The extensive and well-sheltered harbour has undergone great improvement; and mail steamers can now lie alongside the quays in 26 feet of water. Pop. 24,508.

Brioude (*Bree-ood'*), a town in the dep. of Haute-Loire, 44 miles SSE. of Clermont. Pop. 4832.

Brisbane, the capital of Queensland, a seaport and chief seat of trade in the colony, is situated about 500 miles N. of Sydney, and 25 miles from the mouth of the Brisbane River, which falls into Moreton Bay. Pop. (1876) 26,911; (1881) 31,109; (1891) 48,738; (1901, within a five-mile radius) 119,428. North and South Brisbane are connected by an iron bridge, 1080 feet long, destroyed in 1893 and rebuilt in 1897. Notable buildings are the Parliament Houses, Government House, museum, supreme court, post-office, custom-house, Anglican and Catholic cathedrals, and some of the banks. There are several parks and botanic gardens. The export trade, which is large, includes gold, wool, cotton, sugar, tallow, and hides; and the imports, most of the articles in use among a thriving community. Regular steam communication is kept up with the other Australian ports, as well as with London (11,295 miles). The channel of the river has been deepened, and admits of large vessels coming up to Brisbane. Brisbane is the terminus of several local railways, and since 1888 it has had through railway connection with Sydney, Melbourne, and Adelaide—the last link being the bridge over the Hawkesbury River. Brisbane was settled as a penal station in 1825 by Sir T. Brisbane, governor of New South Wales. In 1839 the convict settlement was broken up. The era of progress began in 1842, when the colony was opened to free settlers. At first an appanage of New South Wales, the Moreton Bay district was erected into an independent colony in 1859, when the city was incorporated.—The Brisbane River rises in the Burnett Range, and receives the Bremer and other rivers before its entrance into Moreton Bay, below the town of Brisbane. Its floods in February 1893 did tremendous damage to the city, South Brisbane being practically laid in ruins.

Bristol, a mercantile city, 118 miles W. of London, and 6 from the mouth of the Avon, at its junction with the Frome, is locally partly in Gloucestershire and partly in Somerset, but since 1373 has been itself a county. The castle, rebuilt with a vast keep by Robert, Earl of Gloucester (died 1147), fell into decay, and was demolished in 1654. The cathedral was formerly a church of Augustinian canons (1148); the nave and aisles, pulled down for rebuilding in 15th century, were rebuilt in 1877; the choir is good 14th-century work; fine Norman chapter-house and gateway remain. Bristol, originally in the diocese of Worcester, was created a see and a city in 1540, with the abbey-church of St Augustine's as cathedral, and was united to the see of Gloucester in 1836; its re-erection as a separate see took place in 1897. Of its other churches the most noteworthy is St Mary Redcliff, justly declared by Queen Elizabeth to be the 'fairest and most famous parish church in England.' Mainly rebuilt by William Canynges, merchant (*c.* 1470), it is vaulted throughout, and is a magnificent specimen of Perpendicular. The truncated spire was completed, 280 feet from ground, and 170 feet from top of tower, in 1872. In the muniment-room is the chest in which Chatterton (1752–70) pretended to have found the Rowley poems. Among the ancient houses of the town are Canynges' house, Redcliff Street, Spicer's (or Back) Hall, and St Peter's Hospital. The principal educational institutions are University College (1876), Clifton College (1862), and the grammar-school (1531); and the charitable foundations, Queen Elizabeth's Hospital (1586), the Red Maids' School (1621), and Colston's School (1704), now removed to Stapleton, Gloucestershire. The City Library (free) dates from 1613. Bristol, which derived its early wealth from exporting slaves to Ireland, received its first charter from Henry II., who also (1171) gave Dublin to the men of Bristol. One of the 'staple' towns (1353), Bristol took a prominent part in discovery and colonisation. In 1497 John Cabot sailed from the port, and was the first to discover North America; his son Sebastian declared that he was born in Bristol, and sailed thence on his voyage of 1498. The city was taken by Prince Rupert in 1643, and by Fairfax in 1645. Colston the philanthropist (1636–1721) founded many charities, and his 'day' is annually kept in Bristol. In the 18th century privateering was largely carried on. Southey was a native of Bristol, and he and Coleridge were much there in their younger days. Burke sat for the city, one of his chief supporters being Champion (1743–91), maker of the famous Bristol china. The Reform riots of 1831 occasioned great loss of life and property. The first transatlantic steam-ship, the *Great Western*, was built in the port in 1838. Strenuous efforts have been made to improve the dock accommodation; in 1809 the Avon for about 3 miles was turned into a floating harbour, and in 1883 the corporation purchased large docks at Avonmouth and Portishead. The principal imports are grain, provisions, oils, hides, tallow, sugar, and petroleum; the exports coal, salt, tin-plates, cotton piece-goods, chemical products, manufactured oils, and sundries. In 1885 the number of its members of parliament was raised from two to four. Pop. within mun. boundaries (1801) 61,153; (1841) 125,148; (1871) 182,552; (1881) 206,503; (1901) 328,842; of parl. borough (1901) 321,908. The Hotwell, noticed by the Bristol chronicler, William Worcester (died *c.* 1491), enjoyed some reputation as a fashionable resort during the later half of the 18th century; it is now deserted and decayed. Clifton, however, the parish to which it belongs, has thriven. It is mentioned in Domesday, but has little history till it appears as a 'beautiful village' in 1760; it is now a large and handsome suburb of Bristol, of which it forms part for municipal and parliamentary purposes. It stands above St Vincent's Rocks, which rise majestically from the Avon. The river is spanned 245 feet above high-water by a suspension bridge (1864). Clifton has a zoological garden (1836), fine arts academy (1858), museum and library, and other public buildings. In the neighbourhood are the remains of some Roman camps. See works by Barrett (1789), Seyer (1823), Nicholl and Taylor (1881), Hunt (1887), and Latimer (1887–93).

Bristol, (1) a town of Bucks county, Pennsylvania, on the Delaware River, 20 miles NNE. of Philadelphia. It has manufactures of iron, machinery, flour, felt, worsted, and furniture. Pop. 7553.—(2) A port of entry, and capital of Bristol county, Rhode Island, on Narragansett Bay, 15 miles SSE. of Providence by rail, with shipbuilding and sugar-refining, and manufactures of cotton and rubber goods. Pop. 6478.

Bristol Bay, an arm of Behring Sea, lying immediately to the north of the peninsula of Aliaska.

Bristol Channel, an inlet of the Atlantic Ocean, between South Wales on the north, and Devon and Somerset shires on the south; or it may be regarded as an extension of the estuary of the river Severn. It is about 80 miles long, and 5 to 43 miles broad; the depth ranging from 5 to 40 fathoms. It is the largest inlet or estuary in Britain, having a very irregular coast-line of 220 miles. The chief rivers which flow into it are the Towy, Taff, Usk, Wye, Severn, Avon, Axe, Parret, Taw, and Torridge. The tides in it rise to an extraordinary height—35 to 47 feet. The chief bays and harbours are Caernarthen and Swansea Bays, Cardiff Roads, on the north, and Bideford or Barnstaple, Ilfracombe, Minehead, Porlock, and Bridgwater, on the south.

Britain. See GREAT BRITAIN, NEW BRITAIN.

Britannia Bridge. See MENAI STRAIT.

British Columbia, Guiana, New Guinea, North Borneo. See COLUMBIA, GUIANA, NEW GUINEA, BORNEO.—For British East, Central, and South Africa, see IBEA, NYASSA, RHODESIA, ZAMBESIA.

Briton Ferry, the port of Neath in South Wales. Pop. 6000.

Brittany (Fr. *Bretagne;* anc. *Armorica*), the great north-western peninsula of France, extending in triangular form into the sea, its base resting on Normandy, Maine, Anjou, and Poitou, its sides washed by the Channel and the Atlantic Ocean. In earlier times it formed, with the name of duchy, one of the provinces of France; now it forms the five deps. of Finistère, Côtes-du-Nord, Morbihan, Ille-et-Vilaine, and Loire-Inférieure, with a total area of 13,130 sq. m., and a population of 3,250,000, more than one-third of whom speak Breton, belonging to the Cymric or southern group of the Celtic languages.

Brive-la-Gaillarde (*Breev'-la-Ga-yard'*), a town in the French dep. of Corrèze, 55 miles SSE. of Limoges by rail. Pop. 13,445.

Brixen, a town of Tyrol, on the Brenner Railway, 57 miles SSE. of Munich. Pop. 5842.

Brixham, a seaport and watering-place of Devonshire, on Tor Bay, 25 miles S. of Exeter (32½ by rail). It is an irregular place, sprinkled over three valleys and four hillsides; picturesque, and fishy as even few fishing-towns. There are iron-mines, limestone quarries, mineral-paint works, and a bone cave on Windmill Hill, discovered in 1858. William of Orange landed here, November 4, 1688. Population, above 8000.

Brixton is a district of London (SW.), in Lambeth parish.

Broach, BAROACH, or BHARUCH, a town of Guzerat, Bombay Presidency, on the north bank of the Nerbudda, 228 miles N. of Bombay by rail. Anciently one of the chief ports of Western India, and in the 16th century 'a town of weavers making the finest cloth in the world,' Broach was taken by the British in 1772, ceded to Sindhia in 1783, and again retaken by the British in 1803. It carries on a small coasting trade, the principal exports being raw cotton, grain, and seeds. Pop. 42,168, including many Parsees and Jains.

Broadford, a coast-village of Skye, 8 miles WSW. of Kyle Akin ferry.

Broadhaven, a watering-place of Pembrokeshire, 6 miles WSW. of Haverfordwest.

Broadlands. See ROMSEY.

Broadmoor, in SE. Berkshire, 2 miles from Wellington College Station, is the state asylum for 500 criminal lunatics. It is a large brick building, opened in 1863.

Broads, THE NORFOLK, a series of inland lakes usually said to be formed by the widening or 'broadening' out of the rivers. More probably their origin is due to a change in the general level of the land surface of the county; for even within historic times the river Yare was an estuary of the sea, in which herrings were caught at the time of Domesday. The broads *par excellence* are those up the Bure or North River (which empties itself into the sea at Yarmouth), and its tributaries the Ant and the Thurne. On the Bure are the well-known broads of Wroxham, Salhouse, Hoveton, Horning, and Ranworth; on the Ant those of Barton and Sutton; on the Thurne those of Hickling, Martham, and Horsey. The three fine broads of Ormesby, Rollesby, and Filby, though connected and forming a chain, have no practicable outlet to the river; the Yare or Norwich River has no broads on which sailing is possible, but those at Surlingham, Strumpshaw, and Rockland are well worthy a visit, and very accessible by rail; near Lowestoft, on the Waveney, is Oulton Broad. The broads have grown greatly in favour with holiday-makers, so that now on a Saturday, during August and September, perhaps a hundred yachts may be seen at once. See works by Davies (1884), Rye (1887), Suffling (1891), Emerson (1893), and Dutt (1903).

Broadstairs, a Kentish watering-place 1¾ mile NE. of Ramsgate, so named from the breadth of the sea-gate or *stair*, which was formerly defended by a gate or archway. Near it is a noble orphanage, founded by Mrs Tait. Dickens was a frequent visitor. Pop. 6266.

Broadway, an old-fashioned Worcestershire village, a great artists' haunt, 5½ miles SE. of Evesham. Pop. of parish, 1436.

Brocken (*Mons Bructerus* of the Romans; popularly *Blocksberg*), the highest summit (3740 feet) of the Harz Mountains, in Prussian Saxony, 20 miles WSW. of Halberstadt. It holds an important place in folklore as the witches' meeting-place on Walpurgis night, and for the optical illusion known as the 'Spectre of the Brocken.'

Brockenhurst, a New Forest village, Hampshire, 4½ miles N. by W. of Lymington.

Brocket Hall, Herts, on the Lea, 2½ miles N. of Hatfield, has been the seat of Lord Melbourne, Lord Palmerston, and Earl Cowper.

Brockton, formerly called North Bridgewater, a town of Massachusetts, U.S., 20 miles S. of Boston. It manufactures boots. Pop. (1880) 13,608; (1890) 27,294; (1900) 40,063.

Brockville, a town of Ontario, on the left bank of the St Lawrence, 125 miles SW. of Montreal. It is on the Grand Trunk and the Brockville and Ottawa railways, and a port of call for steamers. It took its name from Sir

Isaac Brock (1769–1812), who fell in the battle of Queenstown. Pop. 9609.

Brodick, a coast-village of Arran, 14 miles WSW. of Ardrossan.

Brody, a town of Galicia, 89 miles ENE. of Lemberg by rail. A free town from 1779 to 1879, it has leather and flax manufactures, breweries, refineries, &c. The trade is in the hands of the Jews, who form three-fourths of the inhabitants of this 'German Jerusalem.' Pop. 17,534.

Broek (rhyming with *Luke*), 4½ miles NE. of Amsterdam, was formerly the show 'clean village' of Holland. Pop. 1553.

Bromberg, a town of Posen, 6 miles from the Vistula, and 99 SSW. of Danzig. It has iron-foundries, machine-shops, cloth and paper mills, distilleries, breweries, and corn-mills. The *Bromberg Canal*, 17 miles long, by uniting the Netz and Brahe, connects the Oder and Elbe with the Vistula. Pop. (1843) 8878; (1900) 52,160.

Bromley, a market-town of Kent, on the Ravensbourne, 10 miles SE. of London. Long the residence of the bishops of Rochester, it has a church, with the grave of Dr Johnson's wife. Pop. 30,000.

Brompton is a district of London in the parish of Kensington, SW. Once specially a quarter for artists, it contains a fine consumption hospital and the Oratory.

Brom'sebro, a village and castle of Sweden, 27 miles S. of Kalmar.

Bromsgrove, a market-town of Worcestershire, in a richly wooded valley, near the small river Salwarp, 12 miles NNE. of Worcester. It has a grammar-school (1553; refounded 1693), and a fine old church with a spire 189 feet high. The linen manufacture has been superseded by nail and button making. Pop. 8500.

Bromwich. See WEST BROMWICH.

Bromyard, a market-town of Herefordshire, on the Frome, 14 miles NE. of Hereford. Pop. of parish, 1660.

Broni, a town of Northern Italy, with mineral springs, 11 miles SE. of Pavia. Pop. 5147.

Bron'te, a town of Sicily, at the western base of Mount Etna, 33 miles NW. of Catania. Nelson was created Duke of Bronte by the Neapolitan government in 1799. Pop. 19,427.

Brook Farm, an abortive community established in 1840 on Fourier's principles, 8 miles SW. of Boston, U.S.

Brookline, a suburban town 4 miles SW. of Boston, U.S., with numerous handsome villas and parks, and manufactories of philosophical instruments, &c. Pop. 25,000.

Brooklyn, since 1898 a borough in the enlarged New York City, and capital of King's county, New York, is on the west end of Long Island, opposite (old) New York, from which it is separated by a strait called East River, nearly a mile wide, running from Long Island Sound to New York Bay, and with which it is connected by steam-ferries, and a magnificent suspension bridge (finished 1883), 5989 feet in length by 85 in breadth, and with a river span of 1595½ feet, intended for foot-passage, carriages, and railways. Two lines of elevated railways and numerous lines of horse-cars traverse the streets of Brooklyn, making easy communication between the suburban sections and the ferries. Though it is not a port of entry, the amount of foreign and domestic freight that comes to its warehouses is enormous. Some of these docks are among the most extensive in the United States, covering from 40 to 60 acres each, and are lined with immense storehouses for grain and other freight. At the south-east extremity of the city, upon a high ridge overlooking New York Bay and its environs, is the beautiful Greenwood Cemetery, covering 400 acres; and near at hand are the Ridgewood reservoir and Prospect Park, a public pleasure-ground of 540 acres, which has cost, including two noble boulevards connected with it, extending respectively 3 and 2½ miles to Coney Island and East New York, nearly $12,000,000. The borough possesses a water front of 10 miles, and within its area of 25 sq. m. are carried on the refining of sugar and petroleum, the manufacture of glass, chandlery, clothing, carpets, chemicals, paints, oilcloth, metallic wares, tobacco, steam-boilers, lace, hats, buttons, paper, felt goods, &c., and shipbuilding. The public buildings include the court-house, erected at a cost of $543,000; the hall of records, costing $328,000; the municipal building, costing $200,000; an academy of music, seated for 2400 persons, &c. There is a fine government post-office, and a U. S. navy yard, which occupies 40 acres, with extensive ship-houses, workshops, and military stores, and a dry-dock which cost about $1,000,000. First settled in 1636, the town was organised by the Dutch governor of New Amsterdam in 1646, and named Breukelen from a place of the same name in the Netherlands, 8 miles NW. of Utrecht. It was incorporated as a city in 1834, to which Williamsburg and Bushwick were added in 1855, and in 1886 the town of New Lots (East New York). In 1898 it became part of the larger New York. Pop. (1810) 4402; (1850) 96,838; (1880) 566,603; (1890) 806,343; (1900) 1,166,582.

Broom, Loch. See SUMMER ISLES.

Broomhall, the Earl of Elgin's seat, Fife, 2½ miles S. by W. of Dunfermline.

Brora, a coast-village of Sutherland, at the mouth of the Brora River, 4½ miles NE. of Golspie. Pop. 540.

Broseley, a Shropshire town, on the Severn, 15 miles SE. of Shrewsbury, now a ward division of the municipal borough of Wenlock.

Brou. See BOURG-EN-BRESSE.

Brough (*Bruff*), a Westmorland town, 5 miles NNE. of Kirkby Stephen. Pop. 656.

Brougham (*Broom*), a Westmorland parish, 2 miles SE. of Penrith, with the fine ruin of Brougham Castle, the seat of the Cliffords, and with Brougham Hall, the seat of Lord Brougham and Vaux.

Broughton-in-Furness, a market-town of Lancashire, at the head of the Duddon estuary, 9 miles NW. of Ulverston. Pop. 1159.

Broughty-Ferry, a town of Forfarshire, on the Firth of Tay, 3½ miles E. of Dundee. Many Dundee merchants occupy fine villas at Broughty-Ferry, which has all the amenities of a favourite watering-place. Its castle (1498) was held by the English 1547–50, and in 1860-61 was repaired as a Tay defence. Pop. (1861) 3513; (1901) 10,484.

Broussa, BRUSA, or BOURSA, the ancient *Prusa*, where the kings of Bithynia usually resided, situated in Asiatic Turkey, at the foot of Mount Olympus, in Asia Minor, 13 miles S. of the Sea of Marmora. The old citadel stands on a rock in the centre of the town. Both Greeks and Armenians have an archbishop here. The silks of Broussa are much esteemed, but the production of the silk-factories, many of which are in the hands of Europeans, has fallen off. Wine is

largely produced by the Greeks, and fruit is exported; carpets and tapestry are also made; and meerschaum clay is obtained from a hill in the vicinity. In ancient times Broussa was famous for its sulphurous thermal baths, which during the terrible earthquakes of 1855 ceased for a time to flow, but soon returned with a fuller current than before. The mosques (one of which, 'the Magnificent,' has a large dome adorned with beautiful coloured tiles) suffered severely from the same earthquakes. The sultan Othman besieged Broussa in 1317; and in 1327 his son Orkhan, the second emperor of Turkey, captured it, and made it the capital of his empire, and it continued so until the taking of Constantinople by Mohammed II. in 1453. The first six Ottoman sultans are buried here. Pop. 77,000.

Brown, Mount, in the Rocky Mountains, near the source of the Columbia River, and on the borders of British Columbia and Alberta, is not, as was thought, 16,000, but 9000 feet high.

Brownhills, a town of Staffordshire, 5 miles N. of Walsall. Pop. 15,703.

Brownsville, a port of entry, Texas, on the north bank of the Rio Grande, opposite Matamoros, 35 miles from the river's mouth in the Gulf of Mexico. In May 1846 the town was occupied by a few U. S. troops, who maintained their position in the face of a bombardment that lasted a week. Pop. 6500.

Broxburn, a mining and manufacturing town of Linlithgowshire, on the Union Canal, 12 miles W. of Edinburgh. It is chiefly notable for its shale-oil works. Pop. 6250.

Bruar, a Perthshire stream, with fine falls, 3 miles W. of Blair Athole.

Bruchsal (*Brook'sal*), a town of Baden, on the Saalbach, 12 miles NE. of Karlsruhe. The prince-bishops of Spires resided here from the 16th century. Machinery, cigars, paper, and soap are manufactured. Pop. 14,000.

Bruck (*Brook*), (1) a walled town of Austria, on the Leitha, 26 miles SE. of Vienna by rail. Pop. 4836.—(2) A town of Upper Styria, on the Mur, 108 miles SW. of Vienna by rail. Pop. 7795.—(3) A market-town of Bavaria, 15 miles W. of Munich by rail. Pop. 3418.

Brückenau (*Brük'en-ow*), a town of Bavaria, on the Sinn, 17 miles NW. of Kissingen. Near it are warm springs. Pop. 1592.

Bruff, a Limerick village, 6 miles N. of Kilmallock. Pop. 798.

Bruges (*Brüzh;* Flem. *Brugge*, 'the bridges'), a city of Belgium, 8 miles from the sea, with which it is connected by the three canals from Ghent, Sluys, and Ostend, all much inferior to the direct ship-canal from Heyst (Zeebrugge), 26 feet wide (made 1896–1903). By rail it is 14 miles E. of Ostend, and 62 WNW. of Brussels. Among the most interesting buildings are Les Halles (1364), a cloth and flesh market, with the famous belfry, 353 feet high; the Gothic hôtel-de-ville (1377), with a library of 100,000 volumes; the church of Nôtre Dame, with a spire 442 feet high, a statue of the Virgin (said to be by Michael Angelo), and monuments of Charles the Bold and his daughter Mary, wife of the Emperor Maximilian; the cathedral of St Sauveur, with an ugly brick exterior, but a fine interior, containing the stalls of the knights of the Golden Fleece; and St John's Hospital, with Hans Memling's masterpieces adorning the reliquary of St Ursula's arm. Bruges has manufactures of lace, woollens, linen, cotton, leather, soap, starch, and tobacco; and distilleries, sugar and salt refineries, and shipbuilding yards. Pop. (1901) 53,100, of whom very many are poverty-stricken. Dating from the 3d century, Bruges by 1200 was the central mart of the Hanseatic League, and by 1300 had become the metropolis of the world's commerce, its population then amounting to over 200,000. In 1488 the citizens rose in insurrection, and imprisoned the Archduke Maximilian, and with the harsh measures of repression which ensued commenced the commercial decline of Bruges. Many of the traders and manufacturers, driven forth from their own country by the religious persecutions of the following century, settled in England; in the 16th century, however, the tapestry of Bruges was still celebrated. Taken by the French in 1794, in 1815 the city became a part of the kingdom of the United Netherlands, and in 1830 of the Belgian monarchy. At Bruges lived John van Eyck (1428–41), Caxton (1446–76), and Memling (1477–94). See James Weale, *Bruges et ses Environs* (4th ed. 1887).

Brugg (*Broogg*), a town in the Swiss canton of Aargau, on the Aar, 36 miles ESE. of Basel by rail. Near it is the site of *Vindonissa*, the chief Roman station in Helvetia; and it was also the cradle of the Hapsburgs, whose ruined castle (1020) crowns a wooded height 2 miles distant. Zimmermann was a native. Pop. 2435.

Brühl (nearly *Breal*), a town of Rhenish Prussia, 8 miles SSW. of Cologne by rail. It has a splendid 18th-century castle. Pop. 7030.

Brunei, a Mohammedan sultanate under British protection (since 1888) in the NW. of Borneo, whose sultan was formerly overlord of the whole island. Area, 4000 sq. m.; pop. perhaps 25,000 or 30,000. The capital, Brunei, on a river of the same name, is a miserable, dirty town, built on piles, with 10,000 inhabitants.

Brünig, a Swiss pass (3396 feet), forming the shortest and easiest route between the 'Forest Cantons' and the Bernese Oberland. A road was formed in 1857–62, and in 1888 a Brünig branch of the Berne-Lucerne Railway was opened.

Bruni Island (North and South) lies off the south part of the east coast of Tasmania, from which it is separated by D'Entrecasteaux Channel. It is 32 miles long, 1 to 11 miles wide, and 160 sq. m. in area. Coal is mined.

Brünn, a city of the Austrian empire, the capital of Moravia, at the confluence of the Schwarzawa and the Zwittawa, 93 miles N. of Vienna by rail. Behind the city, on an eminence (984 feet), rises the castle of Spielberg, where Silvio Pellico was confined 1822–30. Brünn has a steam-tramway, a cathedral, St James's Church, with a tower 305 feet high, and important manufactures of woollens, machinery, linen, leather, chemicals, &c. Pop. (1881) 82,660; (1900) 110,000, 40 per cent. of whom were Czechs.

Brunnen (*Broon'nen*), the port of the Swiss canton of Schwyz, on the Lake of Lucerne, 17 miles by water, but 28½ by rail ESE. of Lucerne. Here in 1315, after the battle of Morgarten, the deputies of the Forest Cantons formed a league.

Brunswark, a conspicuous hill (920 feet) of S. Dumfriesshire, with Roman camps.

Brunswick, Duchy of (Ger. *Braunschweig*), a state of Northern Germany, consisting of three larger and five smaller distinct parts, with a total area of 1423 sq. m. Pop. (1875) 327,493; (1900) 464,333, mostly Lutherans, and (in the country) speakers of Platt-Deutsch. Of the three larger parts, the principal one, forming the circle of

Wolfenbüttel, and including the capital, lies between Prussia and Hanover; the second, extending westward from Prussia to the Weser, divides Hanover into two parts; and the third, forming the Blankenburg district, lies to the south-east, between Hanover, Anhalt, and Prussia. Brunswick belongs mostly to the basin of the Weser, which serves as a boundary on the west. Its surface is mostly mountainous, particularly in the southern portions of the country, but it has nevertheless level tracts of considerable extent. The climate in the lowlands resembles the general climate of Northern Germany; but in the Harz district it is so much colder that harvest is generally a month later than in the plains. Brunswick in 1235, with Lüneburg, was made a duchy. In 1884, at the death of the childless Duke William, the succession passed to the Duke of Cumberland, son of George V., the dethroned king of Hanover. As he refused to recognise the new constitution of the German empire, the imperial government declined to allow the succession to take place, and an interregnum occurred.

Brunswick, the capital, stands on the Oker, 143 miles WSW. of Berlin. In the 13th century Brunswick became a member of the Hanseatic League, and soon attained considerable commercial prosperity, but its importance declined with the decay of the League. Most irregularly built, with narrow and crooked streets, it has a cathedral (1173-1469), the church of St Andrew with a steeple 341 feet high, and a fine Gothic Rathhaus. The manufactures include jute, woollen and linen, leather, sewing-machines, &c. A fine avenue of linden-trees leads to the ducal palace, which, destroyed by fire in 1830 and 1865, is now an imposing edifice of 1869. Pop. (1871) 57,833; (1900) 128,226.

Brunswick, (1) a port of entry, Georgia, on St Simon Sound, an inlet of the Atlantic, 186 miles SE. of Macon by rail. Population, about 10,000.—(2) A town of Maine, 29 miles NE. of Portland by rail, at the head of navigation on the Androscoggin River, whose falls or rapids supply water-power for cotton, paper, and other mills. It is the seat of Bowdoin College (1794), a Congregational institution of high standing, at which Nathaniel Hawthorne and Longfellow graduated. Pop. 7012.

Brunswick, New. See New Brunswick.

Brussels (Fr. *Bruxelles*), the capital of Belgium, is situated in a fertile plain on the ditch-like Senne, 27 miles S. of Antwerp, and 193 NE. of Paris. It has a circumference of about 5 miles, and is built partly on the side of a hill; though some of the streets are so steep that they can be ascended only by means of stairs, Brussels may on the whole be pronounced one of the finest cities in Europe. The fashionable Upper Town, in which are the royal palace, public offices, chief hotels, &c., is much more healthy than the older Lower Town, which is greatly subject to fogs, owing to its intersection by canals and the Senne, although the stream now passes under an arched covering, which supports a new boulevard. But the closely built old streets, with their numerous handsome buildings, formerly belonging to the Brabant nobility, but now occupied by merchants and traders, have a fine picturesque appearance, while some of the public edifices are unrivalled as specimens of Gothic architecture. French is spoken in the upper division; but in the lower Flemish is the current language prevalent, and by many the Walloon dialect is spoken. The walls which formerly surrounded Brussels have been removed, and their place is now occupied by pleasant boulevards extending all around the old town, and shaded by alleys of limes. The *Allée Verte*—a double avenue along the Scheldt Canal—forms a splendid promenade, and leads toward the country palace of Laeken, 3 miles north of the city. Besides the fine park of 32 acres, in the Upper Town, ornamented with fountains and statues, and surrounded by the palace and other state buildings, Brussels has several other squares or places, among which are: the *Place Royale*, with its colossal monument of Godfrey of Bouillon; the *Grand Place*, in which is the hôtel-de-ville, a splendid Gothic structure of the 15th century, with a spire of open stonework 364 feet high; and the *Place des Martyrs*, where a memorial has been erected to those who fell here in the revolution of 1830. The statue group of the Counts Egmont and Horn is notable. The cathedral of St Gudule, dating from the 13th century, has many richly painted windows, and a pulpit considered to be the masterpiece of Verbruggen. In the *Palais des Beaux Arts* is the picture-gallery, containing the finest specimens of the Flemish school of painting; a valuable museum; and the public library, with 234,000 volumes and 22,000 MSS., many of the latter being beautifully illuminated. The new *Palais de Justice*, built in 1866–83 at a cost of more than £2,000,000, is one of the most magnificent buildings in Europe. The royal palace and the national palace (for the chambers) are important buildings. The university (1834) has over 1300 students. There are schools of painting and sculpture, and a conservatorium. There is a museum of paintings by the artist Wiertz, many of them on painful and repulsive subjects. Brussels lace is particularly famous. Of the so-called Brussels carpets only a few are manufactured here, most of those of Belgian make being produced at Tournai. There are also manufactures of damask, linen, ribbons, embroidery, paper, jewellery, hats, soap, porcelain, carriages, &c. Pop. (1846) 123,874; (1866) 157,905; (1901) 212,500, or, with its eight suburbs, 565,000.

Dating from at least the 8th century, Brussels under Charles V. was made the court-residence in the Netherlands, and became afterwards, under Philip II., the chief arena of the atrocities committed by Alva and the Inquisition. It suffered greatly in the war of Spain against Louis XIV.—in whose reign it was bombarded by Marshal Villeroi, and upwards of 4000 buildings destroyed—and in that of Austria against Louis XV.; but still more from the continual prevalence of party animosities caused by the policy of Austria. Under the mild rule of Maria Theresa, it flourished greatly, and in this time many of its best institutions and public buildings were founded. In 1792 Brussels fell into the hands of the French. It was incorporated with the kingdom of the Netherlands in 1815; in 1830 it became the capital of Belgium.

Brüx, a town of Bohemia, on the Biela, 78 miles NW. of Prague by rail. In its vicinity are coal-mines, and the famous mineral springs of Püllna and Seidlitz. Pop. 20,136.

Brynmawr, an iron-working town of Brecknock, 8 miles WSW. of Abergavenny; pop. 7000.—The American Bryn Mawr, with its college for women (1885), is 10 miles NW. of Philadelphia.

Brzezany, in Galicia, 52 miles SE. of Lemberg; pop. 11,500.

Buachaille Etive, two mountains (3345 and 3129 feet) of Ardchattan parish, Argyllshire.

Bubastis (the *Pi-beseth* of Ezek. xxx. 17; now *Tel Bast*), a ruined city of Lower Egypt, on the eastern main-arm of the Nile, near Zagazig. Under the 25th dynasty (725–686 B.C.) the city was a royal residence, but after the Persian conquest it gradually lost its importance. The ruins of its great temple were discovered by M. Naville in 1887.

Bucaramanga, capital of the dep. of Santander in the NE. of Colombia, on the Lebrija River, 3200 feet above sea-level. Pop. 20,000.

Buc'cari, or Bakar, a free port of Croatia, on an inlet of the Gulf of Quarnero, 5 miles by rail ESE. of Fiume. Pop. 2000.

Buccleuch (*Buk-clew'*), a small Selkirkshire glen, 18 miles SW. of Selkirk, with the site of a stronghold of the Scotts, who hence took the title of earl (1619) and duke (1663).

Buchan (*Buhh'an*), the NE. district of Aberdeenshire, between the Ythan and the Deveron. It rises in Mormond Hill to 769 feet; portions of the coast are bold and precipitous, and 6 miles south of Peterhead are the famous Bullers of Buchan, a huge vertical well in the granite margin of the sea, 50 feet in diameter and 100 feet deep, into whose bottom the sea rushes by a natural archway. Buchan contains the towns of Peterhead, Fraserburgh, Macduff, and Turriff. Buchan Ness is the easternmost promontory of Scotland, 3 miles S. of Peterhead. See Pratt's *History of Buchan* (1859).

Bucharest (*Bucuresci*), the capital of the former principality of Wallachia and of the present kingdom of Roumania, stands 265 feet above sea-level, in the fertile but treeless plain of the small sluggish Dambovitza. By rail it is 716 miles SE. of Vienna, 40 N. of Giurgevo on the Danube, and 179 NW. of Varna on the Black Sea. A strange meeting-point of East and West, the town as a whole is but meanly built, but the streets are now mostly paved, and lighted with gas. An elaborate system of fortification was undertaken in 1885. The royal palace was rebuilt in 1885; and the Catholic cathedral is a fine edifice of 1875–84. The number of cafés and gambling-tables is excessive; and altogether Bucharest has the unenviable reputation of being the most dissolute capital in Europe, with all the vices but few of the refinements of Paris. There is, however, a university (1864). The *corso*, or public promenade, is a miniature Hyde Park. Bucharest is the entrepôt for the trade between Austria and the Balkan Peninsula, the chief articles of commerce being textile fabrics, grain, hides, metal, coal, timber, and cattle. Bucharest has been several times besieged; and between 1793 and 1812 suffered twice from earthquakes, twice from inundations, once from fire, and twice from pestilence. Pop. (1866) 141,754; (1901) 282,100.

Buckau (*Book'kow*), a manufacturing town of Prussian Saxony, in 1887 incorporated with Magdeburg (q.v.).

Buckhaven, a fishing-village of Fife, on the Firth of Forth, 5½ miles E. of Thornton Junction. Pop. 5000.

Buckie, a fishing-town of Banffshire, 13 miles ENE. of Elgin by rail. Its harbour (1874–80), constructed of concrete at a cost of £60,000, consists of an outer and inner basin, with an area of 9 acres. Pop. 6600.

Buckingham, the county town of Buckinghamshire, stands, almost encircled by the Ouse, 61 miles NW. of London. An ancient place fortified by Edward the Elder (918), it yet has no antiquities, owing to a great fire in 1725. Since 1848 Aylesbury has superseded it as the assize town, and it lost its last member in 1885. The grammar-school was founded in 1548. The bobbin-lace manufacture has declined. Pop. (1851) 4020; (1891) 3364; (1901) 3150.

Buckinghamshire, or Bucks, a south-midland county of England, surrounded by Bedfordshire, Herts, Middlesex, Surrey, Berks, Oxfordshire, and Northamptonshire. Thirty-third in size of the English counties, it has a maximum length of 57 miles, a varying breadth of 8½ and 27 miles, and an area of 730 sq. m., or 466,932 acres. It is finely diversified with hill and dale, wood and water. To the south is the Chiltern range of chalk-hills, which, entering from Oxfordshire and stretching across the county in a north-easterly direction, are partly covered with heath and wood, and rise near Wendover to a height of 905 feet above sea-level. The chief rivers are the Thames, bordering the county on the south-west, the Ouse, Ousel, Colne, and Thame, the last two falling into the Thames. Buckinghamshire is eminently an agricultural county, 87 per cent. of the entire area being in cultivation. The chief dairy product is butter for the London market; in the fertile vale of Aylesbury, fattening of cattle is extensively carried on; the sheep are noted for their fine and heavy fleeces; and large numbers of ducks are reared. Nearly 40 sq. m. are under woods and plantations, beech and oak being the chief timber-trees. The chief manufactures are paper, straw-plait, and thread-lace. The county returns three members to parliament; Aylesbury, Buckingham, Marlow, and Wycombe having ceased in 1885 to be parliamentary boroughs. It contains some Roman and British remains, as traces of Watling, Icknield, and Akeman Streets or Ways; remains of the religious houses of Missenden, Notley, Burnham, Medmenham, and Ivinghoe; and vestiges of Lavendon and Whitchurch Castles. Bucks is rich too in scenes of historic or biographical interest, as Chalfont St Giles, Horton, Hampden, Milton, Stoke Poges, Olney, Slough, Stowe, Aston Sandford, Beaconsfield, Gregories, Bardenham, and Hughenden. Pop. (1801) 108,132; (1841) 156,439; (1901) 197,064. See county histories by Lipscomb (1847), Sheahan (1862), and Page (1905–6).

Bucklyvie, a Stirlingshire village, 15½ miles W. of Stirling. Pop. 383.

Buck of Cabrach, an Aberdeenshire mountain (2368 feet), 13 miles SW. of Huntly.

Buczacz, a town of Austria, in Galicia, on the Stripa, an affluent of the Dniester, 47 miles ENE. of Stanislau by rail. Pop. 9970.

Bu'dapest, the official designation of the capital of Hungary, which consists of Buda (Ger. *Ofen*) on the right and Pest or Pesth on the left bank of the Danube, the two cities having formed a single municipality since 1872. See Pesth.

Budaun, a town of India, 140 miles NW. of Lucknow. Pop. 39,372.

Buddon Ness, the promontory, 95 feet high, on the north or Forfarshire side of the entrance to the Firth of Tay.

Bude, a watering-place on the north coast of Cornwall, 17 miles NNW. of Launceston. Pop. 1057.

Budleigh Salterton, a sheltered Devon watering-place, at the mouth of the Otter, 5 miles E. of Exmouth. Pop. 1870.

Budrun (*Boodroon*), a seaport of Asiatic Turkey, on the north shore of the Gulf of Kos, 96 miles S. of Smyrna. It is the site of the ancient *Halicarnassus*, the birthplace of Herodotus and Dionysius. Pop. 6000.

Budweis (*Bood'vice;* Czech *Budejovice*), a cathedral city of Bohemia, on the navigable Moldau, 133 miles NW. of Vienna by rail. It manufactures machines, stoneware, lead-pencils, saltpetre, &c. Population, 40,000. Near it is Schloss Frauenberg (1847), Prince Schwarzenberg's seat.

Buenaventura (*Bway'naventoo'ra*), a town on the Pacific coast of Colombia. Pop. 5000.

Buena Vista (*Bway'na Veesta*), a village of Mexico, 7 miles S. of Saltillo, where in February 1847, some 5000 U. S. troops defeated 20,000 Mexicans.

Buen-Ayré (Span. *Bwayn-Ireh*), Fr. BONAIRE, a West Indian Island, 60 miles from the coast of Venezuela, and 30 E. of Curaçao, like which it belongs to the Dutch. Area, 127 sq. m.; pop. 4043.

Buenos Ayres (*Bwaynôs I'rez;* Eng. pron. usu. *Bonos Ai'rez*), the largest province of the Argentine Republic, extending along the Atlantic, from the mouth of the Plata to that of the Rio Negro; on the NE. it is washed by the Plata and the Paraná. In administration the province is independent of the central government. Its area is about 118,000 sq. m. (close on that of Great Britain and Ireland), with a pop. (excluding the city, a province by itself) of 1,210,000.—The *city* of Buenos Ayres, the federal capital of the Argentine Republic, stands on the right bank of the Plata, which here, at a distance of 150 miles from the open sea, is 28 miles across, but so shallow that ships drawing 15 feet of water are obliged to anchor 7 or 8 miles from the shore. Monte Video, on the opposite shore, possesses a better harbour; but Buenos Ayres has greater facilities in carrying on an inland trade, and undertook, moreover, in 1887, a system of harbour works to connect two channels of the Plata, and so bring the largest vessels up to the wharfs. The city is partitioned into blocks of about 150 yards square, with muddy, uneven roads; still, new houses, generally of brick faced with marble or stucco, are everywhere taking the place of the old comfortless Spanish-American erections, and the value of property has enormously increased. The principal buildings are the cathedral, second in South America to that of Lima alone, the chapel of Santa Felicitas, with elaborate frescoes, Anglican, Lutheran, Methodist, and Presbyterian churches, the university, a military college, the new post-office, the mint and government offices, and some of the palatial railway depots. There are also printing establishments; manufactories of cigars, carpets, cloth, furniture, and boots and shoes; some small dockyards; and an Emigrants' Home. The city is the seat of an archbishopric, and possesses several public libraries and museums, eleven hospitals, and numerous other charitable institutions. The terminus of six railways, it has some 150 miles of tramway lines; there is cable communication with Europe and the United States, and a good telephone service. The drainage is well planned, and the water and gas supply excellent; the climate is not so exceptionally fine as the name of the town ('good airs or breezes') would imply. The exports (one-sixth to England) and imports (about one-half British) are practically those of the Argentine Republic; but there is also a river-trade averaging £3,500,000. Pop. (1902) 865,500. Buenos Ayres was founded in 1535, but was subsequently twice destroyed by the Indians. In 1806 a British force, which had just captured the city, was obliged to surrender; and in 1807 another, which attempted to recover the place, was repulsed with heavy loss; and these successes over so formidable a foe emboldened the colonists, three years afterwards, to throw off the yoke of Spain. In the insurrection of 1892 the city was bombarded.

Buffalo, a city of New York state, capital of Erie county, is at the east end of Lake Erie, and at the head of Niagara River. It is 295 miles NW. of New York City in a direct line, but 423 by the Erie Railroad; the distance from Chicago is 539 miles. In population and wealth, Buffalo ranks third among the cities of New York. It has a capacious harbour, admitting vessels of 17 feet draught, and with an outer breakwater 4000 feet long, besides other breakwaters, piers, basins, and canals. The harbour is guarded by Fort Porter, which stands two miles out from the heart of the city; close by is the old fort, built in 1812, but now in ruins. The water front of the city extends 8 miles along the lake and river, while Buffalo Creek has been rendered navigable for over a mile. The commercial importance of Buffalo dates from the completion of the Erie Canal in 1825; but since 1862 the lake commerce has yielded to the competition of the railroads. The chief business is the receiving, transferring, and storing of grain, the annual amount of which (including flour) received by lake and railroad is from 70,000,000 to 90,000,000 bushels. The live-stock trade is scarcely second in importance; the iron and steel works rank next to those of Pittsburgh; and the shipments of Pennsylvania coal, which finds a depot here, have greatly increased of late years. The lumber trade is also large, but has been partly diverted to Tonawanda, 10 miles below Buffalo, where more room is afforded. The industrial works comprise four blast-furnaces, large rolling-mills, machine-shops, car-shops, iron shipyards, stove-foundries, tanneries, breweries, flour-mills, and manufactories of agricultural implements. Buffalo is connected with the Niagara Utilisation Company's works for electric lighting and motor power. The navigation of Lake Erie usually opens about the middle of April, the extreme dates being a month earlier and a month later. Buffalo has wide streets, well paved and lighted, and generally lined with trees. It has excellent sewerage, and extensive water-works supplied from Niagara River; and its healthfulness is attested by the low death-rate of 14 per 1000. There are five public squares, and the magnificent park consists of three sections, connected by boulevards, which encircle the city. The city and county hall is an imposing structure of Maine granite, in the form of a double Roman cross, with a tower 245 feet high, surmounted by four statues. The other prominent buildings are the U. S. custom-house and post-office, the public library, the state arsenal, the county penitentiary, and a state asylum for the insane (in North Buffalo). Of the two finest of its 100 churches, St Joseph's Cathedral (Roman Catholic) is a gray Gothic structure; and St Paul's (Episcopal) has been rebuilt since its burning in 1888. Founded in 1801, Buffalo was burned in 1813 by British and Indians. It was incorporated as a city in 1832, and had then a population of 15,000, which had increased in 1860 to 81,130; in 1880 to 155,137; in 1890 to 255,664; in 1900 to 352,387.

Bug (*Boog*), the name of two Russian rivers. The Western Bug rises in Austrian Galicia, and after a course of 470 m., mostly along the eastern

frontier of Poland, it joins the Vistula near Warsaw. The Eastern Bug (anc. *Hypanis*) rises in Podolia, and flows 520 miles south-east into the Dnieper's estuary.

Bugis. See Boni.

Bugulma (*Boogoolma*), a town in the Russian government of Samara, on the Bugulminka, a tributary of the Kama. Pop. 13,746.

Buguruslan (*Boogoorooslan*), a town in the Russian government of Samara, on the Kinel, in the Volga steppe. Pop. 19,390.

Buildwas (*Bild'was*), a Shropshire parish, on the Severn, 4 miles N. of Much Wenlock, with a ruined Cistercian abbey (1135).

Builth (*Bilth*), a town of Brecknockshire, on the Wye, 14 m. N. of Brecon. Pop. 1805. Builth Wells, 1 mile NW., have mineral properties.

Buitenzorg (*Bi'tenzorg*), a town in Java, 35 miles S. of Batavia by rail, stands in mountainous country, and has so fine a climate that it is a favourite summer-resort. Pop. 25,000.

Bujalance (*Boo-ha-lan'thay*), a city of Andalusia, Spain, 25 miles E. of Cordova. Pop. 11,250.

Bukkur, a fortified island of the Indus, in Sind, between the towns of Rohri and Sukkur.

Bukowina (*Booko*, 'beechland'), an eastern province of the Austro-Hungarian empire, surrounded by Galicia, Russia, Moldavia, and Hungary. Area, 4035 sq. m.; pop. (1869) 513,404; (1900) 730,195, of whom 42 per cent. are Ruthenians, 33 Moldavians, and 12 Jews, while 71 per cent. belong to the Greek Church. It is traversed by offsets of the Carpathians, culminating at 6077 feet; gives rise to many rivers flowing towards the Black Sea; and abounds in wood, cattle, horses, and minerals. Capital, Czernowitz.

Bulacan, a port of Luzon, Philippines, 20 miles NW. of Manila. Pop. 14,000.

Bulak. See Boulak.

Bulandshahr, a town in the Meerut division of the United Provinces of India. Pop. 17,500.

Bulawayo, the old capital of Matabeleland, and now chief commercial place in Southern Rhodesia, is 290 miles SW. of Salisbury, and is connected by rail both with Beira (1900) and with Capetown (1897). Pop. 7000 (4000 whites).

Bulgaria, a principality in the Balkan Peninsula, between the Danube and the Balkans. It was created by the Treaty of Berlin (1878), and since 1885 Eastern Roumelia, lying to the S., has been practically incorporated with it. The area of Bulgaria is 24,500 sq. m.; that of Eastern Roumelia, 13,700; and their united population in 1903 was 3,310,715—over three-fourths Bulgarians, 530,000 Turks, 90,000 Gypsies, 72,000 Roumanians, 70,000 Greeks, and 34,000 Jews. The north of Bulgaria is fertile plain and hilly country; the south is wooded and mountainous. A fine waterway as her northern boundary and an outlet to the Black Sea, a seaboard, a mild climate, a purely agricultural country capable of great development, free institutions and about the most liberal constitution in Europe, a peasantry possessing the solid qualities and persevering industry of northern races—with these elements for her economic development, her right to a national existence cannot be disputed. The physical aspects of Eastern Roumelia are very varied, the surface in the west being broken up by the offshoots of the Albanian ranges, and in the north and north-east by the Balkans and their spurs. The principal exports are cereals, and the imports live-stock; but there are important manufactures of woollens and attar of roses, and the production of wine and tobacco receives considerable attention. Sofia is the capital, the other principal towns being Varna, Shumla, Rustchuk, Widin, Razgrad, Sistova, Tirnova, and Plevna; Philippopolis is the chief town of Eastern Roumelia. The Bulgarians belonged originally to the Ural-Altaic stock, but have adopted a Slavonic dialect. First crossing the Danube in the 6th century A.D., by 1186 they had split up into three principalities, and from 1393 fell under the domination of the Turks. The Bulgarians now extend far beyond the boundaries of the two Bulgarian states, into Macedonia, Bessarabia, &c., their total number being estimated at seven millions. See Samuelson, *Bulgaria* (1888); Dicey, *The Peasant State* (1894); Miller, *The Balkans* (1896).

Bullers of Buchan. See Buchan.

Bull Run, a small stream separating Fairfax and Prince William counties in Virginia, 25 miles W. by S. of Washington. It gives name to a battlefield, where on July 21, 1861, and August 29, 1862, the Confederates gained two victories.

Bulsar, a seaport of India, on the estuary of the river Bulsar, 115 miles N. of Bombay by rail. Pop. 14,229.

Bulstrode Park, Bucks, 2½ miles ESE. of Beaconsfield, a seat of the Duke of Somerset.

Bultfontein (*Booltfontayn*), a place with diamond mines in Griqualand West, E. of Kimberley.

Bulti (*Booltee*), part of Cashmere (q.v.).

Buncombe, the county of North Carolina whose tedious representative in congress (1819–21) explained when interrupted that he was 'speaking for Buncombe'—hence 'bunkum.'

Buncrana (*Bun-krah'na*), a Donegal town, on Lough Swilly, 12 m. from Londonderry. Pop. 1316.

Bundaberg, a sugar port of Queensland, 272 miles N. of Brisbane. Pop. 5000.

Bundelkhand (*Boondelkhund*), a region of Upper India, between the Chambal and the Jumna. It includes five districts of the British NW. Provinces (Banda, Jalaun, Jhansi, Lalitpur, and Hamirpur); also the 'Bundelkhand Agency,' a subdivision of the Central Indian Agency, which is a group of 30 native states. Principal towns—Kalpi, Jhansi, Kalinjar, Banda, Jalaun, Chhatarpur, Datia.

Bundi, a native state of Rajputana; area, 2225 sq. m.; population, 180,000, nearly all Hindus. Chief town, Bundi (pop. 20,000).

Bundo'ran, a watering-place on Donegal Bay, 4 miles SW. of Ballyshannon. Pop. 896.

Bungay, a market-town of Suffolk, on the Wayeney, 6 miles W. of Beccles. It grew up around the 12th-century castle of the Bigods, Earls of Norfolk, some ruins of which still remain; but mostly it is later than the great fire of 1688. It has a large printing establishment. Pop. 3560.

Bunker Hill, an elevation (112 feet) on the peninsula of Charlestown, now part of Boston, Massachusetts, connected by a ridge, 700 yards long, with Breed's Hill (75 feet). The two heights were the scene of the first hard-fought battle of the American Revolution (June 17, 1775), in which the Americans repulsed two attacks by General Gage's forces, and were dislodged only after reinforcements had been brought up, and their ammunition was spent. A granite obelisk, 221 feet high, marks the site of the redoubt.

Bunzlau (*Boontz'low*), a town of Prussian Silesia, 25 miles WNW. of Liegnitz by rail. It

manufactures earthenware, woollens, glass, &c. Pop. 14,532.

Bunzlau, Junc (Czech *Mladá Boleslav*), a town of Bohemia, on the Iser, 32 miles NE. of Prague by rail. Pop. 14,250.

Burano (*Boo-râh'no*), an island and town, 5 m. NE. of Venice. Its lace manufacture, once famous, has been revived. Pop. 8300.

Burdekin, a river of Queensland, draining the district of North Kennedy. It rises not far from the coast, and after an irregular course forms a delta emptying into Bowling Green and Upstart bays. It was discovered by Leichhardt in 1845, and explored by Dalrymple and Smith in 1859–60.

Burford, a town of Oxfordshire, on the Windrush, 18 miles W. by N. of Oxford. Pop. of parish, 1346.

Burg (*Boorg*), a town of Prussian Saxony, 15 miles NE. of Magdeburg by rail. It manufactures woollens, leather, tobacco, &c. Pop. 22,414.

Burgas (*Boorgas*), a port of Eastern Roumelia, on the Gulf of Burgas, in the Black Sea, 76 miles NE. of Adrianople. Pop. 9000.

Burgdorf (*Boorg-dorf;* Fr. *Berthoud*), a Swiss town, 14 miles NE. of Bern by rail. In the old castle here Pestalozzi established his famous school (1798–1804). Pop. 8581.

Burgess Hill, a town of Sussex, 8¼ miles N. of Brighton. Pop. 4888.

Burgh-by-Sands, a Cumberland parish, 5 miles NNW. of Carlisle. An obelisk marks the deathplace of Edward I.

Burgh Castle, a Suffolk parish, 4 miles WSW. of Yarmouth, with a most perfect Roman camp.

Burghead, a fishing-town of Elginshire, on the Moray Firth, 11 miles NW. of Elgin. Pop. 1531.

Burghley House, 'by Stamford town,' in Northamptonshire, on the Welland, the splendid Renaissance mansion of the Marquis of Exeter, was commenced in 1575 by Lord Burghley, and has a noble park, carvings by Grinling Gibbons, and a great collection of pictures.

Bürglen, a village in the Swiss canton of Uri, about a mile from Altorf, is the traditional birthplace of William Tell. The supposed site of his house is now occupied by a chapel (1522), on whose walls are represented scenes from his history. Pop. 1778.

Burgos (*Boor'gŏs*), a city of Spain, the ancient capital of Old Castile, on the river Arlanzon, 225 miles N. of Madrid by rail. Founded in 884, it has a castle, in which our Edward I. was wedded, and Pedro the Cruel born, and an archiepiscopal cathedral (1221), which ranks with those of Toledo and Leon as one of the three great Spanish churches of the Early Pointed period. It is a glorious building, with its twin-spired western façade, its exquisite lantern, and its fifteen chapels so rich in fine sculpture and tombs. Burgos was the birthplace of the Cid, whose bones are preserved at the town-hall. It has manufactures of woollens and linens. The university (1550) is now extinct, but there is a college with twenty-one professors. The city formerly had 50,000 inhabitants; but on the removal of the court to Madrid in the 16th century, it began to decline in importance. It was further greatly injured in 1808 by the French. In 1812 the castle was four times unsuccessfully besieged by Wellington, who, however, took it in the next year, when the French blew it up, and the fortifications. Pop. 30,250.

Burgundy, till 1477 an independent principality of widely varying area in the east and south-east of what is now France, and later a French province (Fr. *Bourgogne*), which comprised the present departments of Ain, Côte-d'Or, Saone-et-Loire, and Yonne, with parts of adjoining deps. Among its towns were Dijon, Macon, Autun, Châlon-sur-Saone, and Bourg. The white and red wines of Burgundy have a great celebrity.

Burhanpur, a town of the Central Provinces, India, on the Tapti, 280 miles NE. of Bombay. The remains of buildings show that the town extended over an area of 5 sq. m. when under the Moguls. The city was taken by General Wellesley in 1803, but it was only in 1860 that Burhanpur came completely under control of the British government. The town contains a palace built by Akbar, and a mosque built by Aurungzebe. Pop. 33,017.

Burley-in-Wharfedale, a village and township in the West Riding of Yorkshire, on the Wharfe, 10 miles N. of Bradford. Pop. 3310.

Burlington, three cities in the United States: (1) The capital of Des Moines county, Iowa, on the right bank of the Mississippi (here crossed by a railway bridge), 207 miles WSW. of Chicago. Laid out in 1834, it is the seat of a Baptist college, and has manufactures of machinery, farming implements, flour, carriages, &c. Pop. (1870) 14,930; (1900) 23,200.—(2) A port of entry of Burlington county, New Jersey, on the Delaware, 7 miles above Philadelphia. It possesses an Episcopalian college (1846), and large manufactories of shoes, ironware, and thread. Pop. 7264.—(3) A port of entry and capital of Chittenden county, Vermont, and the most populous city in the state, beautifully situated on the eastern shore of Lake Champlain, 40 miles WNW. of Montpelier by rail. It has a good harbour, with a breakwater and lighthouse, and has access by canals and the Richelieu River to the Hudson and St Lawrence. It is the seat of the State Agricultural College (1865), and of Vermont University (1800); has cotton, flour, and planing mills, machine-shops, and manufactures of furniture, &c.; and is one of the largest lumber markets in the States. Pop. (1870) 14,387; (1880) 11,365; (1900) 18,640.

Burlington. See Bridlington.

Burma, once the chief state in the Indo-Chinese peninsula, is now the largest of all the provinces of the Indian empire. It stretches from 28° lat., on the confines of Tibet, southward for 1100 miles, to 10° lat., far down the Malay Peninsula, and from 103° long., on the Chinese border, for 700 miles westward to the Bay of Bengal. It is conterminous with China and Siam on the east; and for the rest it is bounded by the Indian provinces of Bengal and Assam, and by the ocean. Its total area is 236,738 square miles, of which 81,160 belong to the old province of Lower Burma, 87,390 to Upper Burma, and 68,188 to the Shan States. The country consists of the great basin of the Irawadi and its affluents; the rugged country drained by the Salween and Sittang rivers, on the upper waters of which are situate the Shan States; and the narrow maritime provinces of Arakan and Tenasserim. The deltas of the Irawadi, Salween, Sittang, and Koladan rivers are flat plains, and there are smaller areas of level land at the mouths and on the banks of some of the feeders of the Irawadi. The level cultivable plains probably do not exceed 50,000 sq. m. in all. The rest of Burma is hilly broken country, covered for the

most part with forest. The China hills in the north-east reach a height of 15,000 feet. The Shan States occupy a vast upland, cleft by deep chasms, in which flow the Salween and the Cambodia rivers and their feeders. The chief river of Burma is the Irawadi, 1100 miles in length, which is navigable all the year round by river-steamers to Bhamo, 700 miles from the sea, and 50 miles from the Chinese border. The rivers are the chief highways of the country; but during the dry season all, except the very largest and the tidal channels, are too low for navigation. Sometimes the flood-waters of the Irawadi submerge the country for 10 or 15 miles on either side to a depth of 4 to 14 feet. The inundated villages, however, do not suffer, as the houses are all built on piles. The rainfall varies widely in different parts of Burma, from 200 to 42 inches. In the delta and along the coast the rainy season lasts for five, six, or sometimes even seven months. From February to the end of April the climate of the delta is dry and hot (occasionally 100° in the shade). Higher up the Irawadi valley the climate is much hotter and dryer in the summer, but cooler in the winter months. The climate of Burma is more trying to Europeans than that of the plains of India. The forests of Burma contain an abundance of useful and beautiful trees, including teak, bamboo, and trees producing valuable fibre, wood-oil, varnish, tannin, and gums. Among the wild animals of Burma may be mentioned the elephant, three species of rhinoceros, tapir, buffalo, bison, many kinds of deer, small wild cattle, hog, tiger, leopard, bear, and wild dog. Among domestic animals, the buffalo, oxen, elephants, and ponies are all good. No horses are bred, and sheep and goats are rare. Pythons and cobras abound. The variety of birds and of fish is immense. Gold is found in small quantities by washing river-sand; silver is extracted at lead-workings in the Shan States. Iron, copper, lead, and tin exist in great quantity, petroleum is found in several districts. Jade and amber are worked. Coal exists at several places in Upper Burma. The coal found as yet in Lower Burma has proved of poor quality and scanty in quantity. The ruby-mines north of Mandalay yield the best rubies in the world.

At the census of 1901 the population of Lower Burma was 5,389,897, and of Upper Burma 3,849,833, and 1,250,894 in the Shan dependencies, showing a total population of 10,490,624. Of these some 7,000,000 are Burmans, 800,000 Karens, the rest being mainly other hill tribes (Chins, Kachins, Singphos, Paloungs, &c.). The Burmans are a short-statured, flat-featured, thick-set people. They are excitable and fond of fun and laughter; much given to dramas, dances, and shows; and callous to suffering in others. Dacoity or robbery with violence by gangs is common. Burmese women are well treated. Burmans are Buddhists by religion; the most respected class are the Buddhist monks, whose function is to set an example of a correct life, and to instruct the young. They observe the vows of celibacy and poverty, but can return to the world when they please. They shave their heads, wear yellow robes, and live in monasteries. The Shans resemble the Burmans; but being highlanders, are poorer, hardier, and more courageous. The Karens are less clever, but more persevering and methodical than Burmans. There are over 500 parishes of Christian (American Baptist) Karens, containing nearly 200,000 souls. The Burmese language is monosyllabic; it is written from left to right, the shape of the letters being circular. The classical language of Burma is Pali. The name Burma is, according to Yule in *Hobson-Jobson*, an Englished form of *Mram-ma*, pronounced by the people *Bam-mâ*. The primary schools of the country are the Buddhist monasteries, in which every Burman lad must be taught to read and write. Over 60 per cent. of the males in Lower Burma above the age of twelve can read and write.

The external sea-borne trade of Lower Burma is valued at over twenty millions sterling. Most of this trade centres in Rangoon. The chief export items are rice, teak timber, cutch, hides, cotton; while the chief import items are cotton piece-goods and yarns, silk goods, coal, hardware, salt, and metals. Several railways are in operation, including that from Rangoon to Mandalay. Extensions are in progress in several directions; and possible railway communication between Burma and China has been much discussed. The commercial and financial development of Lower Burma under British rule has been great and rapid. The arts in which Burmese excel are wood-carving, silver repoussé work, woven silk fabrics of many colours, and lacquer-ware. Burma is governed under the Viceroy of India, by a chief-commissioner. A Buddhist Burman dynasty was established on the Irawadi at least as early as the 11th century. It was not till 1820 that the Burmese came directly into contact with the British power in Assam, then Burmese. In consequence of Burmese aggression followed by war, Arakan and Tenasserim were ceded in 1826, Pegu in 1854; and in 1886 Upper Burma was incorporated with British India. See works by Forbes (1876), Fytche (1878), Scott ('Shway Yoe,' 1882 and 1886), Phayre (1883); and for the Burmese, Siam, and China Railway, works by Colquhoun and Holt Hallett.

Burnham, a Somerset watering-place, on Bridgwater Bay, 7½ miles N. of Bridgwater. Pop. 2897.

Burnham Beeches, in Bucks, near Maidenhead, and 25 miles W. of London, the remains of an ancient forest, purchased in 1879 by the London Corporation. See a work by Heath (1880).

Burnham Thorpe, a Norfolk parish, 4½ miles W. by S. of Wells. Lord Nelson was born in the former rectory.

Burnley, a thriving town of Lancashire, in a narrow vale on the banks of the Brun, near its influx to the Calder, 21 miles E. of Preston, and 27 N. of Manchester. Roman remains have been found, but it is a modern-looking place, a great seat of the woollen and then of the cotton manufacture, with a literary institute and exchange (1855), a market-hall (1868), the Victoria Hospital (1886), a grammar-school (*temp.* Edward VI.), and an ancient parish church, restored in 1856. It manufactures looms and other machinery, has cotton-mills, calico-printing works, iron and brass foundries, breweries, tanneries, and rope-works. There are collieries in the vicinity. Burnley was created a municipal borough in 1861 (the boundary being extended in 1889), a parliamentary borough (returning one member) in 1867, and a county borough in 1888. Pop. (1871) 44,320; (1891) 87,016; (1901) 97,050.

Burnmouth, a Berwickshire fishing-village, 5½ miles NNW. of Berwick-upon-Tweed.

Burntisland, a seaport and watering-place of Fife, on the Firth of Forth, 5 miles N. of Granton by steam-ferry (1848). Backed by the Bin, 632 feet high, it has a quaint parish church (1594),

and the old castle of Rossend, where Chastelard incurred his doom. The harbour has been much improved, and coal is shipped in large quantities. Burntisland is one of the four Kirkcaldy burghs. Pop. (1841) 1959; (1901) 4846.

Burra, East and West, two Shetland Isles, 10½ miles SW. of Lerwick. Pop. 203 and 612.

Burra Burra, a famous copper-mine in South Australia, 101 miles N. by E. of Adelaide. It was discovered in 1844.

Burrard Inlet, a narrow inlet, 9 miles long, at the SW. corner of British Columbia, a little north of the mouth of the Fraser River. It forms one of the finest harbours on the Pacific coast, and has become of much importance by the opening of the Canada Pacific Railway, whose terminus is at Vancouver here.

Burray, an Orkney island, between Pomona and South Ronaldshay. Area, 4 sq. m.; pop. 671.

Burriana, a Spanish town, 34 miles N. of Valencia. Pop. 10,179.

Burrow Head, a promontory, 150 feet high, the SE. extremity of Wigtownshire.

Burscheid, a town of Prussia, on the Wupper, 20 miles SE. of Düsseldorf. Pop. 7828.

Burslem, a town of Staffordshire, within the parliamentary borough of Hanley, 20 miles N. by W. of Stafford. It is known as the 'mother of the potteries,' the pottery manufacture having been established here about 1644. Porcelain and pottery of all kinds are produced on a large scale, as well as encaustic tiles. There is also a glass manufactory. A fine town-hall, Renaissance in style, with a lofty clock-tower, was erected in 1865. Burslem was the birthplace of Josiah Wedgwood (1730–95); and a Wedgwood Memorial Institute was opened in 1870 to serve as a school of art, free library, and museum. Burslem was made a municipal borough in 1878, the boundary being enlarged in 1891. Pop. (1851) 16,954; (1891) 32,000; (1901) 38,850.

Burton-on-Trent, a municipal borough (since 1878) of East Staffordshire and South Derbyshire, 25 miles E. of Stafford, on the river Trent, the ancient bridge over which was superseded in 1864 by one 470 yards long. Burton-on-Trent owes its rapid extension to the brewing of ale, the staple of the place. The opening of the Midland Railway in 1839 paved the way for future progress. Cotton-spinning was at first the chief industry, but this has been discontinued since 1849. Its rise and progress as a brewing centre has been largely due to the suitability of the water for this purpose. There was some small local trade in beer in the 16th century here; Burton ale had a repute in London in 1630; and a considerable export trade had been established with the Baltic ports by the middle of the 18th century. In 1791 there were nine breweries, in 1851 sixteen, and now there are nearly twice that number, some of them—e.g. those of Bass and Allsopp, being on a scale of unparalleled magnitude. There are, of course, extensive cooperages, and also iron-foundries. A church or monastery was erected by the Trent in the 9th century; Burton Abbey was founded and endowed by Wulfric, Earl of Mercia, in 1002. The town suffered in the Great Rebellion, and has suffered repeatedly by floods, the water standing 4 or 5 feet deep on some streets in 1875. Pop. (1851) 7944; (1901) 50,386.

Burtscheid, a town of Rhenish Prussia, ½ mile from Aix-la-Chapelle, has manufactures of woollen cloths and cassimeres, and celebrated sulphur springs and baths, with a temperature of 106° to 155° F. Pop. 16,139.

Buru, or Boeroe, an island of the Malay Archipelago, in the residency of Amboyna, from which it lies 40 miles to the W. Marshy along the coast, and most of it densely wooded, it attains in one peak 10,320 feet. Area, 3360 sq. m.; pop. 40,000 to 50,000.

Bury, a flourishing manufacturing town of South-east Lancashire, on a rising ground backed by hills on the north and east, between the Irwell and the Roche, 10 miles NNW. of Manchester. The woollen manufacture introduced by Flemings in the 14th century attained its zenith under Elizabeth, but had greatly declined by 1738, when Bury was merely 'a little market-town,' and it has long been all but eclipsed by the cotton industry. Besides spinning and weaving factories, there are important paper, print, bleach, and dye works, and some large foundries and engine manufactories. In the vicinity are excellent freestone quarries, and abundant coal-mines. Some improvements in the cotton manufacture arose here—notably, the invention by John Kay of the fly-shuttle. Sir Robert Peel (1788–1850) was born at Bury in a cottage near Chamber Hall, his father being a great calico manufacturer. In 1852 a bronze statue of him was erected in the market-square. Bury was made a parliamentary borough (returning one member) in 1832, a municipal borough in 1876 (the boundary was extended in 1885), and a county borough in 1888. Pop. (1851) 31,262; (1891) 57,212; (1901) 58,030.

Bury St Edmunds, or St Edmundsbury, a clean, well-built town of West Suffolk, on the little river Lark, 26 miles NW. of Ipswich, and 76 NNE. of London. It was named after Edmund the Martyr, who on Christmas-day 856 was crowned here king of the East Angles, and who in 870 was shot to death at Hoxne by the Danes. His relics were translated hither in 903, and in 1020 Canute reared a Benedictine abbey in his honour, which in time became the richest and most important in England, Glastonbury only excepted. Little now remains but the noble Abbey Gate (1327–77), Decorated in style, and 62 feet high; and the Norman Tower or Church Gate (*c.* 1090), a quadrangular tower of massive simplicity, 86 feet high. The cruciform church itself, which measured 512 by 212 feet, is represented only by the west front and the piers of the central tower, one of which bears the inscription: 'Near this spot, on 20th November 1214, Cardinal Langton and the Barons swore at St Edmund's altar that they would obtain from King John the ratification of Magna Charta.' St Saviour's Hospital was founded by that notable abbot, Samson, whose life and actions, as recorded by Jocelin de Brakelonde, Carlyle has so vividly recalled in his *Past and Present*. The poet Lydgate was a monk of Bury St Edmunds; and Bishops Gardiner and Blomfield, Sir Nicholas Bacon, and Crabb Robinson were natives. St Mary's and St James's churches are both fine Gothic edifices of the 15th century; in the former is the tomb of Mary Tudor, the widow of Louis XII. of France. The grammar-school (1550) was rebuilt on a new site in 1883 in Queen Anne style at a cost of £12,000. Donaldson was one of its head-masters, and amongst its scholars have been the Norths, Sancroft, Cumberland, Blomfield, J. M. Kemble, FitzGerald, and Spedding. Defoe, Wollaston, 'Mr Pickwick,' 'Ouida,' and F. W. Robertson were residents. Since 1883

Bury St Edmunds has returned only one member to parliament. Pop. (1801) 7655; (1841) 12,538; (1901) 16,250. See works by Gillingwater (1804) and Thomas Arnold (1893).

Busachino. See BISACQUINO.

Busaco (*Boo-sah'ko*), a Portuguese ridge north of the river Mondego, 16 miles NNE. of Coimbra. Here, in 1810, Wellington repulsed Massena.

Busby, a town with cotton-mills and print-works, 7 miles S. of Glasgow. Pop. 1786.

Bushey, a small village in the south of Hertfordshire, 1½ mile S. of Walford.—BUSHEY PARK, a royal park, close to Hampton Court, is in Middlesex, 14 miles SW. of London.

Bushire (*Boo-sheer'*; properly ABUSHEHR, 'father of cities,' also written Bushahr), a principal port of Persia, on a sandy peninsula on the east shore of the Persian Gulf, in the province of Fars. The district is liable to be devastated by earthquakes and the simoom, and is deficient in water; but the situation is highly favourable for commerce. It is the land terminus of the Indo-European telegraph line, and a chief station of the British Indian Steam-navigation Company; and has a large trade both in imports and exports. Pop. 20,000.

Bushmills, an Antrim market-town, on the river Bush, 8 miles NE. of Coleraine. Pop. 979.

Busiu, BUSEO, BUZEO, or BUZAU, a Roumanian town, in Wallachia, 60 miles NE. of Bucharest, with a cathedral and much trade. Pop. 23,000.

Bussanga. See BORGU.

Bussorah. See BASRA.

Busto-Arsizio, a town of Italy, 20 miles NW. of Milan. Pop. 9891.

Bute, an island in the Firth of Clyde, separated from Argyllshire by the winding Kyles of Bute, mostly under a mile wide, and about 6 miles distant from Ayrshire, 8 NE. of Arran. It is 15½ miles long, 1¼ to 6¼ broad, and 49 sq. m. in area. The surface to the north is high, rugged, and barren, attaining 875 feet in Kames Hill; in the centre and south it is low and undulating, and comparatively fertile. Of six small lakes, the largest is Loch Fad (2½ by ¼ mile), in a cottage on whose west shore lived Kean and Sheridan Knowles. The climate is milder than in any other part of Scotland, and though moist, less so than on the west coast generally; hence, Bute is much resorted to by invalids. The principal town is Rothesay (q.v.). Most of the island belongs to the Marquis of Bute, whose beautiful seat, Mount-Stuart, 5 miles SSE. of Rothesay, has been rebuilt since the fire of 1877 at a cost of nearly £20,000. Among the antiquities of Bute are Rothesay Castle, Kames Castle (John Sterling's birthplace), Kilmorie Castle, St Blane's Chapel, and Dungyle, a remarkable vitrified fort on a high crag on the south-west coast. From an early period till 1266 Bute was more or less subject to the Norwegians. Pop. (1801) 6106; (1841) 9499; (1891) 11,735; (1901) 12,180.

BUTESHIRE, a county comprising the isles of Bute, Arran, the Cumbraes, Holy Isle, Pladda, Inchmarnock, and other smaller islands. The area of the whole is 225 sq. m., or 143,977 statute acres. Pop. (1871) 16,977; (1901) 18,787. Buteshire returns one member to parliament. The county town is Rothesay, in Bute.

Butler, a town of Pennsylvania, on the Conequenessing Creek, 30 miles N. of Pittsburgh (45 by rail). It has woollen, flour, and planing mills, and plate-glass and carriage factories. The neighbourhood is rich in natural gas, petroleum, and coal and iron fields. The population is now well over 11,000.

Butte (*Bewt*), capital of Silver Bow county, Montana, 72 miles by rail S. by W. of Helena, with silver-mines, quartz-mills, smelters, &c. Pop. (350 in 1870) now 31,000.

Butterley, a seat of ironworks and collieries, in Derbyshire, 10 miles NNE. of Derby. Sir James Outram was born at Butterley Hall.

Buttermere, a Cumberland lake, 9 miles SW. of Keswick. Lying 247 feet above sea-level, it is 1¼ mile long, ¼ mile wide, and 90 feet deep, and is united by a short stream to Crummock Water (240 ft., 2¾ m. by ¾ m., 130 ft. deep), which discharges to the Cocker.

But'tevant, a market-town on the Awbeg, 27 miles N. of Cork. Pop. 979.

Buxar, or BAXAR, a town of Bengal, on the south bank of the Ganges, 411 miles NW. of Calcutta by rail. Here in 1764 Sir Hector Munro defeated Mir Kasim. Pop. 18,498.

Buxton, a town in Derbyshire, 37 miles NW. of Derby, and 25 SSE. of Manchester. It lies 1025 feet above sea-level, in a deep valley surrounded by hills and moors, which have been tastefully planted; and the only approach is a narrow ravine, by which the Wye flows into the Derwent. Buxton has long been famous for its calcareous springs, tepid (82° F.) and cold (discharging 120 gallons of water per minute), and its chalybeate springs. They were probably known to the Romans, and in 1572 were celebrated by one Dr John Jones as 'the ancient baths of Buckstones.' The town is visited annually, from June to October, by 8000 to 12,000 persons, the waters being taken for indigestion, gout, rheumatism, and nervous and cutaneous diseases. Near Buxton is the Diamond Hill, famous for its crystals; and Poole's Hole, a gas-lit stalactite cavern 770 yards long. Pop. (1871) 3717; (1891) 7424; (1901) 10,185.

Buyuk'dereh, a village on the Bosphorus, 10 miles NNE. of Constantinople, is the summer residence of many of the ambassadors.

Byblos, an ancient city of Phœnicia, now a village of 600 inhabitants, called Jubeil, on a shallow bay at the base of the lower range of the Libanus, midway between Tripoli and Beyrout.

Byland Abbey, a ruined Cistercian monastery in the North Riding of Yorkshire, founded 1137, and chiefly represented by its noble Norman and Early English church, 328 feet long.

Bytown, till 1854 the name of Ottawa (q.v.).

Byzantium. See CONSTANTINOPLE.

CABATUAN, a town in the island of Panay in the Philippines, province Iloilo. Pop. 18,000.

Cabes, or KHABS, a port of Tunis, at the head of its own gulf. Pop. 10,000.

Cabinda, a small Portuguese territory on the west coast of Africa, north of the mouth of the Congo, and bounded on the E. by the Congo State. It was delimited in 1886. The capital, Cabinda, was formerly a noted slave port; pop. 8000.

Cabot Strait, the entrance to the Gulf of the St Lawrence, between Newfoundland and Cape Breton.

Cabourg, a village in the French dep. of Cal-

vados, on the Dives, 11 miles SW. of Trouville by rail. Pop. 1056.

Cabra, a town of Spain, 37 miles SE. of Cordova. Pop. 13,160.

Cabrach. See BUCK OF CABRACH.

Cabrera, one of the Balearic Isles (q.v.).

Cabul. See KABUL.

Cac'camo, a town of Sicily, 5 miles SW. of Termini. Pop. 7964.

Cáceres (*Kah'the-res*), a province of Spain, in the north of Estremadura. Area, 8014 sq. m.; population, 355,000.—The capital, Cáceres (anc. *Castra Cœcilia*), 45 miles N. of Merida by rail, is famous for its bacon and sausages. Here the allied forces defeated the Duke of Berwick's rearguard, 7th April 1706. Pop. 16,749.

Cachar Plains, a district of British India in the chief-commissionership of Assam, bordering on Manipur. Area, 2472 sq. m.; pop. 367,542. Silchar (pop. 6567) is the headquarters.

Cacongo, or KAKONGO, a district of West Africa, immediately N. of the mouth of the Congo. Cabinda (q.v.) is part of it; the rest has been absorbed in the Congo Free State.

Cadenabbia, a health-resort, beautifully situated among orange and citron groves, on the west shore of Lake Como. Its famous Villa Carlotta contains works by Canova and Thorwaldsen.

Cad'er Idris ('Chair of Idris,' a reputed giant), a picturesque mountain (2914 feet) in Merionethshire, Wales, 5 miles SW. of Dolgelly. It consists of an immense ridge of broken precipices, 10 miles long, and 1 to 3 miles broad.

Cadiz (*Kay'diz;* Span. pron. *Kâh'deeth*), a great Spanish port, capital of a province in Andalusia, is situated on the Atlantic at the extremity of a narrow tongue of land projecting 5 miles NW. from the Isle of Leon, 95 miles SSW. of Seville by rail. A small channel, with a drawbridge and a railway bridge, separates the island from the mainland; at its northern outlet stands the arsenal of La Carraca, with large docks, 4 miles ESE. of the city. The town, which is walled and defended from the sea both by a series of forts and by low shelving rocks, is about 2 miles in circuit, and presents a remarkably bright appearance, with its shining granite ramparts, and its whitewashed houses crowned with terraces and overhanging turrets. It has few public buildings of note: its two cathedrals being indifferent specimens of architecture, though possessing some excellent Murillos. Cadiz reached its highest prosperity after the discovery of America, when it became the depot of all the commerce with the New World, but declined greatly as a commercial city after the emancipation of the Spanish colonies in South America. The exports consist of salt, cork, lead, wine, tunny-fish, olive-oil, and fruits. The manufactures are glass, woollen cloth, leather, soap, hats, gloves, fans, &c. Pop. (1887) 63,277; (1897) 70,180. Built by the Phœnicians, under the name of Gaddir ('fortress'), about 1100 B.C., Cadiz afterwards passed to the Carthaginians; was captured by the Romans, who named it Gades, and under them soon became a city of vast wealth and importance. In 1587 Drake destroyed the Spanish fleet in the bay; nine years later, Cadiz was pillaged and burned by Essex.

Cadore (*Kah-do'ray;* also *Pieve di Cadore*), the birthplace of Titian, is a small village of Venetia, at the foot of the Alps, and 22 miles NE. of Belluno.

Cadzow (*Kad'yoo*). See HAMILTON.

Caen (*Kon*[9]), chief town of the French dep. of Calvados, and the former capital of Lower Normandy, is situated on the left bank of the navigable Orne, here joined by the Odon, 9 miles from its mouth, 149 W. by N. of Paris, and 83 ESE. of Cherbourg. Among its fifteen churches are St Étienne and La Sainte Trinité, both founded in 1066 by William the Conqueror and his queen Matilda, and containing their graves, which the Huguenots violated in 1562; and St Pierre (1308–1521), with an exquisite spire 242 feet high. The Conqueror's castle, finished by Henry I. of England, was dismantled in 1793, and now serves as a barrack. The faculty or university (1809) is successor to one founded by our Henry VI. in 1436; and in the Hôtel de Ville is a library of 80,000 volumes and a fine collection of paintings. The chief manufacture is lace. Trade is facilitated by a maritime canal connecting the port with the sea. In 1346, and again in 1417, Caen was taken by the English, who held it till 1450. Malherbe, Marot, Huet, and Auber were natives (a marble statue of the last was unveiled in 1883); Charlotte Corday lived here; and Beau Brummell died in the lunatic asylum. Pop. (1372) 39,415; (1901) 41,530.

Caergwrle (*Ka-er-goor'leh*), one of the Flint boroughs, 5 miles NNW. of Wrexham. Pop. 1328.

Caerla'verock, a splendid ruined castle near the Nith's mouth, 7 miles SSE. of Dumfries. For over four centuries the seat of the Maxwells, earls of Nithsdale (1620–1716), and still owned by their representative, Lord Herries, it was captured by Edward I. in 1300. Robert Paterson, Scott's 'Old Mortality,' is buried in the churchyard. See Fraser's *Book of Caerlaverock* (1873).

Caer'leon ('castle of the legion;' Lat. *Isca Silurum*), a town of Monmouthshire, on the Usk, 2½ miles NE. of Newport. It was very early the seat of a see—the only one, it seems, in all Wales—which was transferred to St David's in the 6th century. A Cistercian abbey existed here before the Reformation. Many Roman relics have been found; and there are also remains of an amphitheatre, measuring 222 by 192 feet, and known as King Arthur's Round Table. Pop. 1410. See Lee's *Isca Silurum* (1845).

Caermarthen, Caernarvon. See CARMARTHEN, CARNARVON.

Caerphilly, a town of Glamorganshire, 7½ miles N. by W. of Cardiff. It has a fine ruined castle, ironworks, and collieries. Pop. 15,830.

Caerwys, one of the Flint boroughs, 7½ miles E. of St Asaph. Pop. 550.

Cæsare'a (now *Kaisarieh*), a once splendid seaport on the coast of Syria, 30 miles N. of Joppa, built by Herod about 22 B.C., and named in honour of Cæsar Augustus. It is now a heap of half-buried ruins, with a few fishermen's huts.—CÆSAREA PHILIPPI, 95 miles N. of Jerusalem, near the source of the Jordan, received its suffix in honour of Philip the Tetrarch. It is now a heap of ruins, with the small village of Paneas, or Banias, on its site.

Caffraria. See KAFFRARIA.

Cagliari (pron. *Cal'yari*), the capital of Sardinia, at the head of a spacious bay, on the south coast of the island. By steamboat it is 34 hours from Leghorn and 27 from Naples, by rail 174 miles S. of Porto Torres. With a lagoon on either hand, it lies at the base and on the slopes of a steep hill, 300 feet high. Its harbour, defended by forts, has been enlarged since 1882; and Cagliari has a university (1596; remodelled 1764), a castle

(*c.* 1217), and a cathedral (1312). Pop. 53,750. Cagliari occupies the site of the Carthaginian *Carales*, and has a Roman amphitheatre, measuring 95½ by 79 yards.

Caherconlish, a village in the county and 8 miles SE. of the town of Limerick.

Ca'hir, a town in County Tipperary, on the Suir, 11 miles NW. of Clonmel. On a rock in the river is a 12th-century castle. Pop. 2056.

Cahirciveen, or CAHERSIVEEN, a Kerry village, at the mouth of the Caher River, 39 miles WSW. of Killarney. Near it is ruined Carhan House, O'Connell's birthplace. Pop. 2013.

Cahors (*Kâ-or'*; anc. *Divona*), the chief town in the French dep. of Lot, on a small rocky peninsula, formed by a bend of the river Lot, 71 miles north of Toulouse by rail. It has a 12th-century cathedral, a 14th-century bridge, and many Roman remains, including those of a magnificent aqueduct. Fénélon was a student at the university here, which, founded by Pope John XXII. in 1321, was united with that of Toulouse in 1751; and here were born the poet Marot, and Gambetta, to whom a monument was raised in 1884. Pop. 11,751.

Caicos (*Kī'koes*), a group of islands belonging geographically to the Bahamas, but annexed in 1874 to Jamaica. Area, with Turk's Islands, 223 sq. m.; population, 4750.

Cairnbulg, an Aberdeenshire fishing-village, 2½ miles ESE. of Fraserburgh. Pop. 561.

Cairngorm, a mountain (4084 feet) of Banff and Inverness-shire, 3 miles NE. of Ben Macdhui. From it are named the yellow rock-crystals found in the neighbourhood. Cairntoul (4241 feet) is another peak of the same group.

Cairo (*Kī'ro*), the capital of modern Egypt, is in 30° 6′ N. lat., and 31° 26′ E. long., on the right bank of the Nile, 131 miles by railway from Alexandria, and near the apex of the Delta. In the present day it covers about 11 sq. m. of the sandy plain, and extends from Mount Mukattam to the port of Boulak (Bûlâq); but only a small part of the modern city belongs to the Cairo of history, which consisted originally of little more than an immense palace with its attendant buildings. Modern Cairo is built upon the remains of four distinct cities, founded between 641 and 969 A.D.; but with the last hundred years it has been greatly enlarged on the west side, the space between the old city and the Nile having been covered with villas and palaces of European construction. The mediæval city, however, may still be seen in something of its former picturesqueness in the streets and bazaars, which occupy and surround the site of the original palace-enclosure of El-Kâhira. The quarter bounded by the north and east walls, between the Bâb-en-Nasr ('gate of victory') and the Citadel, is still purely oriental; and it is chiefly in this part that are found the numerous mosques, schools, fountains, and latticed houses which represent the art of the Saracens in its most chaste and perfect form. Here is situated the Azhar University (founded 971), to which 2000 students annually flock from all parts of the Mohammedan world; here is the mosque of El-Hâkim (990), the beautiful Mâristân and tomb of Kalaûn (1288), and the fine mosques of En-Nâsir (1298), Aksunkur (1347), Sultan Hasan (1358), El-Muayyad (1420), and El-Ghôri (1503), to mention but a few of these exquisite monuments. The mediæval city, however, is rapidly giving way to the encroachments of western commerce and sanitation. The separate closed quarters of distinct trades are becoming rarer. Very few of the old palaces of the Mamelukes are still standing; the most beautiful features of the decoration of ancient houses and even mosques have been despoiled by the travelling collector; and natural decay, aided by centuries of neglect and ignorant injury, has reduced the remains of a perhaps unrivalled epoch of Saracenic art to those shattered but exquisite ruins, which an official 'Commission for the Preservation of the Monuments' now endeavours, not, indeed, to restore, but if possible to rescue from further demolition and decay.

The modern portion of the city consists partly in a few broad streets or 'boulevards,' which pierce the mediæval quarters, and have destroyed many priceless monuments of art, but chiefly in the western suburb of Ismailia, formed by new villas, built along broad avenues lined with trees, and extending from the square called the Ezbekiya, near or in which are the principal hotels, the opera-house, theatre, and the European shops, as far as Boulak (q.v.). In this suburb are some of the numerous palaces of the Khedive, notably Abdin, where all official receptions take place; others are situated on the bank of the Nile, where are also barracks and a hospital. Modern Cairo, including the whole circuit, old and new, is the largest city in Africa, and second only to Constantinople in the Turkish empire. Railways and telegraphs connect it with Alexandria, Ismailia, Suez, Port Said, and Upper Egypt, its central station (1893) being a magnificent structure. Steamers ply on the Nile as far as the Second Cataract. Gas, the telephone, and other modern appliances are in universal use among the European and official circles. There is a busy trade, but chiefly of the transport kind, consisting of the produce of the interior. Manufactures, except rude pottery, turned woodwork, and silver-smithery, are almost non-existent; and the arts of ancient and mediæval Egypt appear to have been almost forgotten. After 1882 Cairo was the centre of English influence in Egypt. Three new bridges across the Nile were built in 1904–6 at a cost of £191,000. Pop. (1882) 374,838; (1898) 570,060. See works by Lane (1896), Reynolds-Ball (1898), S. L. Poole (1892, 1902).

Cairo (*Kā'ro*), capital of Alexander county, Illinois, at the junction of the Ohio and Mississippi, 180 miles below St Louis. A steel bridge (1888), costing $5,000,000, connects the railways north and south of the Ohio. The city, Martin Chuzzlewit's 'Eden,' formerly suffered much from inundations, from which it is protected by levées, now utilised for streets and railways. There are numerous factories, and a U.S. marine hospital and custom-house. Pop. (1860) 2188; (1890) 10,324; (1900) 12,566.

Caith'ness, a county in the extreme NE. of the Scottish mainland, 43 miles long, 28 miles in extreme width, and 701 sq. m. in area. Except in the west and south, where the mountain-range dividing Caithness from Sutherland attains in Morven a height of 2313 feet, its general aspect is level and bare, being in great part moorland and treeless. The northern sea-coast is bold and rocky, with Dunnet Head and Duncansby Head, on the west side of which is John o' Groat's House (q.v.). The climate is damp and chilly; auroras are seen almost nightly in winter. Only 23 per cent. of the entire area is in cultivation; and the crops are 20 days later in ripening than in the Lothians. There are herring, ling, cod, salmon, and lobster fisheries; Wick being a chief seat of the herring-fishery. The other exports

are cattle, oats, wool, and flagstones, of which, as well as of freestone and slate, Caithness contains quarries, the chief that of Castlehills, 5 miles E. of Thurso. The county returns one member; and Wick is its only parliamentary burgh; another town is Thurso. A railway (1874) connects them with the south. Pop. (1801) 22,609; (1861) 41,111; (1901) 33,860. See works by Laing (1866) and Calder (new ed. 1887).

Caivano (*Kī-vah'no*), a town of Italy, 4 miles N. of Naples. Pop. 10,832.

Cajabamba (*Kahabam'ba*), cap. of the prov. of Chimborazo, in Ecuador, 102 miles S. of Quito, on the arid plateau of Topi, at an elevation of 9480 feet. Pop. 18,000. The former town of *Riobamba*, founded here in 1533, was in 1797 overwhelmed by an earthquake that cost 30,000 lives.

Cajamarca (*Kahamar'ka*), a NW. dep. of Peru, between the western chain of the Andes and the Amazon. A railway connects it with the Pacific. Area, 14,000 sq. m.; pop. 450,000. The capital is Cajamarca; pop. 12,000.

Cakemuir, a Midlothian tower, 2 miles E. of Borthwick, whence Queen Mary fled hither.

Calabar', a coast-district on the Gulf of Guinea, now embraced in the southern division of the British protectorate of Nigeria. Its limits are not clearly defined; but it is usually understood to extend from the Nun mouth of the Niger to the Cameroon colony. The surface is low and flat, and the climate unhealthy. Palm-oil, kernels, ebony, ivory, india-rubber, shea butter, and beni-seed are the chief articles of commerce. The Scottish Presbyterians have had a mission here since 1846, which has produced beneficial changes. Of the different tribes, the Efik, who are a negro stock, is the most important. The chief towns are Duke Town, Creek Town, and Old Town.—The Old Calabar or Cross River, believed to rise near Iko, beyond Uyanga, enters the Bight of Biafra by an estuary 9 miles broad, is mainly the estuary of the Cross River. It is navigable by steamers for 200 miles above its mouth.—The New Calabar River is a branch or mouth of the Niger. See Goldie's *Calabar and its Mission* (1890).

Calabria, the south-west peninsula of the kingdom of Italy, bounded N. by the province of Basilicata. Area, 6637 sq. m.; pop. about 1,400,000. It is traversed throughout its entire length of 160 miles by the forest-clad Apennines, whose valleys afford rich pasture. There is no river of any importance; but the valleys and plains are very fertile, yielding wheat, rice, cotton, liquorice, saffron, the sugar-cane, &c., and also the vine, orange, lemon, olive, fig, and mulberry, in luxuriance. The coast fisheries, particularly of the tunny and anchovy, are important. The 'compartimento,' which is very subject to earthquakes, is divided into the provinces of Cosenza, Catanzaro, and Reggio. In ancient times the name Calabria was given to the south-east peninsula, nearly corresponding to the modern province of Lecce, no portion of which is included in modern Calabria, which answers to the ancient *Bruttium*. The people are a proud, fiery, and revengeful race, long celebrated as among the fiercest of banditti. See Ross and Cooper's *Highlands of Calabria* (1888).

Calahorra, a cathedral city of Spain, 30 miles SE. of Logroño by rail. It is the ancient *Calagurris*, Quintilian's birthplace, celebrated for its obstinate but unsuccessful resistance to Pompey's legate (78 B.C.). Pop. 8830.

Calais (Fr. pron. *Ka-lay'*), a port in the dep. of Pas-de-Calais, on the Strait of Dover, here 21 m. wide, by rail is 184 miles N. of Paris. It ranks as a fortress of the first class, the old walls, dividing it from its suburb, Saint Pierre, having been demolished since 1883, and their place supplied by a ring of exterior forts. The gate built by Richelieu in 1635, and immortalised by Hogarth, has disappeared; but the cardinal's citadel (1641) still stands on the west of the town. On the south and east are low marshy grounds, which could be submerged in the event of an invasion. A new harbour, comprising a tidal one of 15 acres and a wet-dock of 27, was opened in 1889. Calais is one of the chief ports of debarkation for travellers from England to France, and has steam communication thrice a day with Dover, with which since 1851 it has also been connected by submarine telegraph. With the air of a Flemish more than of a French town, Calais has not much to boast of in the way of objects of interest. The picturesque hôtel-de-ville was rebuilt in 1750, and restored in 1867. The adjoining Tour de Guet (1214) served as a lighthouse till 1848; the present lighthouse is 190 feet high. A museum (1884) occupies the site of the Hôtel Dessin, where Sterne lodged, and Scott, and Lady Hamilton. A handsome English church was built in 1862. The chief manufacture is tulle or bobbin-net, introduced by English from Nottingham in 1818. Pop. (1872) 39,700; (1901) 53,180. Till 997 a small fishing-village, Calais in 1347, after a twelvemonth's siege, was captured by Edward III. of England, and the self-devotion then shown by six of the citizens forms one of the noblest passages of history. The English retained it until 1558, when it was captured by the Duke of Guise, its garrison of 800 men holding it for a week against his 30,000.

Calais (*Kal'lis*), a town of Maine, 82 miles ENE. of Bangor, at the head of navigation on the St Croix River. There is some shipbuilding and a large trade in lumber. Pop. 7690.

Calañas (*Kalân'yas*), a town of Andalusia, Spain, 27 miles N. of Huelva and 13 NE. of Tharsis, with which it was connected by rail in 1887. Here is a large copper-mine. Pop. 6721.

Calascibetta (*Ka-lâh-shee-bet'tā*), or Calatascibetta, a town of Sicily, 64 miles SE. of Palermo. Pop. 6615.

Calatafimi (*Kalatafee'mee*), a town of Sicily, 8 miles SW. of Alcamo; named from a ruined Saracenic castle, Kalat-al-Fimi. Here, in 1860, Garibaldi defeated the Neapolitans. Pop. 10,500.

Calatayud (*Kalatayood'*; Arab. 'Ayud's Castle'), a city of Aragon, Spain, on the Jalon, 152 m. NE. of Madrid by rail. It is built out of the ruins of ancient *Bilbilis*, the birthplace of Martial, which lay about 2 miles to the east. Pop. 10,057.

Calatrava la Viega (*Kalatrâh'va*), a ruined city of Spain, on the Guadiana, 12 miles NE. of Ciudad Real. Its defence against the Moors, in 1158, after being abandoned by the Templars, is famous as originating the Order of the Knights of Calatrava.

Calaveras, an inland county of California, E. from San Francisco, with a picturesquely varied surface, including hills, cañons, prairies, and forests. It is rich in granite, quartz, limestone, and slate, and copper and gold are mined.

Calcutta, the capital of Bengal and of British India; is situated on the left bank of the Húglí (Hooghly), an arm of the Ganges, in 22° 34′ N. lat., and 88° 24′ E. long., about 80 miles from the

sea by the river. It was founded in 1686, by the removal hither from Húglí of the factories of the East India Company. Calcutta is the Anglicised form of Kalikata, as this again is the Moslemised form (1596) of Kali-ghat, a famous shrine of the goddess Kali, which still exists to the south of the city. In 1707 Calcutta had acquired some importance as a town, and was made the seat of a presidency. In 1756, however, it was unexpectedly attacked by Surájud-Daulá (Surajah Dowlah), the Nawáb of Bengal, and yielding after a two days' siege, was the scene of the tragedy of the 'Black Hole.' The city remained in the hands of the enemy until seven months afterwards, when Clive recaptured it. In 1772-90 Calcutta superseded Murshidabad as seat of the central government in India; in 1852 it was erected into a municipality. Pop. (1837) 229,700; (1891) 741,144; (1901) 1,026,987, of whom 62 per cent. are Hindus, 32·2 Mohammedans, and 4·4 Christians. The appearance of the city as it is approached by the river is very striking. On the left are the Botanical Gardens, destroyed by the cyclones of 1867 and 1870, but since replanted; and the Bishop's College, a handsome Gothic edifice, now used as an engineering college. On the right are the suburb of Garden Reach, the government dockyards and the arsenal, and the Maidan Esplanade, which has been termed the Hyde Park of India. Here, near the river, lies Fort William, the largest fortress in India, constructed (1757-73) at a cost of £2,000,000, and occupying, with the outworks, an area of 2 sq. m. Facing the Esplanade, among other fine buildings, is the Government House, the official residence of the Viceroy of India, a magnificent palace erected (1799-1804) by the Marquis of Wellesley. Beyond this, extending northwards along the river-bank, is the Strand, two miles in length, and 40 feet above low-water, with various ghats or landing-places. It is adorned by many fine buildings, including the custom-house, the new mint, and other government offices, and is lined by a splendid series of jetties for ocean steamers. Among other places of interest are the High Court, the Bengal Government Offices, St Paul's Cathedral, the Scotch church (St Andrew's), the Imperial Museum, the town-hall, Bank of Bengal, Jesuits' College, Medical College, university (1857), the domed post-office, and the Treasury. Calcutta has three theatres, several large European hotels, two fine clubs—the Bengal and United Service, four daily English newspapers, and a number of monuments throughout the city, the most noticeable being those to the Marquis of Wellesley, Sir James Outram, and Sir David Ochterlony, the last a column 165 feet high. Of Calcutta's own sons the greatest is W. M. Thackeray.

Although the European quarter of the town is distinguished for its fine public buildings and commodious dwelling-houses, the quarters occupied by the natives present a very different appearance, their houses being in most instances built of mud or bamboo and mats, and the streets narrow and unpaved. Calcutta has been said to be a city of palaces in front and of pig-styes behind. Great havoc was done in the native quarter by the cyclone of 1864, which destroyed 40,700 native houses; and those of 1867 and 1870 were likewise very destructive. Considerable improvements have now been effected; new and wider streets have been opened through crowded quarters; brick houses are fast replacing the huts, and an extensive system of drainage has been carried out to the no small advantage of the inhabitants. The water-supply of Calcutta has been very much improved (1865-88), the large tanks interspersed throughout the city having been superseded by an excellent supply drawn from the Húglí, 15 miles above Calcutta. The result of this has been a marked improvement in the health of the city. Electricity and gas have taken the place of the oil-lamps which till far on in the 19th century lighted the streets at night. Tramways have been extensively introduced, and steam tramways run to some of the suburbs. A canal girds a part of the city beyond the Circular Road. In Howrah and other villages on the right bank of the river are warehouses, ironworks, timber-yards, large jute-mills, &c. Calcutta may be regarded as the great commercial capital of Asia; and its communications by rail and steamboat afford great facilities for its extensive commerce. Navigation on the Húglí has been greatly improved, and an extensive scheme of docks constructed at Kidderpur, at a cost of nearly 3 millions sterling. The river, adjacent to the city, varies in breadth from a quarter of a mile to nearly a mile. Ships of 5000 tons ascend to Calcutta in the usual course, the main difficulty to shipping being the James and Mary shoal, half-way down the river.

Calder, Mid, a Midlothian village, 11½ miles WSW. of Edinburgh. Near it is Calder House, where Knox celebrated the Lord's Supper (1556). Pop. 703.—West Calder, a mining town, 16 miles WSW. of Edinburgh. Pop. 2652.

Caldron Linn, waterfalls on the Devon, 2¾ miles ENE. of Dollar.

Caledonian Canal, a chain of natural lakes united by artificial canals, running straight across Scotland south-westerward from the North Sea to the Atlantic, through Glenmore, or the Great Glen of Albin, in Inverness-shire. The sea and fresh-water lochs in this line are the Moray Firth and Lochs Dochfour, Ness, Oich, Lochy, and Linnhe. Suggested by Watt in 1773, and carried out from Telford's plans in 1803-23, at a total cost up to 1849 of £1,311,270, the canal was designed to avoid the dangerous and tedious navigation of ships, especially coasting-vessels, round by the Pentland Firth; the distance between Kinnaird's Head and the Sound of Mull by this route being 500 miles, but by the canal only 250, with an average saving of 9½ days for sailing-vessels. From the head of the Moray Firth to that of Loch Linnhe, its length is 60½ miles, 37½ miles being natural, and 23 miles artificial. Each cut is 120 feet broad at surface, 50 at bottom, and 17 deep. The highest part is Loch Oich (105 feet); and there are in all 28 locks. Ships of 500 to 600 tons can pass through. The annual expenditure exceeds as a rule the income, each ranging between £6000 and £11,000.

Calf of Man, an island, 1 sq. m. in area, and 360 feet high, at the southern extremity of the Isle of Man.

Cal'gary, a town of the North-west Territory of Canada, with station on the Canadian Pacific Railway, 2262 miles W. of Montreal, stands 3380 feet above sea-level, between the Bow and Elbow rivers. It dates from 1884. Pop. 7500.—There is a bay of this name on the north-west coast of the island of Mull in Scotland.

Cali (*Kalee'*; in full Santiago de Cali), a town of Colombia, 3300 feet above the sea, 50 miles SE. of Buenaventura by rail. Pop. 16,000.

Cal'icut, a seaport of Malabar, Madras presidency, 6 miles N. of Beypur terminus, and 566

SSE. of Bombay. It was the first spot in India visited overland by Covilham (1486) and round the Cape by Vasco da Gama (1498), being then the chief emporium on the coast. So populous and powerful was it, that it twice repulsed the Portuguese, slaying their commander in 1509, and expelling Albuquerque himself in 1510. In 1792, when it fell into the hands of the English, it was little better than a ruin; but since then it has made progress in trade and population, though the anchorage is an open roadstead. The cotton cloth at first exported hence was called 'calico.' Pop. (1881) 57,085; (1901) 75,510. See Logan's *Malabar* (Madras, 1887).

California, a state of the American Union, bounded by Oregon, Nevada, Arizona, the Mexican territory of Lower or Old California, and the Pacific Ocean. The parallels of 32° 28′ and 42° N. lat. respectively mark its S. and N. limits. The state has an area of 155,980 sq. m. It is thus larger than any other state or territory, except Texas and Alaska, larger than Italy, or Prussia, or Hungary, and more than a fourth larger than the whole of the United Kingdom. The aspect of the country is extremely varied. Along the eastern border of the state extend the ranges of the Sierra Nevada, which connects with the Cascade Range its northward extension. The scenery in this part of the state is often (as in the wonderful Yosemite and Hetch-Hetchy valleys) very striking. There are twelve peaks which exceed 10,000 feet in height; Mount Whitney (14,898 feet) being higher than any other in the United States outside of Alaska. West of the Sierra Nevada lies the central valley of California, drained by the Sacramento River, and the San Joaquin. The eastern slope of the great valley is very gradual, while the opposite side of the Sierras has a sharp and precipitous descent towards the great basin of Nevada. The Coast Mountains consist of a number of ill-defined ridges. To the south of the San Joaquin Valley a transverse ridge connects the coast-ranges with the Sierra, separating to some extent Southern California from the rest of the state. The coast-line is mostly high and rocky, with only a few bays and harbours. California presents a great variety of climatic conditions. In the north-west the rainfall is excessive, and in the north the winters are rather severe than mild; the coast region of the northern half of the state is damp, with cool or cold nights, even in summer. But Southern California, in temperature and productions, has a semi-tropical character; and the serenity of its climate has made it famous as a resort for invalids. In the south the scanty rainfall and the extreme summer heat detract from an otherwise perfect climate. In general it may be said that the winters in California are mild, and the summers dry, and not intensely hot, though often very dusty. There are practically but two seasons—a more or less rainy winter, and a nearly rainless summer. Extremes of temperature are much less marked than in the states east of the Rocky Mountains. In the interior the thermometer sometimes reaches 120° in summer.

The gold production of the state, at one time enormous, for many years declined, but has of late again increased; in the years 1848-64 the annual product was $56,000,000; in 1900-4 it averaged over $15,000,000. Among the valuable minerals obtainable are quicksilver, lead, silver, borax, rock-salt, marbles, asphalt, potash-salts, native soda, sulphur, kaolin, and many others; petroleum is abundant; coal is not extensively wrought. Copper, iron, chromium, antimony, and other metals abound. But the mineral wealth of the state is not more remarkable than its agricultural resources, wheat, alfalfa or lucerne, the vine, and all manner of fruits growing luxuriantly. In many sections irrigation facilitates agriculture. The distillation of brandy, sugar-refining, shipbuilding, the packing of meats, silk-growing, and bee-keeping are profitable industries. The fisheries are of growing importance. The principal exports are wheat, barley, wool, wines, brandy, honey, hops, timber, provisions, metals, ores, borax, and other minerals; fish and furs, largely from Alaska; dried, preserved, and green fruits, including oranges, prunes, raisins, and almonds. The Lick observatory at Mount Hamilton belongs to the state university at Berkeley; there is another university at Palo Alto. Pop. (1850) 92,597; (1860) 379,994; (1870) 560,247; (1880) 864,694; (1890) 1,208,130; (1900) 1,485,000. Chinese immigration was stopped by restrictive legislation in 1882-92. The principal cities are San Francisco (q.v.), Los Angeles, Oakland, and Sacramento, capital of the state. The prosperity of the state was greatly stimulated by the opening of the Union Pacific Railway in 1869. In April 1906 a disastrous earthquake and the resultant fires destroyed a great part of San Francisco and injured many other towns.

Lower or Old California is a peninsula and a territory of Mexico, continuous southward from the state of California, and is detached by the Gulf of California and the lower reaches of the Rio Colorado from the rest of Mexico. Its area is 61,562 sq. m., or more than half the extent of Great Britain and Ireland. The climate is exceedingly dry, and the surface mountainous, and excepting in some of the valleys, agriculture is hardly practicable. The whale-fishery and pearl-fishery are of some value. Some mining is done, and salt, sugar, orchil, and a little wine produced. Pop. 42,200.

The Gulf of California, an arm of the Pacific Ocean, which divides the peninsula above described from the rest of Mexico, is 700 miles in length, and varies in width from 40 to 100 miles. It receives the waters of the Colorado.

Callan, a market-town, on the Owenree, 13 miles SW. of Kilkenny. Pop. 1843.

Callander, a Perthshire village, a great tourist centre, on the Teith, 16 miles NW. of Stirling by rail. Pop. 1438.

Callao (Span. pron. *Kal-yâh'o*), the port of Lima, Peru, 7 m. SW. of Lima, on a small bay, possesses a floating-dock, while fine harbour-works, embracing an area of 520 acres, with extensive pier and dock accommodation, were completed in 1875; and the spacious roadstead, sheltered by the island of San Lorenzo, is one of the safest in the world. The huge old Spanish fortress is used for custom-house offices. There are sugar-refineries, ironworks, and sawmills; and the exports are wool, sugar, specie, copper, cotton, bark, hides, guano, and cubic nitre. Pop. 48,000. The present Callao dates only from 1746, when the original city, a little to the south, was destroyed by an earthquake and an invasion of the sea. It was bombarded in 1880 during the war between Chili and Peru.

Callendar, a mansion ¾ mile ESE. of Falkirk, with memories of Queen Mary, Prince Charles Edward, &c. In the grounds is a well-preserved section of the northern Roman wall.

Callernish, a district on the west coast of the

island of Lewis, 16 miles from Stornoway, remarkable for its four stone circles.

Callington, a Cornish market-town, 11 miles S. of Launceston. Pop. of urban district, 1714.

Calmar. See KALMAR.

Calne (*Kaun*), an old market-town of Wiltshire, 6 miles ESE. of Chippenham by a branch-line (1863). It has a town-hall (1882), a free grammar-school (1660), and a large bacon-curing industry. A municipal borough, Calne returned one member till 1885. Pop. 3455.

Caltabelotta (Arabic *Kalaat-el-Ballût*, 'castle of the cork-trees'), a town of Sicily, 10 miles NE. of Sciacca, with an ancient castle crowning a steep rock above a stream. Pop. 6178.

Caltagirone (*Kaltajeero'nay*), a city of Sicily, on two hills (2013 feet), 38 miles SW. of Catania. Pop. 33,000.

Caltanisetta, a fortified town of Sicily, 83 miles SE. of Palermo by rail. It has a cathedral, mineral springs, and sulphur-works. Pop. 44,500.

Calton Hill. See EDINBURGH.

Calumet, a mining locality of Houghton county, Michigan, on a peninsula of Lake Superior, 42 m. N. of L'Anse by rail. The Calumet and Hecla copper-mine is one of the richest in the world.

Calvados (*Kal-vad'os*), a maritime dep. of Normandy. The principal rivers are the Touques, Orne, Dives, Seulles, Aure, and Vire. The coast is formed partly by bold ridges, partly by sand-downs, cliffs, and reefs; the dangerous reef extending for 16 miles between the mouths of the Orne and the Vire was called Calvados, after the *Salvador*, a vessel in the Spanish Armada shipwrecked here, and from it the dep. takes its name. Towns are Caen (the capital), Bayeux, Falaix, Honfleur, Lisieux, and Trouville. Area, 2130 sq. m.; pop. (1861) 480,992; (1901) 410,178.

Calvi (*Kal'vee*), a seaport of Corsica, on a peninsula in the Gulf of Calvi, 38 miles WSW. of Bastia. Captured by the English after a siege of fifty-one days in 1794 (when Nelson lost an eye), it was retaken by the Corsicans next year. Pop. 1987.

Calw, or KALW (*Kalv*), a town of Würtemberg, 35 miles WSW. of Stuttgart. Pop. 5423.

Cam, or GRANTA, a sluggish narrow river, which, rising in Essex, flows 40 miles NW. and NE. through Cambridgeshire, and falls into the Ouse 3½ miles above Ely.

Camargue. See BOUCHES DU RHONE.

Cambaluc (*Khan-Baligh*, 'city of the emperor'), the name by which Marco made Pekin (q.v.) known to Europe.

Cambay (*Khambhát*), the port and capital of a small Indian feudatory state of Bombay presidency, lies in the north-west portion of the peninsula, at the head of the Gulf of Cambay, 52 miles S. of Ahmedabad. Many ruins still attest its former magnificence, the main cause of its decay having been the gradual obstruction of its seaward navigation. It exports agate, cornelian, and onyx ornaments. Pop. 31,390. The area of Cambay state is 350 sq. m.; pop. 79,722.—The Gulf of Cambay, 80 miles long and 25 broad, was formerly a great commercial resort.

Camberwell, a metropolitan and parliamentary borough (three members) of London. Pop. of metr. bor. (1901) 259,339.

Cambodia, or CAMBOJA (Fr. *Cambodge*), nominally a kingdom in Indo-China under a French protectorate, but practically a French dependency, on the lower course of the Mekong, between Siam, Annam, and French Cochin-China, and comprising an area of 38,000 sq. m. The coast, 156 miles long, offers but one port, Kampot. The mountains of the north and west (some of them over 3000 feet high) generally contain iron, limestone, sandstone, and more sparingly, copper. The greater part, however, of Cambodia consists of alluvial plains, completely inundated during the rainy season. In the north-east are forest-clad tracts. The principal river is the Mekong, Cambodia or Tonlé-Tom, with its tributaries and branching mouths; a kind of backwater is the Tonlé-Sap, expanding into the Great Lake, 100 miles by 25 miles in area, with a depth of 65 feet at its maximum. The climate is divided into the rainy season from April to October, but interrupted in August, and the dry from October to April. The thermometer ranges from 70° to 104° F. The natural products are rice, tobacco, salt fish, betel, cotton, maize, pepper, cinnamon, vanilla, cardamoms, sugar-cane, indigo, manioc, ramee, sesame, gutta-percha, &c. The forests contain excellent timber. Crocodiles are found in the rivers. The population is about 1,500,000, mainly of the Cambodian stock, with 100,000 Annamites, 150,000 Chinese, 40,000 Malays, and a few hundreds of Frenchmen. Pnom-Penh, the capital, at the junction of the 'Four Arms' of the river, has a population of 35,000. The Cambodians approach the Malay and Indian types, are less Mongoloid and more nearly resemble the Caucasian type than their neighbours; they speak a monosyllabic language. The principal industry is the fishing of the Great Lake. In Kompong-Soai are manufactures of iron. The total commerce of Cambodia is valued at from 10 to 12 million francs yearly. The religion of Cambodia is a development of Buddhism, in which the worship of ancestors forms a large part. The most remarkable feature of Cambodia is the splendid ruins of Khmer architecture. The temples and palaces of Angkor (the old capital, north of the Great Lake, abandoned in the 14th century), which were known to Portuguese missionaries in the 16th century, have since 1858 been explored by French and other travellers, and are even less remarkable for their magnitude and number than for their artistic value. They are believed to range from the beginning of our era to the 15th and 16th centuries, the finest dating from between the 8th and 14th.

The ancient kingdom of Cambodia or Khmer formerly extended over a large part of Indo-China. Buddhism would appear to have been introduced in the 4th century. In the 16th and 17th centuries Portuguese, Spaniards, and Dutch successively set up their factories at the mouth of the Mekong. In the 17th century the capital was Cambodia or Pontaipret, a place now much decayed, on the Mekong, opposite the mouth of the Tonlé-Sap. The Khmer kingdom has been dismembered since the 17th century, by Annam first, and then in 1812 by Siam. In 1863 France concluded a treaty placing Cambodia under a French protectorate, and since 1887 it is practically a province like Annam (q.v.) of French Indo-China. See works by Mouhot (trans. 1864), Vincent (1873), Thomson (1875), and others.

Camborne, a Cornish town, 12 miles WSW. of Truro by rail. Round it are productive copper, tin, and lead mines. Pop. of parish, 14,730.

Cambrai (anc. *Camaracum*), a city and first-class fortress of the French dep. of Nord, on the Scheldt, 128 miles NNE. of Paris by rail. Among the principal public buildings are the town-house, archiepiscopal palace, and cathedral

(rebuilt after the fire of 1859), with a monument to Fénélon. The town also contains a college, theological seminary, and library, with 40,000 vols. and 1200 MSS. The manufactures are cambric—so named from Cambrai—linen thread, lace, sugar, soap, leather, &c. Pop. (1872) 22,897; (1901) 15,000. The League of Cambrai was formed in 1508 by the pope, the emperor, and the kings of France and Spain.

Cambridge (*Kaim'brij*), county town of Cambridgeshire, lies on the Cam, 58 miles N. by E. of London, and 76 NE. of Oxford. Two important Roman roads, *Akeman Street* and the *Via Devana*, here cross the valley of the Cam, and were guarded by the station *Camboritum*, the outlines of which can still be clearly traced on the north side of the river. In its centre is the partly artificial mound, now known as Castle Hill, which is probably a relic of a yet older British city. The Saxon town of *Grantabrygge* occupied the site of *Camboritum*, and it was here that the Norman castle was built. The present town, as distinguished from the university, has not many features of interest. It possesses a guildhall, corn exchange, free public library, and jail. There is also a fine county hospital founded under the will of Dr Addenbrooke in 1743, and an extensive recreation ground named Parker's Piece. Of the churches St Benedict's or Benets has a tower which is a fine specimen of the so-called Saxon architecture, and the church of the Holy Sepulchre is the oldest of the four round churches in England, having been built in 1101 in imitation of the church of the Holy Sepulchre at Jerusalem. It was restored by the Camden Society in 1841. The parish church of Great St Mary's is also the church of the university, at which all academic services are held. In 1887–90 there was built a fine R. C. church, with a spire 215 feet high. The country round Cambridge is somewhat flat and dull; but on the west side the grounds known as 'the Backs' of the colleges are very beautiful, consisting of gardens, meadows, and avenues. The Cam flows through them, and is crossed by nine bridges. Above Cambridge the Cam is a small but picturesque stream. Below Cambridge it is dull and ugly, but is used for boat-racing. Since 1885 the borough of Cambridge has sent one member to parliament, instead of two as formerly. Pop. (1851) 27,815; (1871) 30,078; (1901) 47,737, of whom 38,393 were within the municipal borough.

The university, dating from about the 12th century, comprises the following colleges in the order of their antiquity: St Peter's, Clare, Pembroke, Caius, Trinity Hall, Corpus Christi, King's, Queens', St Catharine's, Jesus, Christ's, St John's, Magdalene, Trinity, Emmanuel, Sidney Sussex, Downing, Selwyn. Ridley Hall (a theological training-college), Westminster (Presbyterian) College, and Girton and Newnham colleges for women are no part of the university. Teachers number 120, students 3000. Chief among college buildings are King's (1441), with its noble Perpendicular chapel; Trinity, with its courts, its hall, and its library by Wren; and John's, with its splendid new chapel (1869) by Scott. There are also the library, Senate house, Fitzwilliam museum, observatory, union, &c. See works by J. Bass Mullinger (2 vols. 1873–84), and Willis and Clark (4 vols. 1889), besides Humphry's short *Guide* (5th ed. 1890).

Among its 'wranglers' (those who constitute the first-class after the public mathematical honour examinations) have been the great English mathematicians for many generations. But amongst the eminent men Cambridge has sent forth have been men as various as Cranmer, Ridley, Latimer, Parker, Tillotson, Tenison, Jeremy Taylor, Isaac Barrow, Paley, Cudworth, Wollaston, Bentley, Porson, Lord Bacon, Harvey, Sir Isaac Newton, Lord Burghley, Falkland, Strafford, Oliver Cromwell, Pitt, Palmerston, Fuller, Pepys, H. Walpole, Wilberforce, Macaulay, Thackeray, Lytton, Darwin, Marlowe, Fletcher, Spenser, Milton, Ben Jonson, Waller, Herrick, Dryden, Cowley, Gray, Byron, Coleridge, Wordsworth, Tennyson.

Cambridge, a city of Massachusetts, virtually a suburb of Boston (q.v.), from which it is separated by the Charles River, is principally distinguished as the seat of Harvard University; it was the home from 1836 of Longfellow, who lived in a house formerly occupied by Washington. Cambridge was first settled in 1630, and is therefore one of the oldest towns in New England. It early became noted for its printing industry, and the manufacture of books is now one of its leading industries; besides which there are large manufactories of furniture, glass, ironware, tinware, bricks, chemicals, net and twine, sugar, soap, and rubber. Within the limits of the city are comprised the different localities of Old Cambridge, or Cambridge proper, which is distinctively the seat of the university; East Cambridge or Lechmere Point, a manufacturing district; Cambridgeport, where is located the city hall, numerous churches, several banks, a convent, and some manufactories; and North Cambridge, which is principally devoted to residences. Here Washington assumed command in 1775. The famous cemetery of Mount Auburn is partly in Cambridge and partly in Watertown. Pop. of Cambridge (1870) 39,364; (1900) 91,886.

Cambridgeshire, an inland eastern county of England, 48 miles long, 11¼ to 33 miles broad, and 821 sq. m. or 525,182 acres in area. As much as 92 per cent. of that area consists of arable land, meadow, and pasture, the rest being fens. The surface, except in the south, which is somewhat elevated and on the chalk formations, is flat and thinly wooded, with villages and churches here and there on slight elevations called 'eys' or islands. In a country less level the much-vaunted Gog-Magog Hills, 4 miles SE. of Cambridge, would escape observation. The northern portion of Cambridgeshire forms part of the Bedford Level (q.v.). The chief of the sluggish rivers are the Ouse, which crosses the middle of the county from west to east, with its tributary the Cam; the Nene, which borders the county on the north; and the Lark. These are all navigable to a certain extent. The chief towns are Cambridge, Ely, Wisbeach, March, Thorney, Linton, Soham, Newmarket, and Royston. Cambridgeshire returns three members to parliament, one for each of the Chesterton, Newmarket, and Wisbeach divisions. Pop. (1801) 89,346; (1841) 164,459; (1871) 186,906; (1901) 190,687. Of four great dykes or earthworks the chief is the Devil's Ditch, extending 7 miles south-eastward from Reach to Wood-Ditton. It is 18 feet high on the east side, and was certainly of pre-Roman workmanship, as it is cut through by Roman roads. See works by Holl (1882) and Babington (1883).

Cambuskenneth, a ruined abbey (1147), on the Forth, near Stirling. James III. and his queen are buried here.

Cambuslang, a mining town of Lanarkshire, 4 miles SE. of Glasgow. Here a revival, known

as the 'Camb'slang Wark,' was held, under Whitefield, in 1741. Pop. (1881) 5538; (1901) 12,252.

Cambusnethan. See WISHAW.

Camden, a city and port of entry of New Jersey, on the left bank of the Delaware River, opposite Philadelphia, with which it is connected by steam-ferries. It has shipyards and dry-docks, foundries, cotton and woollen mills, and manufactures of machinery, ironwares, paints, oilcloths, &c. Pop. (1880) 41,659; (1900) 75,935.

Camden Place, a Kentish seat, 2 miles ENE. of Bromley. Here lived and died the antiquary Camden.

Camden Town, a north suburb of London.

Camelford, a quaint little Cornish town, near the source of the Camel ('crooked brook'), 15 miles W. of Launceston. Within 3 miles of it is the traditionary scene of King Arthur's last battle; also near are the great slate-quarries of Delabole. 'Ossian' Macpherson was member for Camelford, which was disfranchised in 1832. Pop. of Lanteglos parish, 1870.

Cam'elon. See FALKIRK.

Camerino (*Kamayree'no;* anc. *Camerinum*), a town of Central Italy, on a spur of the Apennines, 41 miles SW. of Ancona. It has an archiepiscopal cathedral occupying the site of a temple to Jupiter, and a university (1727). Pop. 12,000.

Cameroon (often *Cameroons;* in German spelt *Kamerun*), a German colony on the west coast of Africa, extending from the Rio del Rey, a little east of the Old Calabar River, southwards to a point slightly below 3° N. lat., where it is bounded by French Congo. On the north-west, the boundary is a line from the Rio del Rey to near Yola on the Benuë, and thence to Lake Chad. The eastern boundary is understood to be about the meridian 15° E. This would make Adamawa and part of Bagirmi the 'Hinterland' of Cameroon. But the arrangements, on this head and as to the boundary towards the interior agreed on by Germany and Britain in 1893, were hotly contested by the French. The area has been estimated at 190,000 sq. m., and the pop. at 3,500,000. The name is derived from the Cameroon River (Port. *camarão,* 'a shrimp'), which enters the Bight of Biafra opposite Fernando Po by an estuary over 20 miles wide. The low mangrove swamps that clothe its banks render the climate very trying to Europeans; but much of the interior is high-lying and healthy. The natives belong to the Bantu group, the Duallas living nearest the coast. In 1884 the German flag was hoisted at Cameroon, and by 1893 the revenue decidedly exceeded the expenditure. The country is very fertile; ebony, red-wood, and palm-trees clothing the Cameroon, which also has long been noted as an 'oil river,' and for its cotton and ivory; while many tropical fruits grow wild. North-west of the estuary lie the Cameroon Mountains, a volcanic group, which attain a height of 13,746 feet in the peak Mongo ma Lobah ('mount of the gods'), first scaled by Burton and Mann in 1862.

Campagna, a cathedral city of Italy, 13 miles E. of Salerno. Pop. 6896.

Campagna di Roma (*Kampan'ya dee Rom'a*), an undulating, mostly uncultivated plain of Italy, surrounding Rome, including the greatest part of ancient Latium, with a length of about 90 miles, and an extreme breadth inland, to the Alban and Sabine hills, of 40 miles. A broad strip of sandy plain skirts the Mediterranean, with a thick fringe of pines. The ground is almost entirely volcanic, the lakes being formed by craters of extinct volcanoes, and the broad Tiber winds across the plain between banks of tufa, of which the Seven Hills of Rome are composed. Of late some drainage has been attempted, and eucalyptus plantations have been made in the hope of reducing the malarious conditions.

Campanha, a town of Brazil, 150 miles NW. of Rio de Janeiro. Pop. 6000.

Campania, anciently a province on the west coast of Italy, having Capua as its capital, and now subdivided into the provinces of Benevento, Naples, Salerno, Avellino, and Caserta. It was one of the most productive plains in the world.

Campbell Island, a lonely island to the south of New Zealand, in 52° 34′ S. lat., and 169° 12′ E. long. Though 1498 feet high, and only 85 sq. m. in area, it is yet valuable for its harbours. Discovered in 1810, it served as an observatory during the Transit of Venus in 1874.

Campbeltown, an Inverness-shire village, on the Moray Firth, 12 miles NE. of Inverness. Pop. 648.

Campbeltown, a royal burgh and seaport of Argyllshire, on the E. coast of the Kintyre peninsula, 83 miles SW. of Glasgow by water. It curves round the head of a sea-loch (2¾ × ¾ mile), which is sheltered by Davarr Island (300 feet high), and forms a magnificent harbour. The place is an important fishing centre, and has upwards of twenty whisky distilleries. With the other Ayr burghs it returns one member to parliament. Dr Norman Macleod was a native. Pop. (1841) 6797; (1901) 8286.

Campden, a Gloucestershire market-town, 9½ miles ESE. of Evesham. Pop. of Chipping Campden parish, 1536.

Campeachy (*San Francisco de Campeche*), a seaport on the west side of the peninsula of Yucatan. It has a citadel, university, naval academy, and shipbuilding docks. The haven is safe, but very shallow, and the trade, principally in logwood and wax, has greatly fallen off; while cigars and palm-leaf hats are almost the only manufactures. Founded in the middle of the 16th century, it was taken, occupied, and burned by buccaneers in 1685. Pop. 16,000.

Camperdown (Dutch *Camperduin*), a broad tract of low dunes in North Holland, 25 miles N. of Haarlem. Off here Admiral Duncan defeated the Dutch fleet under Admiral Winter, October 11, 1797.

Campinas, SÃO CARLOS DE (*Kampee'nas*), a town of Brazil, 44 m. NW. of São Paulo. Pop. 28,000.

Campine (*Kam'peen*), a barren district in the provinces of Antwerp and Limburg in Belgium.

Campobasso, a town of South Italy, among the Apennines, 52 miles N. of Benevento by rail. Pop. 15,594.

Campobello, two towns of Sicily. (1) CAMPOBELLO DI LICATA, 17 miles N. of Licata by rail, with sulphur-mines. Pop. 7481.—(2) CAMPOBELLO DI MAZZARO, 32 miles SSE. of Trapani by rail. Pop. 6586.

Campo-Formio, a village of Northern Italy, 6 miles SW. of Udine. Here peace was concluded on 17th October 1797 between Austria and the French Republic.

Campos, SÃO SALVADOR DOS, a town in the Brazilian province of Rio de Janeiro, on the Parahyba, 30 miles from its mouth. Pop. 35,000.

Campsie, a Stirlingshire parish, 12 miles N. by E. of Glasgow. The Campsie Fells (1894 feet)

are part of the Lennox Hills. Norman Macleod is buried in the graveyard.

Campvere (now *Vere*, *Veere*, or *Ter-Vere*), a small fortified Dutch town on the north-east of the island of Walcheren, with a port on the Veergat, which separates Walcheren from North Beveland. The town has fallen into decay; but its former prosperity is indicated by such large edifices as the town-house and cathedral church. Pop. about 900. From 1444 till 1795 it was the seat of a Scottish factory, the only staple port between Scotland and the Netherlands.

Cana, OF GALILEE, the scene of our Lord's first miracle, and the birthplace of Nathanael, was situated in the neighbourhood of Capernaum, to the W. of the Sea of Galilee.

Canaan ('low-land'), the name originally applied to the low coast-land of Palestine on the Mediterranean, inhabited by the Canaanites (strictly so called), as opposed to the mountain-land. Later it became extended to the whole country, yet only to the part west of the Jordan, the part east of Jordan being contrasted with it as the 'Land of Gilead.'

Canada (probably derived from an Indian word *kannatha*, meaning a village, but understood by the first French discoverers to apply to the country at large), a British dominion occupying the northern part of North America. Canada originally comprised the vast territory extending as far west as the Mississippi, and including the great lakes, which was ceded to Great Britain by France in 1763. Subsequently, at the termination of the War of Independence, it was limited to the region now occupied by the provinces of Ontario and Quebec, described prior to 1867 as Upper and Lower Canada respectively. The Dominion of Canada is a confederation of the colonies of British North America, constituted in 1867. Upper and Lower Canada, Nova Scotia, and New Brunswick were the first to unite. The Hudson Bay Territory was acquired from the company, a portion of it formed into the province of Manitoba, the remainder designated the North-west Territories, and both were admitted into the confederation in 1870. Part of the North-west Territories was subsequently divided into districts—Keewatin in 1876, and Assiniboia, Saskatchewan, Alberta, and Athabasca in 1882. In 1871 British Columbia, and in 1873 Prince Edward Island, became parties to the Union, which now includes the whole of British North America, except Newfoundland.

Canada is bounded on the N. by the Arctic Ocean, on the W. by the Pacific and Alaska, on the E. by Newfoundland and the Atlantic, and on the S. by the United States. Both the Atlantic and Pacific shores abound in deep indentations forming magnificent harbours and sheltered bays. The most striking physical features of Canada are the Rocky Mountains, the Laurentian Range (which forms the watershed between Hudson Bay and the St Lawrence, and varies in height from 1000 to 3000 feet), and the chain of immense fresh-water lakes. The eastern portions of Canada are generally well timbered, as are also British Columbia and the North-west Territories north of the Saskatchewan. Westward of the Red River, between the 49th and 55th parallels of latitude, there is an immense fertile plain, suitable for general agriculture and grazing (the eastern end being about 800 feet, and the western about 3000 feet, above the level of the sea), extending nearly to the Rocky Mountains. This range consists of triple chains with valleys between; the most easterly has the greatest elevation near the 52d parallel, the highest peaks being Mount Brown (16,000), Mount Murchison (15,789), and Mount Hooker (15,700). The average height of the chain is from 7000 to 8000 feet. Canada is well watered, the map presenting a network of lakes and rivers. The system of the St Lawrence alone, with the great lakes Superior, Huron, Michigan, Erie, and Ontario (between the last are the celebrated falls of Niagara), drains an area in Canada of 330,000 sq. m. With their outlet the lakes form the greatest fresh-water way in the world. Other important lakes are Winnipeg, Winnipegosis, Manitoba, Lake of the Woods, Great Slave, Great Bear, and Athabasca. Other rivers are the Saskatchewan and the Winnipeg, flowing into Lake Winnipeg, and the Nelson, flowing from it into Hudson Bay; the Assiniboine and the Red River, which flow into Lake Winnipeg; the Albany and the Churchill, emptying into Hudson Bay; the Athabasca and the Peace rivers, flowing into Lake Athabasca, and the Slave River, from it into Great Slave Lake; the Mackenzie, fed from both the Great Slave and the Great Bear lakes, and emptying into the Arctic Ocean; the Fraser and Thompson, in British Columbia, emptying into the Pacific; the Ottawa and the Saguenay, emptying into the St Lawrence; and the St John, in New Brunswick, which it partly separates from the State of Maine. The principal islands of the Dominion are: on the east, Cape Breton, Prince Edward and Magdalen islands, and Anticosti, in the Gulf of St Lawrence; and on the west coast, Vancouver Island and Queen Charlotte Islands. All the great Arctic islands, except Greenland, belong to Canada.

The cold in winter and the heat in summer are greater than in Great Britain, but the climate is a healthy one. Spring commences two or three weeks later than in England, but the conditions for the rapid growth of produce—warm sunshine and a sufficiency of rain—are so favourable that the crops of the two countries are about equally advanced by the middle of July. The winter may be said to continue from the middle of November to the end of March, or about four and a half months. British Columbia probably possesses the finest climate in North America. In some inland parts of Canada the maximum temperature may be from 90° to 96°, and the minimum from 20° to 26° below zero. But although there are these extremes, the air is always dry, bracing, and exhilarating. All the grain and fruit crops grown in England flourish in Canada; and many species raised in England under glass, such as grapes, peaches, melons, and tomatoes, ripen in southern Canada in the open air. Canada is nearly as large as the whole of Europe, and about 600,000 sq. m. larger than the United States without Alaska. At the census of 1901 the area and population of provinces and districts were:

	Area, sq. m.	Pop.
Prince Edward Island	2,000	103,259
Nova Scotia	20,550	459,574
New Brunswick	28,100	331,120
Quebec	227,500	1,648,898
Ontario	219,650	2,181,947
Manitoba	64,066	255,211
British Columbia	382,300	178,657
Territories, Islands, &c.	2,371,481	211,649
	3,315,647	5,371,315

In all, 4,671,815 were natives of Canada, 386,545 of the United Kingdom, 19,338 of other parts of the British empire, 127,899 of the United States, 31,231 of Russia, 27,300 of Germany, and 107,187

of China, Scandinavia, France, and Italy; 1,649,371 were French-speaking. There were 108,112 Indians. Alberta and Saskatchewan (absorbing Assiniboia and Athabasca) were constituted provinces in 1905. The chief towns are Montreal (267,730), Toronto (208,040), Quebec (68,840), Ottawa, capital of the Dominion (59,928), Hamilton (52,634), Winnipeg (42,340), Halifax (40,832), and St John (40,711). Catholics number 2,229,600, Presbyterians 842,442, Anglicans 680,620, Methodists 916,886, and Baptists 316,477. English is generally spoken in the Dominion, but in some parts of the province of Quebec, French is the only language understood. In the Dominion, Quebec, and Manitoba parliaments, members may address the House in either language. The French spoken by the *habitants*, as the French-Canadians are called, is a patois which in many respects resembles the French of the 17th century more closely than the French of modern Paris. The principal universities are, in the order in which they were founded, as follows: Dalhousie (N.S.), 1820; M'Gill (Que.), 1821; New Brunswick, 1828; Toronto (Ont.), 1828; Queen's, Kingston (Ont.), 1841; Laval (Que.), 1852; Manitoba, 1877. The government also established (1874) the Royal Military College at Kingston (Ont.). Canada has passed beyond the mother-country in many social questions. Thus, as regards the liquor traffic, local option prevails; by an Act of the Dominion Parliament in 1882, marriage with a deceased wife's sister was legalised; religious liberty prevails; there is practically free and unsectarian education, and a free and liberal franchise; members of parliament are paid for their services; the parliaments are quinquennial; and there is no system for legalising pauperism, although orphans and the helpless and aged of both sexes are not neglected.

Between the years 1879 and 1903 the annual value of Canadian imports varied from $81,965,000 (1879) and $241,214,961 (1903); while that of exports rose from $71,491,000 (1879) to $225,849,724 (1903). In 1903 the exports to Great Britain were $131,202,000, and to the United States $71,784,000; while the imports from Britain were $58,894,000, and from the United States $137,605,000. Chief imports are iron manufactures, wool manufactures, coal and coke, sugar, cotton and cotton manufactures, bread-stuffs, silks, chemicals; exports are lumber and other forest-products ($39,536,958, including wood-pulp), cheese ($24,712,943), cattle, wheat and wheat flour ($29,265,840), barley, and other agricultural products, cod and other fish, coal, and minerals. These figures do not give an accurate idea of the total trade of Canada; they only embrace the outside trade, and do not include the large business which takes place between the provinces. Canadian fisheries are, as regards the area available, the largest in the world, embracing nearly 5600 miles of sea-coast, in addition to inland seas, innumerable lakes, and a great number of rivers teeming with fish; and there are twelve fish-breeding establishments in different parts of the Dominion. The total value of the produce of the fisheries varies from $21,000,000 to over $25,000,000 annually.

The minerals are chiefly coal, gold, copper, iron, phosphates, salt, antimony, mineral oils, and gypsum. Gold-mines have been and are being worked in Nova Scotia, in Quebec, and Ontario, and largely in British Columbia, where there are yet immense fields to open up. Silver-mines are being worked in Ontario; and that at Silver Islet, Thunder Bay (on Lake Superior), has been the richest yet discovered in Canada. Iron ore is found all over the Dominion. Copper has been mined to a considerable extent both in Quebec and Ontario, and the deposits of the ore are of great extent. There are very large coal-deposits in Nova Scotia. The coast of British Columbia is rich in coal of a good quality. Coal is known to exist over a vast region stretching from 150 to 200 miles east of the Rocky Mountains, and north from the frontier for about 1000 miles. The total value of the mining produce of Canada averages over $65,000,000 annually.

The forest-products of Canada constitute one of her most important sources of wealth. They find their way to all parts of the world—to the United States, to the United Kingdom, and to the Australian colonies. Canadian cattle are of good quality, many pedigree and highly priced cattle having been imported for the improvement of the flocks and herds. Herds of Shorthorns, Herefords, Galloways, Polled Angus, and Jerseys are to be found in many parts of Canada. Great progress has been made in dairy-farming, and the factory system has been latterly introduced in the older provinces. There are factories for making cheese, and creameries for butter. Agriculture is the leading interest of the country. Mixed farming is generally carried on, the growing of grain and fruit, stock-raising, and dairy-farming being more or less combined. Great progress has recently been made in the development of manufactures. The 'national policy' comprises a high protective system, but since 1901 gives a preference to Britain.

There are nearly 19,000 miles of railway in Canada. The Canadian Pacific Railway (4319 miles) was completed in 1885; by it the distance from Liverpool to Japan and China is shorter by 1000 miles than *viâ* New York and San Francisco. In 1905 the Grand Trunk system was planning extension to the Pacific, and the Dominion government proposed another line to the north of the Canadian Pacific. The railway is not only of importance locally to Canada, as connecting the various provinces and opening up the vast North-west Territories for settlement, but it is of imperial importance as providing a new route to Australasia and the East, available for commerce, and for military and naval purposes. The canals of Canada are works of great utility and importance. The channel of the St Lawrence has been deepened, and vessels of 5000 and 6000 tons now reach Montreal, 700 miles from the Atlantic Ocean. There is a system of canals to overcome the St Lawrence rapids, and the difference in the levels of the great lakes (600 feet) which affords uninterrupted navigation from the Strait of Belleisle to the head of Lake Superior, a distance of 2384 miles, of which 71¾ miles are canals. A scheme has been proposed for a new route between Britain and North-west Canada through Hudson Bay, with a railway from Port Nelson to Manitoba. There are regular lines of steamers between Canada and Britain, and from Vancouver to Australia and China and Japan. The postal and telegraph systems are very complete, and the Pacific cable from Vancouver to Australia was completed in 1902.

The revenue of the Dominion in the years 1887 to 1905 varied from $35,754,000 (1887) to over $66,000,000; the expenditure from $35,658,000 to $52,000,000. The constitution of Canada is contained in the British North America Act of 1867. The government of Canada is federal. The provinces have local legislatures, and they also elect the Federal Parliament which sits at Ottawa.

The Executive Government and authority of and over Canada is vested in the crown of Great Britain. The governor-general for the time being, whose emoluments are paid out of the Canadian revenue, carries on the government in the name of the sovereign, with the assistance of a council, known as the cabinet, consisting of the heads of the various departments, which is responsible to the House of Commons. The Dominion Parliament consists of an upper house, styled the Senate (81 members), and the House of Commons (214 members). The senators are nominated for life by the governor in council. The commons are elected every five years, unless the House be dissolved before its course has run; and there is a special franchise distinct from that in force for the provincial assemblies. At the head of each of the provinces is a lieutenant-governor, appointed by the governor in council, and paid by the Dominion, who is the link between the provinces and the Federal Government. Quebec and Nova Scotia have each a two-chamber legislature; New Brunswick, Ontario, Manitoba, British Columbia, and Prince Edward Island only single-chamber assemblies. The executive in each province is responsible to the local legislature. The North-west Territories are administered by a lieutenant-governor and a council, partly elected and partly nominated. Legislation upon local matters is delegated, as a general rule, to the provinces. There is also a very perfect system of municipal government throughout the Dominion. Both the counties and townships have their local councils, which regulate the taxation for roads, schools, and other purposes, so that every man directly votes for the taxes he is called upon to pay. Local taxation is very light.

In 1534 Jacques Cartier landed near Gaspé and took possession of Canada for the king of France; but little was done by way of settlement till 1608, when Champlain founded Quebec. From this time till 1763 Canada, from Acadia (Nova Scotia) to Lake Superior and down the Mississippi to the Gulf of Mexico, was held to be French territory. The struggle between Great Britain and France for supremacy was long and bitter, but ended in 1763 with the Treaty of Paris, by which all the French dominions in Canada were ceded to Britain, save the small islands of St Pierre and Miquelon, retained as fishing stations. Hudson Bay territory, Nova Scotia, and Newfoundland, had passed to England by the Treaty of Utrecht in 1713. Through the American War of Independence, what is now Minnesota, Wisconsin, Michigan, Ohio, Indiana, and Illinois, was lost in 1783 to the United States, no longer British colonies. Quebec was in 1791 divided into Lower and Upper Canada. A rebellion took place in 1837–38, and the provinces were reunited in 1840. Prince Edward Island and New Brunswick were separated from Nova Scotia in 1770 and 1784. British Columbia was made a crown colony in 1858, and Vancouver Island joined to it in 1866. The confederation of all the British North American provinces—except Newfoundland—took place in 1867–71, and the prosperity of the Dominion was only temporarily disturbed by the Red River rebellion of 1869. The fishery rights have repeatedly been a source of difficulty between Canada and the mother-country on the one hand and the United States on the other, and the dispute about sealing in Behring Sea and off the Alaskan coasts was only settled by arbitration in 1893. The long-existing dispute as to the boundary between Canada and the United States territory of Alaska was finally settled by a joint commission in 1903.

There are French histories of Canada by Faillon, Garneau, and Révilland; in English by Tuttle (1878), G. Bryce (1887), Kingsford (8 vols. 1888–98), and Roberts (1898). See also works by Fream (1889), Munro (1890), Goldwin Smith (1891), Lucas (1901), Bradley (1904).

Canadian River, a shallow tributary of the Arkansas, rising in the NE. part of New Mexico, and running 900 miles generally eastward through Texas and Indian Territory to the Arkansas. Its largest tributary is the Rio Nutria, or North Fork of the Canadian, which runs parallel to the main stream for about 600 miles.

Canandaigua, the capital of Ontario county, New York, at the north end of Lake Canandaigua, 28 miles SE. of Rochester by rail. Pop. 6168.

Canary Islands, a Spanish group in the Atlantic Ocean, where 15° W. long. crosses 29° N. lat.; the nearest is only 62½ geographical miles from the NW. coast of Africa. There are seven large and several small islets, with a joint area of 2808 sq. m., and a population of 360,000. The principal islands, proceeding from east to west, are Lanzarote (323 sq. m.), Fuerteventura (326), Gran Canaria (758), Tenerife (877), Gomera (169), Palma (718), and Hierro or Ferro (82). The coasts are steep and rocky, and the surface is diversified with high mountains, narrow gorges, and deep valleys, the loftiest summit being the Peak of Tenerife (12,200 feet). All the islands are volcanic, and everywhere show plain marks of their origin, in the shape of cones, craters, beds of tuff and pumice, and streams of lava; but eruptions have taken place within the historical period only in Tenerife, Palma, and Lanzarote. There are no rivers, and on several of the islands water is very scarce. Upwards of 900 species of wild flowering plants have been found on these islands—420 of them peculiar to the group, and 48 others common to it and to the other North Atlantic islands, but found nowhere else. The flora as a whole is mainly of a South European character, with a large infusion of African genera. As to the cultivated plants, the warmth of the lowest region allows of the growth of the sugar-cane, sweet potato, bananas, date-palm, &c.; whilst above, to the height of 3000 feet, the vine and various cereals are cultivated in a climate resembling that of the south of Europe. Minerals are few and of little importance. The temperature near the sea is genial. The mean annual rainfall amounts to 14 inches. In consequence of the higher temperature, the less rainfall, and drier atmosphere compared with Madeira, and of the much increased facilities for reaching the islands, Orotava and Las Palmas are coming into note as winter-resorts for invalids. A few years ago cochineal was the staple production, but the competition of aniline dyes has been severely felt, and cochineal, no longer bringing in a good profit, has fallen into neglect. The cultivation of the vine (almost ruined after 1853 by the grape disease) and sugar-cane is extending; wine being exported to the European continent, and sugar to Spain. Tobacco is also grown. Submarine cables connect the islands both with the continent of Europe and the African coast.

The Canaries, the Fortunate Islands of the ancients, were rediscovered in 1334, when a French vessel was driven amongst them by a storm. In 1404 the Norman Jean de Bethencourt, having obtained assistance from Spain, mastered four of the islands. His successor

having sold his rights in Spain, they were afterwards acquired by the king, who sent a large force in 1477 to conquer the Guanches, a brave and intelligent race of large stature, and comparatively fair. Their origin is unknown, but they are assumed by many to have been of Berber or of Libyan stock. Their resistance was so stubborn, that it was not until 1495 that the last of the islands was finally annexed to Spain, of which they now form a province.

See works by Pegot-Ogier (Eng. trans. 2 vols. 1882), Olivia Stone (1888), C. Edwardes (1889), G. W. Strettell (1890), J. Whitford (1890), and J. H. T. Ellerbroke (1892).

Cancale (*Kon'kál'*), a bathing-place in the French dep. of Ille-et-Vilaine, 8 miles ENE. of St Malo, on Cancale Bay, famous for its oysters. Pop. 3723, or with the port, La Houle, 6578.

Candahar. See KANDAHAR.

Candeish. See KHANDESH.

Candia is the name of a town of Crete (once the capital), and was long the only name by which the island was known in Western Europe. The city of Candia stands on the north coast of the island, north of Mount Ida. Its harbour is sanded up. Pop. 22,800. See CRETE.

Candy. See KANDY.

Canea (anc. *Cydonia*), present capital and chief commercial town of Crete, on the north-west coast, with a fine harbour. Pop. 24,500.

Canelones (*Kan-ay-lo'nez*), a dep. of Uruguay. Area, 1827 sq. m.; pop. 86,750. Capital, Guadelupe, 30 m. N. of Monte Video by rail; pop, 3000.

Canicatti, a town of Sicily, on the Naro, 24 miles ENE. of Girgenti by rail. Pop. 19,599.

Canna, one of the Inverness-shire Hebrides, 12 miles SW. of Skye, and 3 NW. of Rum. It rises to 800 feet, and is 4½ miles long, 1 mile broad, and 4½ sq. m. in area. With the adjoining island of Sanday (1 sq. m.) its population in 1841 was 225; it is now under 100, mostly Catholic.

Cannæ, an ancient town of Apulia, Southern Italy, near the mouth of the Aufidus (now Ofanto), and 1½ mile N. of the modern Canosa. Here, in 216 B.C., Hannibal defeated the Romans with prodigious slaughter.

Cannanore, a seaport and cantonment of Malabar, Madras, 50 miles N. of Calicut. Pop. 27,818.

Cannes (*Kann*), a watering-place in the dep. of Alpes-Maritimes, charmingly situated on a bay of the Mediterranean, 19 miles SW. of Nice by rail. Though founded by the Romans, it was but a place of 3000 inhabitants, when in 1815 Napoleon landed near it from Elba; nor was it till 1836 that Lord Brougham first selected it as a health-resort. Alexis de Tocqueville, Prosper Merimée, Louis Blanc, Victor Cousin, Auerbach, J. B. Dumas, and the Duke of Albany have died in Cannes; and in 1887 Queen Victoria came to Cannes to visit the place, and to see the beautiful Albany Memorial Church of St George of England, erected with funds raised by the Prince of Wales. Cannes is celebrated for the salubrity of its climate. Low wooded hills shelter it from the north, and it occupies the centre of the great curved bay, 14 miles across, of which Cap Roux and Cap d'Antibes form the extremities. It has a small port, and a trade in flowers, becoming yearly of greater importance. There are farms of violets, roses, oranges, tuberoses, jessamine, and cassia. Pop. (1872) 8201; (1901) 25,350—sometimes doubled by winter visitors.

Cannock, a town of Staffordshire, 8 miles NNW. of Walsall. Cannock Chase abounds in important iron industries. Pop. (1851) 2099; (1871) 6650; (1901) 23,992.

Cannstatt, a town of Würtemberg, on the Neckar, 3 miles NE. of Stuttgart. Of Roman origin, it has much-frequented mineral springs, and manufactures of iron, cottons, tobacco, &c. Pop. (1875) 15,064; (1900) 26,500.

Canonbie, a Dumfriesshire Border parish on the Esk, 16 miles N. by E. of Carlisle. Coal is found.

Canosa (anc. *Canusium*), a town of Southern Italy, 13 miles SW. of Barletta. It has a castle-crowned hill and a cathedral (1101–1825). Pop. 24,200. See CANNÆ.

Canossa, a ruined castle of Italy, 12 miles SW. of Reggio. Here the Emperor Henry IV. in 1077 made submission to Pope Gregory VII.

Canso, CAPE, the eastern extremity of Nova Scotia, at the entrance of Chedabucto Bay. Canso Strait, 17 miles long and 2½ wide, separates Nova Scotia from Cape Breton.

Cantal, an inland dep. of Southern France, formed out of the south portion of the old province of Auvergne. Area, 2090 sq. m.; pop. (1901) 234,382.

Canterbury, a municipal, parliamentary, and county borough, and the seat of the metropolitan see of all England, in East Kent, 56 miles ESE. of London by road (62 by rail), and 16 NW. of Dover. Standing in a plain on the banks of the Stour, amid gently swelling hills, it occupies the site of the Roman *Durovernum* and Saxon *Cantwarabyrig* ('borough of the men of Kent'), and from its position on the great London highroad must always have been a place of importance. There are some remains of the ancient walls (1¾ mile in circuit and 20 feet high), and the West Gate (*c.* 1380) is the survivor of six. Near the city wall is a large artificial mound, the Dane John (probably *Donjon*), and connected with this mound is a public garden, laid out in 1790, from the top of which is a fine view of the country around. The much mutilated castle, whose Norman keep resembled Rochester's, has been degraded to a gas-work; the guildhall (1439; rebuilt 1697) has been refaced with modern brick; and the Checquers Inn, where Chaucer's pilgrims lodged, lost its 'dormitory of the hundred beds' by fire in 1865.

But the great glory of Canterbury is its magnificent cathedral, whose precincts are entered through a splendid Perpendicular gateway (1517). It was founded in 597 by St Augustine; enlarged by Archbishop Odo (942–959); totally destroyed by fire (1067); rebuilt by Archbishop Lanfranc and Priors Ernulf and Conrad (1070–1130): this building it was that witnessed the murder of Becket (29th December 1170); bereft of its choir by fire (1174); partly rebuilt by William of Sens, and another William, an Englishman; and transformed as to the nave and nave-transepts by Prior Chillenden into the Perpendicular style of that period (1378–1411). The central or 'Bell Harry' tower was carried up (1495) to about double its original height; also in the Perpendicular style, it is 235 feet high. The north-west or Arundel steeple was taken down and rebuilt in 1834–40; like the south-west or Dunstan steeple (1413–44), it is 130 feet high. The north transept is called the Martyrdom transept, for here took place the murder of Becket. In 1220, fifty years later, his remains were translated from the crypt to a

shrine in the newly erected Trinity Chapel, eastward of the choir. That shrine was demolished in 1538; but in 1888 a stone coffin, with remains of a skeleton, supposed to be Becket's, was discovered in the crypt, and reinterred there after careful examination. In 1643 the building was 'purified,' as it was called, by order of parliament; still very many most interesting monuments remain—such as the tombs of Stephen Langton, the Black Prince, Henry IV., and Archbishops Peckham, Meopham, Stratford, Sudbury, Courtenay, Chicheley, Stafford, Kemp, Bourchier, Morton, Warham, and Cardinal Pole. The fifty-one statues that since 1863 have adorned the south porch and the western entrance include 19 of Canterbury's 94 archbishops, 21 English sovereigns, 3 deans, Erasmus, &c. Of stained glass there are some fine old specimens, and some new ones of very varied merit. The total length of the cathedral is 522 feet, by 154 in breadth at the eastern transept. Its predominant styles are Transition-Norman and Perpendicular. The large and lofty crypt was in 1561 given up by Elizabeth to a congregation of French and Flemish Protestant refugees, and a French service still is held here. On 3d September 1872 the church narrowly escaped destruction for the fourth time by fire, the outer roof being burned, over all the east portion of the choir.

To the north of the cathedral are the Cloisters, 144 feet square; the Chapter-house (1411); the New Library and the Howley Library; the beautiful Green Court; the Deanery (1517); and the King's School (1541). Marlowe, who was a native, and a drinking fountain to whose memory was erected in 1891, and Dr Harvey, went to school here. These occupy the site, and in part the buildings, of the Benedictine Priory of Christ's Church. The remains of the Abbey of St Augustine, to the east, were in 1844–48 transformed into an Anglican missionary college. Of fourteen old churches, St Martin's has a font, said to be the very one in which Ethelbert was baptised by St Augustine, whilst St Dunstan's contains the monuments of the Ropers, and, in a vault, the head of Sir Thomas More. The Clergy Orphan School occupies a conspicuous position on St Thomas's Hill, a mile out of the city; the Simon Langton Schools were opened in 1882. There are, besides, several hospitals, large barracks, a corn exchange, and an art gallery presented to the city in 1882 by one of her sons, Sidney Cooper, R.A. There is also a free library and museum. Canterbury has a large trade in grain and hops. Races used to be run on Barham Downs, but they were eclipsed in importance by the Canterbury 'cricket week.' Since 1885 the city has returned only one member. Pop. (1851) 18,388; (1901) 24,899. See works by Willis (2 vols. 1845–69), Dean Stanley (10th ed. 1883), Dean Hook (12 vols. 1860–76), and R. Jenkins (1880).

Canterbury, a provincial district of New Zealand (q.v.), in the centre of the South Island, with an area of 14,039 sq. m.; till 1876 it was a province, with Christchurch as its capital, and Lyttelton as its port. The district was settled in 1850 by the Canterbury Association, a society of peers, bishops, and commoners interested in the colonisation of New Zealand. It has a coastline of 200 miles, a breadth of 150, and is well watered by numerous rivers. Coal, iron ore, fireclays, quartz, and gold exist, and coal-mines are in operation. On the eastern side of the great range of hills are the far-famed Canterbury Plains, the great sheep district of the colony. There is railway connection between Christchurch and Dunedin, with various branch lines. The staple trade is in wool and grain. The Bishop of Canterbury is primate of New Zealand. The medicinal hot springs at Hanmar Plain in Amuri district have considerable celebrity. Mount Cook (13,200 feet) is the highest mountain in New Zealand. Pop. (1871) 46,801; (1891) 128,392; (1901) 143,041.

Cantire. See KINTYRE.

Canton, a large commercial city and port in the south of China, and capital of the province of Kwang-tung (of which the name Canton is merely a corruption), is situated in 23° 7′ 10″ N. lat., and 113° 14′ 30″ E. long., on the north or left side of the Shu-kiang, or Pearl River, in a rich alluvial plain, 70 miles N. of Macao, at the mouth of the estuary of the Canton River, and 90 NW. of Hong-kong. The city is surrounded by walls 25 to 40 feet high and 20 thick, with an esplanade inside, six miles in circumference; and it is divided by a partition wall running east and west into two unequal parts, the north or old city, much the larger, and the south or new city. There are twelve outer gates, four gates in partition wall, and two water gates; shut and guarded by night. The entire circuit, including suburbs, is nearly 10 miles. At the south-west corner of the suburbs, south of the river, are the Hongs or European quarter, divided from the river by a quay, 100 yards wide, called Respondentia Walk. The streets, more than 600, are in general less than 8 feet wide, and very crooked. The houses along the water-side are built on piles, and subject to inundations. There are two pagodas, the 'Plain Pagoda,' erected ten centuries ago, 160 feet high, and an octagonal nine-storied pagoda, 175 feet high, erected more than 1300 years ago; and 124 temples or Joss-houses. The Honam temple covers, with its grounds, 7 acres, and has 175 priests attached. The 'Temple of Filial Duty' has 200 priests, supported by 3500 acres of glebe-lands. The priests and nuns in Canton number more than 2000, nine-tenths of them Buddhists. The 'Temple of Five Hundred Genii' has 500 statues of various sizes in honour of Buddha and his disciples. Examination Hall, in the old city, is 1330 feet by 583 feet, covers 16 acres, and has 8653 cells. Nearly half the craft on the river are fixed residences, and the population on land and water can hardly be less than a million and a half. The climate of Canton may be pronounced healthy. The average temperature ranges from 42° to 96° F.; though falls of snow occurred in 1835 and 1861. The average rainfall is 70 inches. Pop. 1,800,000.

The admirable situation of Canton, with a safe and commodious anchorage for the largest vessels, explains how, from an early period, it was a favourite port with foreign merchants. The earliest notices date back to two centuries B.C.; and the Arabs made regular voyages hither as early as the 9th century A.D. The Portuguese found their way to it in 1517, and were followed by the Dutch a hundred years later. These in turn were supplanted by the English before the close of the 17th century, and an immense trade was carried on by the agents of the East India Company, whose monopoly ceased in April 1834. In 1842 Canton became one of the five 'treaty ports' open to foreign commerce. The city was captured by the allied French and English forces in December 1857, and continued to be garrisoned by them till October 1861. The chief exports from Canton are tea, silk, sugar, and cassia; the chief

imports, cotton, woollen, and metal goods, foodstuffs, opium, kerosene, &c.

Canton River is a name given to the chief channel by which the united waters of the Si-kiang and the Pe-kiang rivers reach the sea through the delta. Shu-kiang or Pearl River is another name for part of this waterway; and Boca Tigre (q.v.), Bocca Tigris, or Boque, a part of it below Canton, where the estuary is compressed between escarped hills.

Canton, capital of Stark county, Ohio, on Nimishillen Creek, 56 miles SSE. of Cleveland, with foundries, iron and steel works, paper and wool mills. Pop. (1860) 4041; (1900) 30,667.

Cape Breton (*Brit'un*), a rocky Canadian island of irregular form, at the eastern extremity of Nova Scotia, from which it is separated by the Gut of Canso, one mile broad. Measuring 100 by 85 miles, it has an area of 3120 sq. m., with a pop. of 97,000. The coast is greatly indented, and an inlet, the *Bras d'Or*, entering the island on the east, forms a lake (50 by 20 miles) which renders most of the interior accessible by water, and which, now continued by a ship-canal (½ mile) to St Peter's Bay, on the south coast, bisects the island. The climate is moist, but milder than that of the adjoining continent; the principal exports are timber, fish, iron ore, and coal. Originally French, it was taken and retaken by the English in 1745–58; and in 1819 became part of the province of Nova Scotia. The towns are Sydney, Arichat, and Port Hood, the once strongly fortified Louisbourg having sunk to a village.

Cape Coast Castle, a British settlement in the Gold Coast Colony, Upper Guinea, 315 miles W. of Lagos. It lies in a chasm, and is defended by the great castle and by three small forts on the hills behind. Ceded by the Dutch in 1665, from 1672 it was possessed by several companies till 1843, when it was taken over by government. In 1875 it was superseded by Accra as capital of the Gold Coast. L. E. Landon died here in 1838. Pop. 11,500.

Cape Cod, a narrow peninsula of Massachusetts, in form like the letter L, which, with a length of 65 miles, forms the south-east boundary of the great bay of that state. A canal across the neck has been proposed.

Cape Colony, officially Colony of the Cape of Good Hope, is a British colony situated at the southern extremity of the African continent. It is bounded on the N. by German South-west Africa, the Bechuanaland Protectorate, the Orange River Colony, and British Basutoland; on the S. by the Southern Ocean; on the E. by Natal; and on the W. by the Atlantic Ocean. Neither Basutoland (q.v.), the Bechuana Protectorate, nor the territories of the South Africa Company (see Matabeleland, Mashonaland, Zambesia) are part of the colony. All sections are under the authority of the High Commissioner for British South Africa, who is distinct from the governor of Cape Colony. Pondoland was annexed to the Cape Colony in 1894, and in 1895 the crown colony of British Bechuanaland was also incorporated. The total area of the Cape Colony is now estimated at over 277,000 square miles.

The Cape Colony is deficient in navigable rivers, and in gulfs or arms of the sea stretching inland. The best natural harbour, Saldanha Bay, is unused, on account of the aridity of the land around it. Table Bay, the principal harbour, is naturally much exposed on the north-west; but has been protected by a breakwater (see Capetown). False Bay, lying to the east of the Cape of Good Hope, includes Simon's Bay, which is the imperial naval station. Algoa Bay has Port Elizabeth on its western shore. Running parallel to the coast-line of the Cape Colony, and at an average distance from it of about 150 miles, there is a range of mountains which forms the watershed of the country, and is known as the Stormberg, the Sneeuberg, the Nieuwveld Mountains, the Roggeveld Mountains, and Kamiesberg. The Eastern Province, along with the Cape peninsula, is on the whole better watered than the interior portion of the Western Province, which is largely covered with the Karroo or steppe, dreary-looking, but of great value to the sheep-farmer. Beyond the belt of country skirting the sea-coast agriculture can only be successful where there is a suppy of water for irrigation.

The climate of the Cape Colony and of the interior of Southern Africa generally is one of the finest in the world, and eminently suited for Europeans. As a health-resort the Cape has long been favourably known. The climate on the coast is superior to that of England. But it is after the traveller leaves this well-watered belt that he finds himself in a rare and yet balmy atmosphere which is exhilarating to the healthy, and most beneficial to those subject to lung-complaints, especially if they have arrived in the country at a sufficiently early stage. At Wynberg, near Capetown, the mean temperature in winter is 55°, in summer 63°, the summer maximum being 96°. On the elevated plateau at Aliwal North, the winter mean is 48·8°, summer mean 67·4°, summer maximum 102°. In 1891 the area and population were as follows:

	Area, sq. m.	Pop.
Colony proper	191,416	956,485
Griqualand West	15,197	83,375
East Griqualand	7,594	152,618
Tembuland	4,122	180,415
Transkei	2,552	153,563
Walfish Bay	430	768
Total	221,311	1,527,224

In 1904 the census (delayed by the war) showed 579,741 whites and 1,830,074 coloured, a total of 2,409,815. Griqualand West, Pondoland (annexed in 1894), and British Bechuanaland (annexed 1895) are now part of the Colony proper. The natives of the Cape Colony are steadily increasing. There are two main groups of natives —the yellow-coloured and oblique-eyed Gariepine people (named from the Gariep or Orange River); and the darker, and far more numerous Bantu family. The Gariepine family includes Hottentots, Korannas, Namaquas, and Bushmen. The Bantus are subdivided into numerous tribes, Kaffirs, Zulus, Basuto, Bechuana, Matebele, Mashona, &c. The earliest settlers were from various countries in North Europe, being the servants of the Dutch East India Company; to these were added 150 Huguenot refugees in 1688. In 1820 English and Scotch settlers were placed by government on land in the Eastern Province; and after the Crimean war the German Legion was settled in King Williamstown district. The discovery of diamonds caused a rush to Griqualand West. The Eastern Province of the colony is, roughly speaking, an English country. The western part is mainly occupied by Dutch-speaking descendants of the early settlers. There are 8000 miles of road in the Colony proper. The railway system extended in 1893 to 2300 miles of government line (besides

177 miles of private lines), belonging to three main systems, Western, Midland, and Eastern. Capetown is now connected with Mafeking and Palapwe in British Bechuanaland, and, by the line running through the Orange Free State, with Johannesburg in the Transvaal, which again will soon be connected with the east coast at Delagoa Bay. There are over 5000 miles of telegraph line.

A few elephants and buffaloes are still 'preserved' in the Knysna and Zitzikama forests, but the hippopotamus, rhinoceros, giraffe, eland, quagga, gnu, and other large game, are, with the lion, no longer to be seen within the Cape Colony. Smaller antelopes are still found, with baboons, monkeys, wild cats, porcupines, jerboas, conies, ant-eaters; as also tiger-cats, leopards, jackals, and wild dogs. The variety of birds is also great, and some are peculiar, such as the secretary-bird, the honey-bird, the weaver-bird, and the ostrich. Reptiles still abound; the alligator is chiefly found beyond the colony, but the iguana, the cobra di capello, puff-adder, and other snakes are found in the colony. Insect life is also abundant. It is probable that no single country in the world has contributed so largely to European conservatories and gardens as the Cape of Good Hope—sending such handsome flowering shrubs as the pelargoniums, heaths, proteas, and the lovely bulbous plants of irideæ, amaryllideæ, and liliaceæ.

The chief exports from the colony are diamonds and wool. Cattle are also extensively raised, especially in the grassy districts of the Eastern Province. Pneumonia, known as 'lung-sickness,' was introduced from Holland in 1857, and has never since been eradicated. In the northern parts of the colony, and more especially in the countries beyond the colony, horses are subject during the summer months to a climatic disease known as 'the horse-sickness.' Ostrich-feathers have long been an article of export from the Cape, and in 1864 ostrich-farming was commenced at the Cape, and is now one of the leading industries. Viticulture was introduced by Dutch settlers in 1653, and developed by the Huguenot refugees. In 1900 there were about 83,000,000 vines in the Cape Colony, producing nearly 5,000,000 gallons of wine and over 1,100,000 gallons of brandy. The climate of the south-western part of the colony is said to excel that of any other country for viticulture. Tobacco is extensively grown in certain districts. The climate of the colony is favourable to the growth of fruit in great variety.

Woollen fabrics, leather, furniture, and soap are produced. Fishing is carried on in all the bays which indent the coast. Guano deposits are found on the small islands along the west coast. The diamond-fields of Kimberley, and its huge mines, have (since 1867) become the most important centre of the industry in the world. The finest South African diamond is the 'Porter-Rhodes diamond,' found in 1880, and valued at £60,000. Diamonds are far the largest single item of export from the colony, having nearly three times the value of the wool exported. Gold is found in various districts. Copper is found throughout the district of Namaqualand. Coal is at present worked only in two or three spots. Iron ores are abundant in several places; and lead, zincblende, manganese, as well as valuable stones, such as garnets, agates, crocidolites, jaspers, chalcedonies, amethysts, &c., are found, as well as fine marbles and granite.

From 1887 to 1902 the revenue of the colony rose from £3,352,000 to £11,285,697; the expenditure from £3,333,000 to £11,950,745. The public debt in 1903 was over £36,970,000. In the same years the imports varied in value from £5,771,000 to £34,220,500; the exports, of which the principal items were diamonds and wool, with hides, ostrich-feathers, angora goats' hair, copper ore, and wine, rose in value from £7,719,000 to £17,456,151. The total value of diamonds exported from 1867 to 1902 was £105,804,863.

The colonial government consists of a governor, nominated by the crown, whose term of office usually extends to six years. He is assisted by an executive council, practically the ministry. There are five offices in the Cape ministry—the colonial secretary, the treasurer of the colony, the attorney-general, the commissioner of crown-lands and public works, and the secretary for native affairs. The Lower House, or House of Assembly, at the Cape, consists of ninety-five members. The Upper House, or Legislative Council, consists of twenty-three members. The House of Assembly is purely elective; in the Upper House the single exception is the chairman or president of the council, who is the chief-justice of the colony, *ex officio*. Members of both Houses receive a guinea a day while the House is sitting, and, if residing over 15 miles from Capetown, 15s. per day for not more than 90 days. The Cape Colony is divided into eighty-one divisions or counties, in each of which there is a divisional council elected every three years, which is empowered to levy rates and manage the business of the division. The chairman is the civil commissioner of the division, who is usually also the resident magistrate. The large towns are under mayors and town councils; smaller towns have municipal councils; and villages have management boards. There is an appeal from the colonial courts of justice to the House of Lords. Education is provided for by 2438 state-aided schools, the enrolled pupils numbering over 150,000, besides many private and mission schools. The University of the Cape of Good Hope was founded in 1873, and received a royal charter in 1877.

The Cape of Good Hope was discovered by the Portuguese navigator Bartholomew Diaz in 1486. It was not till 1652 that the Dutch East India Company took possession of Table Bay and fortified it, not at first with purposes of colonisation, but for the supply of the Company's vessels on their way to and from the East Indies. Colonisation soon began; and when in the 18th-century wars the French conquered Holland, an English fleet was sent to hold the Cape for the allies. It was restored to Holland at the peace of Amiens in 1801, but was retaken by Britain in 1805, after some fighting. Since 1814 it has been definitively British. In 1825 an executive council, and in 1835 a legislative council, were established; in 1853 a regular colonial parliament came into being. Responsible government was conceded in 1872; and the chief difficulties of the Cape government have been, besides Kaffir wars, the harmonising of the interests of Dutch and British elements, especially before, during, and after the Transvaal war of 1899–1902.

See Theal's *History of South Africa* (5 vols. 4th ed. 1899); and books by Froude (1880), Anthony Trollope (1878), Mackenzie (1887), Keane (1895), Mockler-Ferryman (1898), Worsfold (1898), Younghusband (1898), Lucas (1899), Johnston (1899), and Burton (1902).

Cape Haytiën, or LE CAP, a seaport on the north coast of Hayti, 90 miles N. of Port au Prince. Pop. 30,000.

Cape Horn, &c. See HORN (CAPE), &c.

Cape of Good Hope, popularly regarded as the most southerly promontory of Africa, though it is half a degree N. of Cape Agulhas. This celebrated promontory is in 34° 22′ S. lat., and 18° 29′ E. long., being the termination of Table Mountain (3582 feet). On the north it forms Table Bay; on the west it shuts in False Bay and Simon's Bay. 'The Cape' was actually reached and doubled by the Portuguese Diaz, driven out of his reckoning by tempests, in 1486—six years before Columbus saw America. The cape Diaz had from his experiences on the voyage named 'Cape of all the Storms' John II. of Portugal renamed *Cabo de Buena Esperanza* ('Cape of Good Hope'). But it was only in 1497 that Vasco da Gama took advantage of the discovery, rounding the Cape on his adventurous voyage from Lisbon to Calicut.

Cape River, or RIO DE SEGOVIA, a river of Nicaragua, flowing nearly 300 miles north-eastward to the Caribbean Sea, and forming part of the boundary with Honduras.

Capernaüm ('village of Nahum'), a prosperous place in the time of Christ, identified generally with Tell Hum, on the NW. coast of the Sea of Galilee, but by Conder with Khan Minieh, in the NE. corner of the plain of Gennesaret.

Capetown, the capital of Cape Colony, is situated between the north base of Table Mountain and Table Bay, in 33° 55′ S. lat., 18° 28′ E. long. The view of the town, alike from the bay and from the mountain, is most imposing. For years the early history of Capetown and of the Cape Colony were one and the same. The town was laid out by its Dutch founders (1652) with mathematical preciseness—the main thoroughfares crossing one another at right angles. The houses of old Capetown are mostly flat-roofed and whitewashed. A few church towers rise here and there, and break the monotony, with an occasional mill chimney. The beautiful government gardens in the heart of Capetown serve the purposes of a public park. There is a fine oak avenue, extending ¾ mile through the gardens. Government House, on the left side of the gardens, is a heavy 17th-century building, altered and added to from time to time. The gardens are 14 acres in extent, and contain upwards of 8000 varieties of trees and plants. Other edifices are the handsome Houses of Parliament (1885), the public library and museum, the Fine Arts Gallery, the law courts, the government offices, the old castle, the town-house, the Standard Bank, the railway station, and the Commercial Exchange. The old 'stoeps,' or railed-off verandas, which blocked the side pavements, disappeared with the 19th century. The town is well drained and paved, has a good water-supply, electric tramways, and a suburban railway. The earliest conception of the Europeans in settling at the Cape was to make it a place of call for passing vessels belonging to their own nation. In a higher sense, the Capetown Harbour Board, in erecting the breakwater and constructing the docks, have made Table Bay a place of call for passing vessels of all nations. The docks were opened in 1870—the graving-dock in 1882; the total cost of the works exceeding £2,000,000. Pop. (1875) 33,239, or with suburbs, 45,240; (1902) estimated at 167,000.

Cape Verd, the most westerly headland in Africa, between the rivers Gambia and Senegal, in 14° 53′ N. lat., 17° 34′ W. long. The Portuguese discovered it in 1443.

Cape Verd Islands (*Ilhas do Cabo Verde*), a group of Portuguese islands, lying 350 miles W. of Cape Verd. They comprise ten inhabited islands, the chief being Santiago, São Antão, Fogo, Brava, and São Nicolão. Their total area is about 1480 sq. m.; and since 1820 the population has increased from less than 50,000 to about 150,000. The islands are all very mountainous, and owe their origin to the action of submarine volcanoes. The highest peak (9157 feet) in Fogo was active so recently as 1847. The climate is unhealthy during the rainy season (August to October), and long droughts have given rise to great famines, as in 1730–33 and 1831–33, which latter cost 30,500 lives. Though water is deficient, vegetation is luxuriant, yielding African and Southern European products. Sugar, manioc, yams, maize, coffee, tobacco, and indigo are grown; the woods have of late years begun to increase; and cattle-breeding is an important industry. Turtles are abundant in the surrounding seas; amber and archil are found on the coasts; and much salt is still procured from the lagoons. The inhabitants, who are mostly negroes and mulattoes, indolent but harmless, speak a bastard Portuguese. They are all Catholics. Porto Grande, in São Vicente, is an important coaling station for British steamers. The islands were discovered in 1441–56 by the Portuguese. Slavery was abolished between 1854 and 1878. See Darwin's *Volcanic Islands* (1844), and Ellis's *West African Islands* (1885).

Cape Wrath (said to be from Scand. *hvarf*, 'turning'), a grand pyramidal promontory of granite gneiss, forming the north-west extremity of Scotland and of Sutherland, 69 miles NW. of Lairg. It is 523 feet high, and on it is a lighthouse (1828), seen 27 miles off.

Capheaton, Northumberland, the seat of the Swinburnes, 11 miles WSW. of Morpeth.

Capo d'Istria, a fortified seaport of Austria, on a rocky island in the Gulf of Trieste, 9½ miles SSW. of Trieste. Connected with the mainland by a stone causeway, nearly half a mile long, it has a modern cathedral, and a Gothic townhall on the site of a Roman temple. Pop. 8646.

Cappadocia, an ancient district, in its widest sense including the whole north-eastern part of Asia Minor from Mount Taurus to the Euxine.

Cappamore, a village in the county, and 12 miles SE. of the town, of Limerick. Pop. 766.

Cappel, a village in the Swiss canton of Zurich, 4½ miles N. of Zug. Here Zwingli was killed in conflict with the Catholics, 11th October 1531.

Cappoquin, a town of County Waterford, on the Blackwater, 151 miles SSW. of Dublin. Pop. 1366.

Caprera (*Ka-pray'ra*), one of the small Buccinari Islands, in the Strait of Bonifacio, off the northern extremity of Sardinia. Measuring 6 by 2 miles, and 10½ sq. m. in area, it is rocky and bare, and was formerly the abode only of wild goats—whence its name (Lat. and Ital. *capra*, 'a goat')—and rabbits. It was the much-loved home of Garibaldi from 1854 till his death here in 1882. He was buried behind his house. In 1885 the island was purchased from his heirs by the Italian government.

Capri (*Kah'pree*; anc. *Capreæ*), a charming Mediterranean island, at the entrance of the Bay of Naples, 3¾ miles from Cape Campanella, and 21 S. of Naples. Only 3¾ sq. m. in area, it yet displays a rich variety of beautiful scenery, and consists of two mountain masses 1918 and 860 feet high.

On a shelving rock at the base of the eastern and lower mountain stands the town of Capri, with walls, gates, and drawbridges, and a pop. of 1627. Till 1876 it communicated with Anacapri, on the western tableland, by a rock-hewn flight of 536 steps; now, however, there is a carriage-road between the two places. The coast is precipitous, with only two safe landing-places, both near Capri. The island was the scene of the last infamous debaucheries of the Emperor Tiberius. Ruins are still found of Roman baths, aqueducts, and villas. The wine of Capri, both red and white, is well known; and delicious quails, alighting on the island during their migrations to and from Africa, are taken in nets. To the west of the town of Capri is the *Grotta Azzurra* (Blue Grotto), a remarkable cavern, 118 feet long, 98 wide, and 40 high, but entered from the sea by a narrow opening not more than 3 feet high. See Gregorovius, *Island of Capri* (trans. Boston 1879); Alan Walters, *A Lotos-Eater in Capri* (1893).

Capua, a fortified city of Italy, on the Volturno, 27 miles N. of Naples by rail. It has a fine cathedral, an antiquarian museum (1874), and a tower commemorating the sanguinary storming of the city by Cæsar Borgia in 1501. Pop. 14,291.—The ancient *Capua*, which for wealth and population ranked second only to Rome and Carthage, and in which Hannibal's men became enervated (216 B.C.), was situated 3½ miles SE. of the present city, its site being occupied by the modern town of Santa Maria di Capua Vetere. It was finally destroyed by the Saracens in 840. Among its Roman antiquities is a well-preserved amphitheatre, capable of holding 60,000 spectators.

Carabo'bo, a state of Venezuela, between the Caribbean Sea and the state of Zamora. Area, 3000 sq. m.; pop. about 200,000. The capital is Valencia; and the chief port, Puerto Cabello.

Carácas, the capital of the republic of Venezuela, is situated in 10° 31′ N. lat., and 67° 5′ W. long., 6 miles (24 by rail) S. of La Guaira, its port. Built on the southern slope of the Avila (8635 feet), it is 3025 feet above sea-level, is regularly laid out, and well supplied with parks and gardens, water and gas, telephones, newspapers, tramways, and railways. The most notable edifices are the Federal Palaces and other official buildings, including the president's 'Yellow House;' the university; the Exhibition Palace; the cathedral; the magnificent basilica of St Ann (£200,000); and over a score of hospitals and charitable institutions. Population, 75,000. The neighbourhood is subject to earthquakes; in that of 1812, 12,000 citizens perished.

Caramania, a name sometimes given to part of the central tableland of Asia Minor, from the town of Karaman (pop. 7000), lying at the northern base of Mount Taurus. It is mostly in the province of Konieh.

Caravaca, a town of Spain, 40 miles NNW. of Murcia. Pop. 15,994.

Caravaggio (*Karavad'jo*), a town of north Italy, 19 miles SSE. of Bergamo by rail. It has a famous church, to which pilgrimages are made, and was the birthplace of three painters, all surnamed Caravaggio. Pop. 6089.

Caravellas, a Brazilian port, 475 miles NE. of Rio de Janeiro, on the Caravellas, 5 miles from its mouth. Pop. 4000.

Carberry, a hill 3 miles SE. of Musselburgh, where Queen Mary surrendered (1567).

Carbondale, a town of Pennsylvania, on the Lackawanna River, 16 miles NNE. of Scranton by rail, with foundries and planing-mills, and rich beds of anthracite coal. Pop. (1880) 7714; (1900) 13,536.

Carcagen'te, a town of Spain, on the Jucar, 25 miles SSW. of Valencia by rail. Pop. 12,521.

Carcassonne (the *Carcaso* of Cæsar), a town in the French dep. of Aude, on the river Aude, and the Canal du Midi, 56 miles SE. of Toulouse by rail. The river, here spanned by two bridges of 1184 and 1846 feet, divides it into the old and the new town; the former, built on a height, is much more picturesque, its ramparts and towers dating partly from the time of the Visigoths, and partly, like the many-towered castle, from the 11th or 13th century. In 1210 this old town suffered greatly at the hands of Simon de Montfort, who here burned 400 Albigenses. In 1356 it effectually resisted the Black Prince. Cloth-making is the staple industry; there are also manufactures of paper, leather, and soap. Pop. (1872) 20,808; (1901) 28,351. See works by Viollet le Duc (1858) and Boyer (1884).

Car'chemish (mod. *Jerablûs*), an ancient city on the Upper Euphrates, NE. of the modern Aleppo, was long the northern capital of the Hittites.

Car'denas, a seaport of Cuba, on the north coast, 75 miles E. of Havana, with which it is connected by rail. Pop. 22,000.

Cardiff (*Caer-Taff*, 'fort of the Taff'), a municipal, parliamentary, and county borough and seaport, the county town of Glamorganshire, South Wales, on the river Taff, a new bridge over which was opened in 1890 by the Duke of Clarence, 56 miles SW. of Gloucester, and 170 W. of London. Its progress in recent years is the most remarkable, the population rising from 2000 in 1801 to 10,077 in 1841, 82,761 in 1881, and 164,420 in 1901. Since 1905 the mayor is called Lord Mayor. An ancient municipal borough, with Cowbridge and Llantrissant, it returns one member to parliament. Among the public buildings are the infirmary, town-hall, free library and museum, jail, law-courts, county buildings, the university college for South Wales (1883), the Roman Catholic pro-Cathedral, baths, a theatre, and numerous halls. There is a public park.

The port of Cardiff is the outlet for the large mineral and manufactured produce of the central portion of the South Wales mineral-field, in which are the populous districts of Merthyr-Tydvil, Rhymney, Aberdare, and the Rhondda Valley. The town is also one of the chief stations on the Great Western line from London to Milford-Haven. The Bute Docks, with an area of 150 acres, constructed at the expense of the Bute estate, have cost nearly four millions sterling, and belong to the Marquis of Bute. There is also a tidal harbour, with a low-water pier 1400 feet in length. The imports to Cardiff include copper ore, live cattle, salted provisions, foreign fruit and vegetables, corn and flour, &c. The Penarth Docks, about one mile to the westward, form another outlet for the trade of the district. The Barry Dock (1888), of nearly 80 acres, adds enormously to the shipping facilities of Cardiff. Steamers ply between the port of Cardiff and New York, London, Liverpool, Glasgow, Bristol, Cork, Whitehaven, and Burnham. The growth of Cardiff began with the opening of the canal from Merthyr-Tydvil to the sea (1794); the first dock was opened only in 1839; the second or East dock dates from 1854. The corporation, which has spent £500,000 in improving the

streets, in 1879 acquired the water-works, and in 1888 secured a new supply from the Brecknockshire Beacons, at a cost of nearly £600,000.

The ancient city of Llandaff (q.v.), now a mere village, is almost connected with Cardiff. Cardiff Castle (1110) is partly now in ruins, and partly occupied by the Marquis of Bute, who has spent large sums in rebuilding it, and to whom nearly the whole of the modern town belongs. Robert, Duke of Normandy, died in the castle, after twenty-eight years' captivity; and Cromwell (1648) got possession of it through treachery.

Cardigan (anc. *Aberteifi;* then *Ceredigion*—pron. *Ker-e-dee'gi-on, g* hard), a county town, municipal borough, and seaport on the Teifi, 3 miles from its mouth, and 117 miles NW. of Cardiff by rail. Pop. (1851) 3876; (1901) 3511. With Aberystwith, &c., it till 1885 returned one member to parliament. Remains of a castle (1160) crown a low cliff on the Teifi. The town suffered much in the struggles between the Welsh and the Normans. The Teifi is said to have been the last British resort of the beaver.

Cardigan Bay, a semicircular bend of St George's Channel, on the west coast of Wales, 54 miles wide from north to south, and 35 miles deep, with a sweep of coast of 130 miles. It has 3 to 30 fathoms water, with three reefs.

Cardiganshire, a maritime county in South Wales, on Cardigan Bay, with a crescent-shaped coast-line of 48 miles, a maximum width of 32 miles, and an area of 693 sq. m. On the Montgomeryshire border is Plinlimmon (2469 feet); and a rugged, bleak range of hills runs through the middle of the county from the south-west to the north-east, between the coast and the Teifi; but on other parts there are rich flat tracts. The chief rivers are the Teifi, Aeron, Claerwen, Ystwith, and Rheidol. The 'sweet shire of Cardigan' contains some romantic waterfalls, especially the Rheidol Falls and the Devil's Bridge, and above twenty small lakes or llyns, noted for their wild beauty. Rich veins of copper, lead, zinc, and silver occur. Cardiganshire is an agricultural county, 62 per cent. of its total area being cultivated; and the rearing of live-stock is a leading industry. There are some manufactures of coarse woollens and gloves, stockings and hats. Cardigan is the county town; other towns being Aberystwith, Lampeter, Adpar, Aberayron, Tregaron. Cardiganshire returns one member. Pop. (1801) 42,956; (1841) 68,766; (1861) 72,245; (1901) 60,237. The antiquities include many prehistoric, British, and Roman remains, and the ruined abbey of Strata Florida (1164), 16 miles SE. of Aberystwith. The women still wear the Welsh costume. In 1843–44 Cardiganshire was disturbed by the Rebecca riots. See Meyrick's *History of Cardiganshire* (1810).

Cardona, a town of Spain, 44 miles NW. of Barcelona, on the Cardoner, and close to a celebrated mountain of salt. Pop. 4691.

Cardross, a village of Dumbartonshire, on the Firth of Clyde, 3½ miles WNW. of Dumbarton. Bruce died at Cardross Castle (1329), which stood between the village and Dumbarton. Pop. 651.

Carelia. See Karelia.

Carhan House. See Cahirsiveen.

Caribbean Sea, lying between the Antilles and the South and Central American mainland, and communicating with the Gulf of Mexico by the Yucatan Channel, 120 miles wide.

Cariboo, a district and gold-field in British Columbia, in the great bend of the Fraser River.

Carignano (*Karinyah'no*), a town of Piedmont, on the Po, 11 miles S. of Turin. Pop. 4270.

Carimat'a, a name applied to the strait between Borneo and Billiton; also to a cluster of a hundred islets and reefs (area, 57 sq. m.; pop. 500) in that strait; and lastly, to the principal member of the group (highest point 2600 feet high).

Carini (*Karee'nee*), a town of Sicily, 12 miles W. by N. of Palermo. Pop. 11,667.

Carinthia (Ger. *Kärnthen*), a crown-land of the Austrian empire, forming part of the old kingdom of Illyria, with an area of 4005 sq. m., and a pop. of (1869) 337,694; (1900) 367,344. The principal river is the Drave; and the loftiest point is the Grossglockner (12,450 feet), the general aspect of the country being mountainous. Only 15 per cent. of the area is devoted to tillage. Horses and cattle are reared and exported. The principal products are mineral. Klagenfurt is the capital of Carinthia, which came into the possession of Austria in 1335. Only 30 per cent. of the population are Slavs (Slovenians), the remainder being Germans; and but 5 per cent. are Protestants.

Carisbrooke, a village in the Isle of Wight, 1 mile SW. of Newport. In its ruined castle Charles I. was imprisoned (1647–48), as were also his children Prince Henry and the Princess Elizabeth, the latter of whom died here. From the castle well, 200 feet deep, the water is drawn by a donkey inside a wheel.

Carlaverock. See Caerlaverock.

Carlingford, a seaport of County Louth, 69 miles N. of Dublin. Close by rises Carlingford Mountain (1935 feet). Carlingford Lough is 10 miles long, and 2 wide. Pop. 600.

Carlisle, the county town of Cumberland, stands on a gentle eminence in a wide-spreading plain, at the influx of the Caldew and Petteril to the Eden—three streams that nearly encircle it. It is 299 miles NNW. of London, 101 miles S. of Edinburgh, 22½ E. by N. of its seaport, Silloth, and 66 W. by S. of Newcastle. In spite of its hoar antiquity, 'merry' Carlisle as a whole is disappointingly modern, its gates having vanished, and almost the whole of the walls. The castle was founded in 1092, and now serves as a barrack. The remains of its Norman keep form a massive tower; but the part in which Mary, Queen of Scots, was imprisoned (1568) was demolished in 1835. The cathedral, ranging in date between 1092 and 1419, comprises every variety of style from Norman to Perpendicular. The fragment of the Norman nave, long used as a parish church, is cut off from the choir, which, mainly Decorated in style, is one of the finest choirs in England, the exquisite tracery of its nine-light east window being of matchless beauty. There are monuments and other memorials to Paley, Dean Close, and Archbishop Tait's five children; and in Carlisle Cathedral Scott married Miss Carpenter (1797). The Eden, which has salmon fisheries, is crossed by a handsome five-arch bridge (1851). The manufactures include cotton, calico, hats, iron, and fancy biscuits; but the prosperity of the place mainly depends on its being a great railway centre. An ancient municipal borough, Carlisle since 1885 has returned only one member. Pop. (1801) 10,221; (1851) 26,310; (1901) 45,478. The *Luguvallum* of the Romans, and *Caer-Luel* (hence *Carlisle*) of the Britons, the town was destroyed by the Danes in 875, and restored by William Rufus in 1092.

From its position as a Border fortress, it has a wealth of martial memories—none more famous than the rescue of 'Kinmont Willie' by Buccleuch from Carlisle Castle in 1596. During the Great Rebellion it twice surrendered to the Parliamentarians (1645–48); and in the '45 it was held by the Jacobites, thirty-one of whom were afterwards executed on Harraby Hill. See works by M. Creighton (1889) and R. S. Ferguson (1890).

Carlisle, capital of Cumberland county, Pennsylvania, 19 miles WSW. of Harrisburg by rail. It is the seat of Dickinson College (Methodist), and has United States barracks, machine-shops, a foundry, and manufactures of railway cars, carpets, window sashes, carriages, and shoes. It was shelled by the Confederates, July 1, 1863. Pop. 9620.

Carlo'vitz (in England, however, usually *Carlovitz*), a town of the Austrian empire, in Slavonia, on the right bank of the Danube, 30 miles NW. of Belgrade. It has a Greek cathedral, and is noted for its red wine. Pop. 4916.

Carlow, a small inland county of Leinster, Ireland, with an area of 346 sq. m. Except for Mount Leinster (2610 feet), on the south-east border, it is a triangular fertile level, or gently undulating plain, between the Wicklow and Wexford range of hills on the east, and the highlands beyond the Barrow on the west. The chief rivers are the Barrow and Slaney. On the west side of the county begins the great coal district of Leinster. Barely one-third of the entire area is under oats, wheat, potatoes, and other crops. There are many dairies on the plains. Along the Barrow, which falls more than a foot per mile, are many large corn-mills. Pop. (1841) 86,228; (1871) 51,472; (1901) 37,748, of whom 36,139 were Catholics. Since 1885 the county has returned but one member to parliament. The chief towns are Carlow, Bagenalstown, and Tullow.

CARLOW, the county town, stands at the influx of the Burren to the Barrow, 56 miles SW. of Dublin by rail. It has a Catholic cathedral, remains of De Lacy's castle (1180), the county court-house, extensive flour-mills, and is the emporium for the agricultural produce of the district. Till 1885 it returned a member. Pop. (1851) 9121; (1901) 6513.

Carlsbad, a town in Bohemia, on the Tepl, near its influx to the Eger, 116 miles W. by N. of Prague by rail. It is widely celebrated for its hot mineral springs (117° to 167° F.), and is frequented during the season (April to October) by 30,000 visitors from all parts of Europe, many of high social standing. Set in most lovely scenery, the town is well built, and appears to stand on a vast caldron of boiling water, which is kept from bursting only by the safety-valves the springs provide. Joseph I. made Carlsbad a free town. Pop. 14,579. See works by Kraus (Lond. new ed. 1888) and Merrylees (1886).

Carlsburg. See KARLSBURG.

Carlshamn, a fortified seaport on the south coast of Sweden, 30 miles W. of Carlskrona. Pop. 6529.

Carlskrona, the capital of a Swedish province, is built on five rocky islets in the Baltic, 240 miles (by rail 350) SSW. of Stockholm. It was founded in 1680 by Charles XI., who made it the great naval station of Sweden, instead of Stockholm. It has a magnificent harbour. Pop. (1875) 16,877; (1900) 23,955.

Carlsruhe (*Karls-roo'eh*), cap. of Baden, is 5 m. E. of the Rhine, and 39 WNW. of Stuttgart, 34 SSW. of Heidelberg. Founded in 1715, and built in the form of a fan, with thirty-two streets radiating from the palace, it has many fine buildings—the palace itself (1776), parliament-house (1845), theatre (1853), town-hall (1821), and museum (1852), with the ducal library of 150,000 vols. Before the palace stands a bronze statue of the city's founder, the Margrave Charles William; and in the market-place is a stone pyramid enclosing his remains. The manufactures include engines, railway carriages, jewellery, carpets, chemicals, and cloth. Pop. (1875) 42,895; (1900) 97,164.

Carlstad, a Swedish town on the Tingvalla island, near the east shore of Lake Wener, 205 miles WSW. of Stockholm by rail. Greatly improved since the fire of 1865, it has a cathedral and two bridges connecting it with the mainland. Pop. 12,000.

Carlstadt, a fortified town of Croatia, Austro-Hungary, 32 miles SW. of Agram by rail. Pop. 7824.—CARLSTADT, in Bavaria, on the Maine, 15 miles NNW. of Würzburg. Pop. 3320.

Carlton, a town of Notts, 3½ miles ENE. of Nottingham. Pop. (1861) 2559; (1901) 10,041.

Carluke, a mining town of Lanarkshire, 2¼ miles E. of the Clyde, and 19½ SE. of Glasgow by rail. General Roy, the antiquary, was a native. Pop. 4716.

Carmagnola, a town of North Italy, 18 miles S. of Turin by rail. Pop. 3730.

Carmania, the old name of Kerman (q.v.).

Carmarthen (Welsh *Caer Fyrddyn*, the *Maridunum* of Ptolemy), the capital of Carmarthenshire, on the navigable Towy, 9 miles from Carmarthen Bay, and 39 NW. of Swansea. Steele is buried in the old parish church; a ruined castle of the Welsh princes was in 1787 incorporated in a new county jail; and Generals Picton and Nott, both natives, are commemorated by an obelisk and a bronze statue. Near the town are tin and iron works; and Carmarthen exports tinplates, slates, domestic produce, &c. It unites with Llanelly in returning one member. Pop. (1851) 10,524; (1901) 10,025.

Carmarthenshire, a maritime county of South Wales, washed on the south by Carmarthen Bay, a semicircular inlet of the Bristol Channel, and bounded on the other sides by Pembroke, Cardigan, Brecknock, and Glamorgan shires. The largest of all the Welsh counties, it has a maximum length and breadth of 45½ and 26 miles, and an area of 947 sq. m., of which 70·8 per cent. is under cultivation. The county is mountainous in the north and east, Carmarthen Van or Beacon (2596 feet) being the highest summit. The coast is marshy; the chief river is the Towy, which has a course of 65 miles, five-sixths in Carmarthenshire, and yields plenty of salmon, trout, eels, and lamprey. On this river is the celebrated vale of the Towy, 30 miles long, with an average breadth of 2 miles. The mineral productions of the county are iron, coal, copper, lead, slates, lime, dark-blue marble. These, with tinned iron, grain, cattle, horses, sheep, and butter, are exported. The principal towns are Carmarthen, Llanelly, Llandilo-vawr, Llandovery, and Newcastle-Emlyn. The chief manufactures are woollens and leather. Pop. (1801) 67,317; (1841) 106,326; (1901) 135,328, largely Welsh-speaking. Carmarthenshire returns two members. It was the birthplace of the 'Rebecca' Riots (1843–44) against turnpike-gates.

Carmaux, a French town and great coal-mining centre in the department of Tarn, 10 miles N. of Albi. Pop. (1901) 10,950. There have been great strikes here.

Carmel (*Mar Elyas*, 'Saint Elijah'), a richly wooded limestone-ridge (1887 feet) which runs from SE. to NW. for 14 miles, forming the only great promontory on the low coast of Palestine.

Carmo'na, an ancient town of Andalusia, Spain, 27 miles ENE. of Seville by rail. Pop. 18,861.

Carnac, a village in the French dep. of Morbihan, 20 miles SE. of Lorient. It is remarkable for the number and variety of the Celtic monuments and Gallo-Roman ruins, consisting of menhirs, dolmens, and tumuli, with which the neighbourhood is studded. The principal group of menhirs is situated on a sterile moor near the seashore, and consists of 1000 or more rude monoliths of granite, rising, many of them, to a height of 18 feet, though a large proportion do not exceed 3 feet. They are arranged in eleven roughly parallel rows, with two slight breaks, extend from east to west about 1¼ mile in length, and have at one end a curved row of 18 stones, the extremities of which touch the outer horizontal rows. See Miln's *Excavations at Carnac* (2 vols. 1877–81).

Carnarvon (*Caer-yn-ar-Fon*, 'fort opposite Mon, or Anglesey'), the capital of Carnarvonshire, stands near the south end of the Menai Strait, on the right bank of the Seiont, 69 miles W. of Chester. Carnarvon Castle, the building of which was commenced by Edward I. in 1283, is one of the noblest ruins in the kingdom, the walls, 7 to 9 feet thick, being still entire, and enclosing an oblong of three acres. The gateway under the great square tower has four portcullises. The city walls, with several of the gates, still exist, but are now within the town. A municipal borough, Carnarvon unites with Pwllheli, Nevin, Criccieth, Conway, and Bangor to return one member to parliament. The harbour admits ships of 400 tons. The chief exports are slates, stones, and ores. There are also iron and brass foundries. Carnarvon is a bathing-place, and is much frequented by tourists. Pop. (1851) 8674; (1901) 9760. Half a mile from Carnarvon are the remains, covering seven acres, of Segontium, or Caer Seiont, a Roman station or city. There is a Roman fort on the left bank of the Seiont, still almost complete, with walls 11 feet high and 6 feet thick. Carnarvon was the seat of the native princes of North Wales down to 873. In 1284 was born here the first Anglo-Norman Prince of Wales, afterwards the unhappy Edward II.

Carnarvonshire, a maritime county of North Wales, bounded E. and SE. by Denbigh and Merioneth shires, and on all other sides by the Irish Sea and the Menai Strait. With a maximum length and breadth of 34 and 23 miles, it has an area of 379 sq. m., of which 50·7 per cent. is under cultivation. The surface is grandly mountainous, attaining a maximum altitude in Snowdon (3571 feet), in the centre of the county, the loftiest summit south of the Scottish Border. Carnarvon Bay is 34 miles across, and 16 deep; it communicates with the Irish Sea through the Menai Strait, which is 14 miles long, and 200 yards to 2 miles broad. The rivers of Carnarvon are numerous, but small. The chief is the Conway, which is navigable for 10 miles, and runs along the east border. Almost all the streams flow through small lakes or tarns—of which there are 50 or 60 in the county—around the central or Snowdon group of mountains. There are many fine cataracts on these streams. The mineral products include copper, lead, zinc, coal, roofing and writing slates; the Penrhyn slate-quarries employing many thousands of workmen. The chief towns are Carnarvon, Bangor, Pwllheli, Conway, Nevin, and Criccieth; besides which boroughs, several flourishing towns and tourist centres have come into prominence—Llandudno, Tremadoc, Bethesda, Bettws-y-Coed, Llanberis, and Beddgelert. The county returns two members. Pop. (1801) 41,521; (1881) 119,349; (1891) 118,204; (1901) 126,883.

Carnat'ic, a region extending 600 miles along the east or Coromandel coast of India, now included in the province of Madras.

Carndonagh (*Karndo'na*), a town of Donegal, 20 miles N. of Londonderry. Pop. 765.

Carniola (Ger. *Krain*), a south-west crownland of the Austrian empire, united thereto since, has an area of 3856 sq. m., and a pop. of 510,000, of whom 35,000 are Germans and 18,000 Croats, the rest being Slavs of the Slovenian branch. It is traversed in the north by a continuation of the Carinthian Alps, and in the south by the Julian Alps, the loftiest summit being the Terglou (9393 feet), between the two sources of the Save, which is the principal river. The chief minerals are iron, quicksilver, and brown coal; the quicksilver mines of Idria are, next to Almaden, the most important in Europe. Laibach is the capital.

Carnlough, an Antrim fishing-village, 6 miles SE. of Cushendall Station. Pop. 592.

Carnoustie (*Karnoos'tie*), a coast-town of Forfarshire, 11 miles ENE. of Dundee. It has fine golf-links. Pop. 5204.

Carolina. See North and South Carolina.

Caroline Islands, a group in the Western Pacific, lying between the Marshall and Pelew islands, with an area of about 270 sq. m., and a pop. of some 36,000; but the Pelew (q.v.) group is generally included in the Caroline Archipelago (area, 560 sq. m.; pop. 36,000), which thus stretches across 32 degrees of longitude and 9 of latitude. There are some 500 small atolls in the archipelago, but three-fourths of both area and population are included in the five volcanic islands of Babelthouap, Yap, Rouk, Ponapé (Ascension), and Kusari (Strong Island). The climate is moist, but not unhealthy, and is tempered by cooling breezes. The people are strongly built, gentle, amiable, and intelligent; they are bold sailors, and carry on a brisk trade with the Ladrones to the north, where they have several settlements. Copra is largely exported. The islands were discovered in 1527 by the Portuguese, and called Sequeira; in 1686 they were annexed and rechristened in honour of Charles II. by the Spaniards, who, however, shortly changed the name to New Philippines. In 1885 the hoisting of the German flag on Yap gave rise to a sharp dispute with Spain, which was submitted to the arbitration of the pope, who decided in favour of Spain. But in 1899 the islands were ceded to Germany, Spain retaining a coaling-station.—A British Caroline island near the Marquesas is only 2 sq. m. in area.

Carouge (*Karoozh'*), a Swiss town 1¾ mile S. of the city of Geneva. Pop. 5889.

Carpathian Mountains, an Austro-Hungarian range, the second great range of Central Europe, extend 880 miles in a great semicircle from Presburg on the Danube to Orsova on the same river. Negoi, the culminating peak, has an eleva-

tion of 8517 feet. The range is generally clothed with wood to a height of more than 4000 feet, and with steep precipices, narrow ravines, extinct craters, and cones of volcanic origin, exhibits scenes of grandeur rarely exceeded. See works by Crosse (1878) and Muriel Dowie (1891).

Carpentaria, Gulf of, a great indentation of the north coast of Australia, said to derive its name from the river Carpentier, so named by Carstensz in 1623, in honour of Pieter Carpentier, governor-general of the Dutch Indies. It contains many islands. To the east (where it is bounded by Cape York Peninsula), south, and west are Queensland and the northern territory of South Australia. On the east it receives the Mitchell and Van Diemen rivers; at the south the Flinders, Leichhardt, and Albert; and on the west the Roper.

Carpentras (*Karpon^{g}trass'*), a town in the French dep. of Vaucluse, on the Auzon, 17 miles NE. of Avignon by rail. It has a Roman triumphal arch, a cathedral (1405), the stately Porte d'Orange of the 14th century, a massive aqueduct (1734), and manufactures of cottons, woollens, &c. It was the ancient *Carpentoracte*. Pop. 7794.

Carpi (*Kar'pee*), (1) a cathedral city of north Italy, 10 miles N. of Modena by rail. Pop. 5987. —(2) A village 28 miles SE. of Verona, where Prince Eugene defeated the French in 1701.

Carrara (*Kar-râh'ra*), a town of north Italy, on the Avenza, near its mouth in the Mediterranean, 30 miles NW. of Leghorn by rail. It is surrounded by the marble hills (part of the Apennine system) in which are some 400 marble-quarries, though very few furnish the marble used for statuary. Pop. 26,300. See the *Century Magazine* for 1882.

Carrick, the southern division of Ayrshire (q.v.). The Prince of Wales is Earl of Carrick.

Carrickfergus, a seaport on the north side of Belfast Lough, and the south-east border of County Antrim, 9½ miles N. of Belfast, and 12 miles S. of Larne by rail. Its picturesque castle-keep (90 feet), supposed to have been erected by De Courcy in the 12th century, stands on a headland 30 feet high. But one gateway now remains of the ancient city walls. Here William III. landed before the battle of the Boyne, and here Thurot made an abortive landing in 1760. Flax-spinning is carried on, and there is an oyster-fishery. Till 1885 Carrickfergus was a parliamentary borough. Pop. (1851) 8488; (1901) 4208.

Carrickmacross, a Monaghan market-town, 51 miles NW. of Dublin. Pop. 1879.

Carrick-on-Shannon, the capital of County Leitrim, on the Shannon, 98 miles NW. of Dublin by rail. Pop. 1177.

Carrick-on-Suir (*Shure*), a town of Tipperary and Waterford counties, on the navigable Suir, 14 miles E. of Clonmel, and 149 SW. of Dublin by rail. It has woollen, linen, and flax factories, and neighbouring slate-quarries. There are remains of a castle (1309) of the Butler family, a branch of which took the titles of Viscount and Earl of Carrick. A stone bridge connects it with the suburb of Carrickbeg in County Waterford. Pop. (1851) 7512; (1901) 5406.

Carriden, a coast parish of Linlithgowshire, on the Firth of Forth, at the eastern termination of the Roman wall of Antonine.

Carrollton, since 1873 part of New Orleans.

Carron, a Stirlingshire village, on the river Carron, 2 miles NNW. of Falkirk. Its great ironworks (1760) till 1852 produced 'carronades,' &c., and now turn out stoves, grates, boilers, pipes, &c. Pop. 1942.

Carse, a Scottish term for low lands adjoining rivers, as the Carse of Gowrie, between Perth and Dundee, and the Carse of Forth, near Falkirk.

Carsebreck, the great curling centre of Scotland, 11 miles NNE. of Stirling.

Carshalton, a Surrey urban district, 3 miles W. by S. of Croydon. Pop. 6746.

Carson City, capital of Nevada state, U.S., near the foot of the Sierra Nevada, 178 miles ENE. of San Francisco. It has gold and silver mines, and a U.S. mint. Pop. 2100.

Carstairs', a village of Lanarkshire, 1 mile NW. from which is Carstairs Junction on the Caledonian Railway, 28½ miles SW. of Edinburgh, and 31 ESE. of Glasgow. Pop. of village, 508; of Junction, 905.

Cart, a Renfrewshire feeder of the Clyde, formed by the confluence of the Black Cart (9 miles) and White Cart (18½), the latter of which has been made navigable to Paisley (q.v.).

Cartagena (*Kartahay'na*), a fortified seaport of Spain, on a bay of the Mediterranean, 326 miles SE. of Madrid by rail. The hill-protected harbour is one of the best in the Mediterranean, its entrance narrow, and commanded by a fortified island on the south. Cartagena was formerly the largest naval arsenal not only in Spain but in Europe. It presents a Moorish aspect in its streets, its cathedral, and its ruined castle, and has manufactures of ropes, sailcloth, and glass, besides extensive blast-furnaces and smelting-works. Population, 86,500. Cartagena was built by Hasdrubal 242 B.C., under the name of New Carthage. It formed the headquarters of the Carthaginians in Spain, but in 210 B.C. was captured by P. Scipio, and became of importance under the Romans, who employed 40,000 men daily in the neighbouring mines. It was sacked by the Goths, and did not again attain any note until Philip II.'s reign. From July 1873 to January 1874 it was held by a communist junta.

Cartagena, capital of the Colombian state of Bolivar, stands on a sandy island, to the SW. of the mouth of the Magdalena, and communicates by four bridges with its suburb, Jetsemani, on the mainland. It has a fine cathedral, a university, and the best harbour on the coast. Its trade has greatly fallen off since the rise of Sabanilla; but much was expected from the reopening of a canal connecting it with Calamar, on the Magdalena. Founded in 1533, it was burned by Drake in 1585, but in 1741 repulsed an attack by Admiral Vernon. Pop. 20,000.

Cartago (*Kartah'go*), (1) a river and landlocked bay or lagoon, communicating with the Caribbean Sea, near the northern extremity of the Mosquito Coast.—(2) A town of Costa Rica, 12 miles E. of the present capital, San José, on a plain to the south of the constantly smoking volcano of Irazú (11,500 feet). Pop. 8000. Founded in 1522, the place had 23,000 inhabitants in 1823, and was capital of the state till 1841, when it was all but destroyed by an earthquake.—(3) A town of Cauca, in Colombia, founded in 1540, on the Rio Viejo, 3 miles above its junction with the Cauca. Pop. 9000.

Carthage was a city on the north coast of Africa, the capital of one of the great empires of the ancient world. It was situated on a peninsula at the north-east corner of the region now known as Tunis, and was founded, most probably, about the middle of the 9th century B.C., by Phœnicians.

The name Carthage is a corruption of Kirjath, the Canaanite word for a town, which occurs in Scripture in such names as Kirjath-Baal and Kirjath-Jearim. The city, called Carthāgo by the Romans, and Karchēdon by the Greeks, was known to its own inhabitants as Kirjath-Hadeshath, or the New Town, to distinguish it either from Tyre or from the earlier Phœnician colony of Utica. It was destroyed by the Romans in 146 B.C., its pop. numbering 700,000. See works by Bosworth Smith (1879) and Church (1886).

Carthage, Cape, a headland of North Africa, jutting out into the Mediterranean, in 36° 52′ N. lat., 10° 22′ E. long., with traces of the ancient city of Carthage to the north of the Tunis lagoon.

Carthagena. See Cartagena.

Cartmel, a Lancashire market-town, 6 miles E. of Ulverston. It was the seat of an Augustinian priory (1188). Pop. 1084. See *The Rural Deanery of Cartmel* (1892).

Cartworth, a town in the West Riding of Yorkshire, 6 miles S. of Huddersfield. Pop. 1838.

Carúpano (*Karoo'pano*), a seaport of Venezuela, on the north coast of the peninsula of Paria, with a lighthouse and good roadstead. Pop. 12,389.

Carvin (*Karvan'*), or Carvin-Epinay, a town in the French dep. of Pas-de-Calais, 11 miles SSW. of Lille by rail. Pop. 6905.

Casablanca (Arab. *Dar el Beïda*), a port of Morocco on the Atlantic, 162 miles SW. of Fez. Pop. 8500.

Casale (*Kasâh'leh*), a city of north Italy, on the Po, 21 miles NNW. of Alessandria by rail. It has a cathedral, the Torre del grand' Orologio, some fine palazzi, and manufactures of silk. In 1474 it became the capital of the marquisate of Montferrat. Pop. of commune, 31,800.

Casalpusterlengo (*u* as *oo*), a town of Italy, 22 miles SE. of Milan by rail. Pop. 5513.

Casamicciola (*Kasamitch'ola*), a watering-place on the island of Ischia, in a valley on the north side of Monte Epomeo, with hot springs (158° F.), baths, hotels, &c., the season extending from June to September. It suffered terribly by the earthquake of 28th July 1883. Pop. 3763.

Casa Santa. See Loretto.

Casas Grandes, an old Indian town of Mexico, 125 miles SW. of El Paso, surrounded with ruins of Aztec buildings, which seem to indicate a former population of 20,000 to 30,000.

Casbin. See Kazvin.

Cascade Range, a chain of mountains in Oregon and Washington, U.S., and in British Columbia. It takes its name from the great cascades of the river Columbia, which are situated at the point where that stream cañons through the range by a pass 4000 feet deep. The course of the mountain-chain in the United States is from north to south nearly parallel to the Pacific, and about 110 to 160 miles distant from it. Southward it is continuous with the Sierra Nevada of California; northward it connects with the range which forms the boundary between British Columbia and Alaska. The chain throughout most of its course is heavily wooded, chiefly with evergreen conifers. Mount Jefferson is 10,200 feet high, and Mount Hood 11,225 feet. The principal peaks in Washington state are Mounts Baker (10,700 feet), Mount Rainier or Tacoma (14,444 feet), and St Helen's (12,000 feet). In this region volcanic action is not quite extinct. In the British Columbian portion the range comes nearer the coast.

Caserta, a town of Italy, 20½ miles NNE. of Naples by rail. Its magnificent palace, one of the finest in Europe, was founded by Charles III. in 1752. Pop. 32,730.

Cashel, a town in County Tipperary (till 1870 a parliamentary borough), 100 miles SW. of Dublin and 5 miles SE. of its railway station. It is the see of a Protestant bishop, and of a Roman Catholic archbishop. It is irregularly built on the south and east slopes of the isolated Rock of Cashel (300 feet), rising abruptly from a rich and extensive plain. The Rock is crowned by the ruins of a cathedral (1169), a stone-roofed chapel (1127), the palace of the Munster kings, a round tower, 90 feet high and 56 in circumference; and an old cross. At Cashel in 1172 Henry II. received the homage of the king of Limerick. Pop. (1851) 4798; (1901) 2938.

Cashgar. See Kashgar.

Cashmere, or Kashmir, a native state embracing an irregular-shaped mountainous region, part of the Himalayan system, in the extreme north of India. Much of it is mere desert, but within its borders are included the valleys of many snow-fed streams. Chief among these is the beautiful valley of the Upper Jhelum at Srinagar —'the Vale of Cashmere' of Moore's *Lalla Rookh*. It extends for about 120 miles from NW. to SE., with a mean breadth of 75 miles, at a distance of 130 miles by road from Rawal Pindi, in the Punjab. The flat part of the valley is not more than 80 miles long by 20 wide, with a variable elevation above sea-level of from 5000 to 7000 feet. In it are two lakes, the Dul and the Wulur. Nothing can well exceed the fertile beauty of this valley, almost surrounded as it is by snow-capped mountains, whose lower spurs descend gently in terraced slopes. These terraces are abundantly irrigated for the purpose of rice cultivation, rice being the staple crop throughout Cashmere. On the margins of the lakes, and scattered through the whole extent of the valley, are magnificent groves of chinar or plane-trees, here and there laid out with great regularity and taste to form gardens and country-seats which used to be the favourite resorts of the Mogul emperors two centuries ago. Other features of Cashmere are its avenues of poplars, and the floating-gardens of the lakes. Srinagar is a quaint and picturesque old town, built almost entirely of wood, said to have been founded at the beginning of the 6th century. Its industries are chiefly shawl-weaving and lacquer-work, with silver and copper work. The restrictions formerly placed on the residence of Europeans in Cashmere territory have been modified, and Cashmere is now visited by thousands of Europeans during the hot months of the year, a well-known summer station being Gulmerg, which is higher and cooler than Srinagar. Good roads have been made, and a railway is projected. The natural productiveness of the valleys is remarkable. Fruit of almost every description is found nearly wild in the lower valleys, and the vine is now largely cultivated for the manufacture of wine. Notwithstanding this fertility and the general cheapness of food-supply, Cashmere is occasionally subject to the scourge of famine. Much has been written about the fine physique of the Cashmere men and the beauty of Cashmere women, but they are really a corrupt and degraded race.

Cashmere was conquered by Akbar in 1586, and became part of the Mogul empire. It was overrun by the Sikhs in 1819. Ghulab Singh,

the feudatory of the Sikhs, made a treaty with Britain in 1846, by which he recognised British supremacy. In 1887 a land settlement (under pressure from the Indian government) abolished serfdom; trade greatly increased. The population of Cashmere with its dependencies (Ladakh, Jamu, Gilgit, Chitrál, &c.) was in 1901 close on 3,000,000, Mohammedans, Buddhists, and Hindus, of whom 1,158,000 were in Cashmere proper. Thirteen dialects are spoken; the Kashmíri is very closely related to Sanskrit.

See works by Bellew (1875), Drew (1875), Wakefield (1879), Hinton Knowles (1885-88), E. F. Knight (1893), and A. Durand (1899).

Caskets. See ALDERNEY.

Casoria, a town of Italy, 6 miles N. of Naples by rail. Pop. 7551.

Cas'pe, a town of Spain, 53 miles SE. of Saragossa. Pop. 9277.

Caspian Sea, an inland sea or great salt lake, the largest in the world, on the boundary between Europe and Asia, extending from 36° 40′ to 47° 20′ N. lat., and 46° 50′ to 55° 10′ E. long. Its length from north to south is 680 miles, and its breadth varies between 130 and 270 miles. Its total area is estimated at 170,000 sq. m. It has no tides, but navigation is dangerous because of violent storms. Its level differs much at different seasons, owing to evaporation and the variable amount of water brought by its tributaries. It is very shallow in the north—only 14 feet at a distance of 10 miles, and 72 feet at a distance of 130 miles from the mouth of the Volga. In its middle it is intersected by a submarine ridge. The greatest depth found in the northern basin is 2526 feet, and in the southern (close by the southern shore), 3006. The Caspian receives the waters of the Volga, Ural, Emba, Terek, Kura, and Atrek. The water is salt, but much less so than that of the ocean. The northern parts are covered with ice during winter. Fish abounds, and very valuable sturgeon and salmon fisheries are carried on. A canal uniting the upper tributaries of the Volga with those of Lake Ladoga and the Düna connects the Caspian with the Baltic. The sea is now surrounded on three sides by Russian territory, the southern shore still remaining Persian. The Russians have a fleet stationed upon it, and lines of steamers, for which the petroleum of Baku forms an economical fuel. The chief Russian towns on its shores are Astrakhan, Derbend, Baku, and Krasnovodsk, from near which a railway runs by Askabad towards Merv, and thence by Bokhara to Samarkand, with an extension to Tashkand in Turkestan.

Cassandra (anc. *Pallene*), the most western of the three tongues of the Chalcidice peninsula, between the gulfs of Salonica and Cassandra. The latter (anc. *Toronaicus Sinus*) extends 35 miles north-westward, and is 8 to 16 miles broad.

Cassano (*Kassáh-no*), (1) a town of S. Italy, 34 miles N. of Cosenza. Pop. 7407.—(2) On the Adda, 16 miles ENE. of Milan by rail, the scene of two sanguinary battles—a defeat in 1705 of the Imperialists by the French; and a defeat in 1799 of the French themselves by the Russians and Austrians. Pop. 5554.

Cassay. See MANIPUR.

Cassel, or KASSEL, chief town of the Prussian province of Hesse-Nassau, and the old capital of the former electorate of Hesse-Cassel, on the navigable Fulda, 120 miles by rail NNE. of Frankfort-on-Main, and 233 WSW. of Berlin. Pop. (1875) 53,043; (1900) 106,000. The oldest part consists of a few very narrow, crooked streets, close to the river; the more modern parts are situated on gentle hills. The 'upper new town' was founded by French refugees in 1688. In the Friedrichs-Platz, the largest square in any German town, stand the Elector's palace, the military school, and the *Museum Fredericianum* (1769-79), with a library of 100,000 volumes. The large new law-courts were erected in 1880 on the site of the Kattenburg, a costly and ambitious palace projected in 1820, which, however, remained unfinished till 1869, when its materials were used in the construction of the new picture-gallery (1877), which contains 1400 paintings. Cassel carries on manufactures of locomotives and steam-engines, carriages, philosophical and mathematical instruments, cotton and linen fabrics, plate, and sugar. The gardens of Wilhelmshöhe (1787-96)—which was assigned to Napoleon III. as a residence after his fall at Sedan, in September 1870—with their splendid fountains and cascades, and the colossal statue of Hercules, within the hollow of whose club eight persons can stand at one time, are 3 miles from Cassel.

Cassillis (*Kassils*), Ayrshire, seat of the Marquis of Ailsa, on the Doon, 4 miles NE. of Maybole.

Cassiquiare (*Kassikeeâh'ray*), a south bifurcation of the river Orinoco (q.v.). It leaves it near Esmeralda, 200 miles from its source, and after a rapid south-west course of 130 miles, joins the Rio Negro near San Carlos.

Castalia, a fountain on Mount Parnassus in Greece, sacred to the Muses.

Castelbuono, a town of Sicily, 8 miles SE. of Cefalù. Pop. 8439.

Castelfranco, (1) a town of Italy, 8 miles SE. of Modena. Pop. 1900.—(2) A town 15 miles W. of Treviso by rail, the scene of an Austrian defeat by the French, 24th November 1805. Giorgione was a native. Pop. 7758.

Castel Gandolfo, a village 12 miles SE. of Rome, near the west shore of Lake Albano. Here Urban VIII. built a summer residence for the popes. Pop. 1684.

Castellamare (*Kas-tel-la-máh'reh*), (1) a seaport of Italy, 17½ miles SE. of Naples by rail; near ancient *Stabiæ*, where the elder Pliny lost his life when the city was overwhelmed with lava from Vesuvius (79 A.D.). The Castello that gave it name was built by the Emperor Frederick II. in the 13th century. Castellamare has a cathedral, an arsenal, and manufactures of macaroni, cotton, sailcloth, &c. Pop. 34,207.—(2) A town of Sicily, at the head of a gulf of the same name, 41 miles WSW. of Palermo. Pop. 15,303.

Castellana (*Kastelláh'na*), a town of south Italy, 26 miles SE. of Bari. Pop. 8092.

Castellane'ta (*e* as *ay*), a cathedral city of south Italy, 24 m. NW. of Taranto by rail. Pop. 10,200.

Castello Branco, a town of Portugal, 115 miles NE. of Lisbon. Pop. 9464.

Castello de Vide, a town of Portugal, 139 miles ENE. of Lisbon by rail. Pop. 5263.

Castellon' de la Plana, a town of Spain, 5 miles from the Mediterranean, and 43 miles NNE. of Valencia by rail, manufactures linen, woollen, sailcloth, brandy, &c. Pop. 31,337.

Castelnau'dary (*au* as *o*), a town in the French dep. of Aude, on the Canal du Midi, 34 m. SE. of Toulouse by rail. The *Sostomagus* of the Romans, and *Castrum Novum Arianorum* (hence the modern

name) of the Visigoths, Castelnaudary suffered dreadfully in the crusade against the Albigenses, and in 1355 it was captured by the Black Prince. It has silk and woollen manufactures. Pop. 8598.

Castel Sarrasin (*Sarazan^{g}*), a town in the French dep. of Tarn-et-Garonne, 12 miles W. of Montauban. Pop. 4155.

Casteltermini (*Kastelter'minee*), a town of Sicily, 20 miles N. of Girgenti by rail. Pop. 9209.

Castelvetrano (*Kastelvetrâh-no*), a town of Sicily, 46 m. SE. of Trapani by rail. Pop. 24,500.

Castiglione (*Kas-teel-yo'nay*), a town of Sicily, on the north slope of Mount Etna, 35 miles SW. of Messina. Pop. 8114.—CASTIGLIONE DELLE STIVIERE is 22 miles NW. of Mantua. Here the French defeated the Austrians in 1796. Pop. 6123.

Castile (*Kast-eel'*; Span. *Castilla*), the central district of Spain, divided by the Castilian Sierras (8730 feet) into Old and New Castile. The former district—so called because it was first recovered from the Arabs—extends north to the Bay of Biscay, is walled in on all other sides by mountain-ranges, and rises to the height of 2500 to 3000 feet in the form of an elevated plateau, mostly trackless, treeless, and dreary. It is now divided into the eight provinces of Palencia, Valladolid, Avila, Segovia, Soria, Burgos, Logroño, and Santander. The plateau of New Castile, to the south, is also enclosed by mountains, and though lying 1800 feet lower than Old Castile, presents many similar characteristics of soil and scenery. It embraces the provinces of Madrid, Toledo, Guadalajara, Ciudad Real, and Cuença. Castilian is the literary language of Spain. Area of Old Castile, 25,280 sq. m.; pop. 1,800,000; area of New Castile, 53,035 sq. m.; pop. 3,500,000; total, 78,315 sq. m., with 5,300,000 inhabitants.

Castillon (*Kas-tee-yon^{g}*), a town (pop. 3670) in the French dep. of Gironde, on the right bank of the Dordogne, 33 miles E. of Bordeaux by rail. Beneath its walls, on 17th July 1453, the English were defeated, their leader, John Talbot, Earl of Shrewsbury, being slain.

Castle-Acre, a Norfolk parish, 4 miles N. of Swaffham, with a ruined castle and priory founded by the Earl of Warrenne (1085).

Castlebar', the capital of County Mayo, on the Castlebar River, 152 miles NW. of Dublin by rail. Pop. 3588.

Castleblayney, a Monaghan market-town, 73 miles NW. of Dublin. Pop. 1576.

Castle Campbell. See DOLLAR.

Castlecary, (1) a market-town of Somerset, 12½ miles NNE. of Yeovil. Pop. of parish, 2096. —(2) A railway station, and old castle, 6½ miles SW. of Falkirk, Stirlingshire, near the site of one of the principal stations of Antoninus' Wall.

Castlecomer, a Kilkenny market-town, 14½ miles SW. of Carlow. Pop. 958.

Castleconnell, a village on the Shannon, 8 miles NE. of Limerick.

Castlederg, a Tyrone village, on the Derg, 10 miles SW. of Strabane. Pop. 796.

Castledermot, a Kildare town, on the Lerr, 9 miles SE. of Athy. Pop. 450.

Castle Donnington, a Leicestershire market-town, 7½ miles NNW. of Loughborough. Pop. of parish, 2591.

Castle-Douglas, a Kirkcudbrightshire town, at the north end of Carlinwark Loch, 19½ miles SW. of Dumfries. Pop. 3018.

Castleford, a town in the West Riding of Yorkshire, on the Aire, 10 miles SE. of Leeds. It was a Roman station, and has now great glass-works, manufacturing especially bottles. Pop. (1851) 2150; (1891) 14,143; (1901) 17,386.

Castle Garden, originally Castle Clinton, a round fort (1807) built 300 yards out from the south end of Manhattan Island, was in 1824 converted into a place of amusement, in 1839 planted with trees, turf, and flowers, in 1847 again transformed into an opera-house, in 1858–90 was the New York depot for immigrants on arrival, was subsequently a government armoury, and then an aquarium.

Castlegregory, a Kerry village, on Tralee Bay, 15 miles W. of Tralee. Pop. 480.

Castlehills. See CAITHNESS.

Castle-Island, a Kerry town, on the Maine, 11 miles ESE. of Tralee. Pop. 1500.

Castlemaine, a town of Victoria, 73 miles NNW. of Melbourne by rail. The gold diggings here were among the first discovered in Australia. Pop. 5770.

Castlepollard, a Westmeath village, 12 miles N. of Mullingar. Pop. 700.

Castlereagh, a market-town on the Suck, 17 miles NW. of Roscommon. Pop. 1190.

Castle Rising, a Norfolk parish, 4 miles NE. of Lynn. Its ruined castle was the abode of Edward II.'s queen, Isabella.

Castle-Semple. See LOCHWINNOCH.

Castleton, (1) the capital of the Peak district, Derbyshire, 10 miles NE. of Buxton. It is commanded, to the south, by the ruined castle of William Peveril, a natural son of the Conqueror. Pop. 641.—(2) A Liddesdale parish, Roxburghshire, 21 miles S. by W. of Hawick. For Castleton of Braemar, see BRAEMAR.

Castletown (Manx *Balley Cashtal*), a seaport of the Isle of Man, on Castletown Bay, 11 miles SW. of Douglas by rail. The grounds of Rushen Abbey (11th century), near the station, are now market-gardens. Hard by is the small building where the House of Keys assembled for about 170 years. Brewing, tanning, and lime-burning are carried on. Near Castletown is King William's College (1833), an Elizabethan pile, rebuilt after the fire of 1844, and enlarged in 1862. Pop. 1963.

Castletown Berehaven, a Cork seaport, 20 miles W. of Bantry. Pop. 1650.

Castletownsend, a Cork seaport, 6 miles SE. of Skibbereen. Pop. 466.

Castlewellan, a Down market-town, 19 miles NE. of Newry. Pop. 945.

Castres (*Kâstr*), a town in the French dep. of Tarn, on the river Agout, 46 miles (72 by rail) E. of Toulouse. It rose up around a Benedictine abbey (647), and in the 16th century became a Huguenot stronghold, but its fortifications were demolished in 1629. It has beautiful promenades, a quondam cathedral, and manufactures of fine wool dyed goods, leather, paper, soap, &c. Pop. 25,000.

Castri. See DELPHI.

Castro, the modern name of the capital of several islands of the Grecian Archipelago—Lesbos, Samothrace, Melos, Lemnos, &c.

Castro del Rio, a town of Andalusia, Spain, 23 miles SE. of Cordova. Pop. 10,268.

Castrogiovanni (*Kastrojovân'nee*; anc. *Enna*), a town of Sicily, 56 miles E. of Catania by rail,

on a fertile plateau, which rises precipitously to a height of 3270 feet above sea-level. Pop. 22,500.

Castro Urdiales (*Oordiâh'les*), on the N. coast of Spain, 30 m. ESE. of Santander. Pop. 12,250.

Castrovil'lari, a town of South Italy, 34 miles N. of Cosenza. Pop. 11,505.

Castuera (*Kastooay'ra*), a town of Estremadura, Spain, 68 miles ESE. of Badajoz. Pop. 7002.

Catalonia (Span. *Cataluña*), an old principality of Spain, triangular in shape, occupying the north-east portion of the peninsula, and now divided into the provinces of Barcelona, Tarragona, Lerida, and Gerona. Total area, 12,500 sq. m.; pop. 2,000,000. Catalonia is the principal manufacturing province of the kingdom —is, in fact, 'the Lancashire of Spain.' The language, costume, and habits of the inhabitants, who regard with contempt and pity the Spaniards of the surrounding provinces, are quite distinct from those of the rest of Spain, whose people they greatly surpass in energy, industry, and intelligence. Even the educated classes speak the rough Catalan dialect, more nearly akin to Provençal than to Castilian. Catalonia became an integral portion of the Spanish monarchy in 1479, though never a very peaceable one.

Catamarca, a western province of the Argentine Republic, sinking SE. from the Andes to the Salt Marshes which separate it from Cordoba. Its capital, Catamarca (pop. 8000), is 82 miles NE. of Rioja.

Catania (*Katâh'nia*; anc. *Catăna*), a seaport of Sicily, near the foot of Etna, 59 miles by rail SSW. of Messina, and 54 NNW. of Syracuse. By eruptions and earthquakes, it has been several times almost entirely destroyed—especially in 1669 and 1693; but out of its ruins it has always risen with increased beauty, and it is now the finest city in Sicily. The harbour was choked by a stream of lava in 1693, and is still unsafe, in spite of a costly mole. Among the chief buildings are the Benedictine convent of San Nicola, secularised in 1866; the cathedral (1091); and the university (1445). Catania has manufactures of silk and linen goods, and of articles in amber, lava, wood, &c. Among the remains of ancient times are those of a theatre, a temple of Ceres, Roman baths, and an aqueduct. Pop. (commune) 150,000.

Catanzaro (*Katantzâh'ro*), a city of S. Italy, on a rocky hill 6 m. from the Gulf of Squillace, and 326 SE. of Naples by rail. It has a cathedral, a ruined castle of Robert Guiscard, and manufactures of silks, velvets, and woollens. Pop. 30,931.

Cateau, Le, or Cateau-Cambresis (*Kâhto'-Kon^g-brezee'*), a town in the French dep. of Nord, 14 m. ESE. of Cambrai. Here in 1559 a treaty was concluded between France and Spain. Pop. 10,269.

Caterham, a village of Surrey, with barracks, 7 miles S. of Croydon. Pop. 9500.

Catharines. See Aleutian Islands.

Cathay, an old name for China (q.v.), current in Europe in the middle ages.

Cathcart, Old, a Renfrewshire town, 3 miles S. of Glasgow. Pop. 4800.

Cat Island. See Bahamas.

Catrail, or Picts' Work, an earthwork extending 50 miles from near Galashiels, through the counties of Selkirk and Roxburgh, to Peel Fell in the Cheviots. See *Blackwood's Maga.* (1888).

Cat'rine, an Ayrshire town, on the Ayr, 2½ miles ESE. of Mauchline, with a cotton-mill. Pop. 2358.

Catskill, a village of New York, U.S., on the Hudson, 34 miles SSE. of Albany. Pop. 5920.

Catskill Mountains, a group of well-wooded mountains in the state of New York, U.S., west of the Hudson River, and south of the Mohawk. Belonging to the Appalachian system, they cover some 5000 sq. m., chiefly in Greene County, N.Y. Some peaks reach nearly 4000 feet in height. The mountains generally have steep and often precipitous ascents, and their summits are broad and rocky. The deep valleys or 'cloves' of the region are remarkable for their almost perpendicular walls. See Searing's *Land of Rip Van Winkle* (1885).

Catstane, a monolith, 3½ miles WNW. of Corstorphine.

Cat'taro, a strongly fortified Austrian port in Dalmatia, lies at the head of the Gulf of Cattaro, 40 miles SE. of Ragusa, under the steep Montenegrin hills. It has a cathedral, a naval school, and a pop. of 5500. At one time the capital of a small republic, the town in 1420 joined the republic of Venice, and was handed over to Austria in 1814. The Gulf of Cattaro, an inlet of the Adriatic, 19 miles long, consists of three basins or lakes, connected by straits ½ mile broad.

Cat'tegat, or Kattegat, the bay or arm of the sea between the east coast of Jutland and the west coast of Sweden, to the north of the Danish islands. It is connected with the Baltic Sea by the Great and Little Belt (q.v.), and by the Sound; and the Skager Rack connects it with the North Sea. Its length is about 150 miles, and its greatest breadth 85.

Catto'lica, a town of Sicily, 14 miles NW. of Girgenti. Pop. 6591.

Caub (*Kowb*), a town in the Prussian province of Hesse-Nassau, on the right bank of the Rhine, 30 miles WNW. of Wiesbaden by rail. Pop. 2179.

Cauca (*Kow'ka*), a river of Colombia, flowing 600 miles N. to the Magdalena. It gives name to the largest of the Colombian states, traversed by the Andean coast-range, and extending along the Pacific from Panama to Ecuador. Area, 260,000 sq. m.; pop. (1887) 465,690. Capital, Popayán.

Caucasus, a great mountain-range that forms the backbone of a well-marked geographical region, nearly corresponding with the Russian governor-generalship or lieutenancy of Caucasia. It occupies the isthmus between the Black Sea and the Caspian, its general direction being from west-north-west to east-south-east. From the peninsula of Taman on the Black Sea, to the peninsula of Apsheron on the Caspian, it has a length of about 750 miles. The breadth, including the secondary ranges and spurs, is about 150 miles, but that of the higher Caucasus does not exceed 70 miles. This range is sometimes treated as the boundary line between Europe and Asia, but the region is really Asiatic in character (see Asia, p. 52). The higher and central part of the range is formed of parallel chains, not separated by deep and wide valleys, but remarkably connected by elevated plateaus, which are traversed by narrow fissures of extreme depth. The highest peaks are in the most central ridge or chain, at least six of them well over 16,000 feet, much exceeding the highest Alps. Mount Elburz attains an elevation of 18,538 feet above the sea, Dikh-tau of 16,923, and Kazbek of 16,541. Here the line of perpetual snow is between 10,000 and 11,000 feet high; but the whole amount of perpetual snow is not great, nor are the glaciers very large or numerous. For more than 100 miles' length

of the main ridge there are no passes lower than 10,000 feet. The spurs and outlying mountains or hills are of less extent and importance than those of almost any other mountain-range of similar magnitude, subsiding as they do until they are only about 200 feet high along the shores of the Black Sea. Some parts are entirely destitute of wood, but other parts are very densely wooded, and the secondary ranges near the Black Sea exhibit most magnificent forests of oak, beech, ash, maple, and walnut; grain is cultivated in some parts to a height of 8000 feet, while in the lower valleys rice, tobacco, cotton, indigo, &c. are produced. The climate, though generally healthy, is very different on the northern and southern sides of the range, the vine growing wild on the south. The south declivity of the mountains towards Georgia presents much exceedingly beautiful and romantic scenery.

There are no active volcanoes in Mount Caucasus, but every evidence of volcanic action. Elburz and Kazbek are both of volcanic origin. There are hot springs and mud volcanoes at each end of the range, and there are also famous petroleum wells in the peninsula of Apsheron (see BAKU). Mineral springs also occur in many places, notably at Vladikavkaz. The bison, or aurochs, bears, wolves, and jackals are among the animals. Lead, iron, sulphur, coal, and copper are found.

The waters of the Caucasus flow into four principal rivers—the Kuban and the Rion or Faz (the *Phasis* of the ancients), which flow into the Black Sea; and the Terek and the Kur, which flow into the Caspian. Kuban and Terek are north, Rion and Kur or Kura south of the mountains. The Russians have with great labour carried a military road through the tremendous fissure or ravine of the Dariel gorge, about halfway from the Black Sea to the Caspian. The road passes over a height of about 8000 feet, and is protected by many forts. The only other road is by the Pass of Derbend, near the Caspian Sea. The term 'Caucasian' was at one time used for all the finer types of the fair-skinned division of mankind, but the 'Caucasian race' of Blumenbach has long been divided into the two groups, Aryan or Indo-European and Semitic; and it is very doubtful if the most of the Caucasian peoples belong to either of these stocks. The Ossetes, numbering perhaps 120,000, are distinctly Aryan; the southern or Kartveli group of Caucasian tribes (including the Georgians), the eastern group (including the Tchetchens and Lesghians), and the western group (including Circassians and Abkhasians), speak languages mutually unintelligible and of doubtful affinities.

The resistance which the Caucasian peoples for more than half a century offered to the arms of Russia attracted to them the attention of the world. But with the capture in 1859 of Shamyl, the prophet chief of the Lesghians, the power of the Caucasians was shattered; by 1870 it was completely broken. The bulk of the Circassians and Abkhasians migrated to Turkish territories in Asia or Europe. The ancient divisions of the country, Georgia, Imeritia, Svanetia, Mingrelia, &c., based on tribal distinctions, have disappeared from the Russian administrative system, in which the main range of Caucasus divides the province into Ciscaucasia, north of the mountains, and Transcaucasia to the south of them; the former comprising the governments of Stavropol, Kuban, Terek; the latter, those of Daghestan (really north of Caucasus), Tiflis, Kutais, Elisabetpol, Baku, Kars, and Erivan. Total area, 308,000 sq. m.; pop. 6,290,000. The chief town in Ciscaucasia is Vladikavkaz; in Transcaucasia, Tiflis. The old capital of Georgia was Mtzkhet, a good specimen of a Georgian word. See works by Freshfield (1869), Cuninghame (1872), Bryce (1878), Phillipps-Wolley (1883), 'Wanderer' (1883), and Abercromby (1890).

Caudebec (*Koad-bek'*), two places in Seine-Inférieure. *Caudebec lès Elbeuf*, 12 miles S. by W. of Rouen, has a population of 9700, and manufactures cloth. *Caudebec-en-Caux*, a pretty antique village of 2386 inhabitants, is on the Seine, 31 miles WNW. of Rouen.

Caura (*Kow'ra*), a river of Venezuela flowing NNW. to the Orinoco. On both sides stretches the territory of Caura (22,485 sq. m.).

Cauterets (*Koa-te-ray'*), a French watering-place in the dep. of Hautes-Pyrénées, lies 3250 feet above sea-level, in the valley of the Lavedan, 42 miles SSE. of Pau. The stationary population was in 1901 only 1566, but it is annually swelled in summer by 15,000 to 20,000 visitors, for whose accommodation numerous sumptuous hotels and bathing-establishments have been built. Its twenty-five sulphurous springs (60° to 131° F.) have been known from Roman times; though their modern reputation dates from the 16th century, when Margaret, sister of Francis I., held her literary court and wrote much of her *Heptameron* at Cauterets.

Cauvery. See KAVERI.

Cava del Tirreni, a cathedral city of Italy, in a lovely valley, 5½ miles NW. of Salerno by rail. Pop. 6339. About a mile distant is a Benedictine monastery celebrated for its archives.

Cavaillon (*Ka-va-yon^{g}'*), a town in the French dep. of Vaucluse, 18 miles SE. of Avignon, with a cathedral and Roman remains. Pop. 9757.

Cav'an, an inland county in the south of Ulster. It lies in the narrowest part of Ireland, 18 miles from the Atlantic, and 20 from the Irish Sea. Area, 746 sq. m., of which less than a third is under crops. Bogs and hills, with many small lakes, are found in the north-west, where Cuilcagh attains a maximum altitude of 2188 feet. The chief rivers are the Erne, the Woodford, and the Annalee. Of minerals, Cavan affords coal, iron, lead, and copper, with many mineral springs. The chief towns are Cavan, Cootehill, and Belturbet. Cavan returns two members to parliament. Pop. (1851) 174,064; (1901) 97,541, of whom 79,026 were Catholics.—CAVAN, the county town, stands on a branch of the Annalee, 85 miles NW. of Dublin by rail. Pop. 2822.

Cavité (*Ka-vee-tay'*), a decayed seaport of Luzon, one of the Philippines, 12 miles SW. of the capital. Pop. 5500.

Cawdor, a Nairnshire village, 5½ miles SW. of Nairn. Cawdor Castle, the seat of the Earl of Cawdor, was founded in 1454, but is one of the three traditional scenes of King Duncan's murder by Macbeth in 1040. See Cosmo Innes's *Book of the Thanes of Cawdor* (1859).

Cawnpore' (*Kanhpur*), a city of the North-western Provinces, on the right bank of the Ganges, 42 miles SW. of Lucknow, 266 SE. of Delhi, and 628 NW. of Calcutta. The river here varies according to the season, from 500 yards in width to more than a mile. The principal landing-place is the beautiful Sarsiya *ghát*. Cawnpore, at least as a place of note, is of recent origin, being indebted for its growth, besides its commercial facilities, partly to military and political considerations. Population, 200,000.

In 1777, being then an appendage of Oudh, it was assigned by the nawab as the station of a subsidiary force; and in 1801 it became, in name as well as in fact, British property. At the outbreak of the mutiny in May 1857, Cawnpore contained 1000 Europeans (560 of them women and children), who, after a three weeks' gallant defence, surrendered to the infamous Nana Sahib, on promise of a safe-conduct to Allahabad, only to be pitilessly massacred. There is a memorial church, a Romanesque red-brick building, whilst the scene of the actual massacre is occupied by the memorial gardens. Over the fatal well a mound has been raised, its summit crowned by an octagonal Gothic enclosure, with Marochetti's white marble angel in the centre. But Sir George Trevelyan's *Cawnpore* (1865) is the best memorial of the tragedy.

Caxamarca. See CAJAMARCA.

Caxias, (1) a town of Brazil, in the province of Maranhão, on the navigable Itapicuru, 190 miles from its mouth. Pop. 10,000.—(2) An Italian colony in the Brazilian province of Rio Grande do Sul, founded in 1875. Pop. 13,680.

Cayenne, a fortified seaport, capital of French Guiana, on an island at the mouth of a river of the same name. The harbour is the best on the coast, but insecure and shallow. Cayenne, though the entrepôt of all the trade of the colony, is chiefly known as a great French penal settlement (since 1852), its climate being extremely unwholesome for Europeans. The French took possession of the island in 1604, and again in 1677. The name of the capital is sometimes used for the whole colony. Pop. 12,000.

Cayes, or AUX CAYES (*O Kay'*), a seaport of Hayti, on the south-west coast, 95 miles WSW. of Port-au-Prince. Pop. 8000.

Caymans (*Kī-mans'*), three fertile coral islands, 165 miles NW. of Jamaica, of which they are a dependency. Columbus discovered them, and called them Tortugas, from the abundance of turtle, still their staple production. Area, 225 sq. m.; pop. 2322.

Cazalla de la Sierra, a Spanish town, 38 miles ENE. of Seville. Pop. 8310.

Cazem'be, an African territory extending between the Moero and Bangweolo lakes, west of 30° E. long. Here Livingstone died in 1873.

Cazorla, a town of Andalusia, Spain, 40 miles ENE. of Jaën. Pop. 6692.

Ceará (*Say-a-râh'*), a province of Brazil, on the north coast, with an area of 40,253 sq. m., and 952,625 inhabitants. The capital, Ceará, has a harbour, with breakwater, and is the terminus of a railway to Baturité (90 miles). Pop. 35,000.

Cebu, or ZEBU, is one of the Philippine Islands (q.v.), the seventh in respect of area.

Cedar-bergen, a range in the west of Cape Colony, stretches N. and S. on the east side of Olifant River Valley, in Clanwilliam division. Sneeuwkop (6335 feet) is the highest point.

Cedar Creek, a river of Virginia, U.S., giving name to the defeat of the Confederates, 19th October 1864.

Cedar Rapids, a town of Iowa, on the Red Cedar River, 79 miles SW. of Dubuque. It is an important railway centre, and has large flour-mills, carriage and machine works, and breweries. Pop. (1860) 1830; (1880) 10,104; (1900) 25,656.

Cefalù (*Chay-fa-loo'*), a city of Sicily, on the north coast, 40 miles ESE. of Palermo. It lies beneath a cliff, with a Norman cathedral and Greek ruins. Pop. 15,714.

Ceglie (*Chayl'yay*), a town in southern Italy, 21 miles NE. of Taranto. Pop. 13,865.

Celano, LAKE OF. See FUCINO, LAKE OF.

Celaya (*Se-lâh'ya*), a town in the Mexican state of Guanajuato, on the Rio Laja, about 150 miles by rail NW. of the city of Mexico. Pop. 28,336.

Celbridge, a town of Co. Kildare, Ireland, on the Liffey, 12 miles W. of Dublin. Pop. 915.

Celebes (Span. pron. *The-lay'bez;* Eng. usu. *Sel'-e-bez*), practically a Dutch island, is separated from Borneo by the Strait of Macassar, and 800 miles long by 200 broad. It consists of a central nucleus whence radiate four long mountainous limbs, respectively E., NE., SE., and S., enclosing the three gulfs of Gorontalo, running in nearly 200 miles, Tolo 150 miles, and Boni about 200 miles. The gulfs, as also the north and west coasts, are studded with islands, rocks and shoals, and larger outlying islands. The east end of the north-eastern peninsula is subject to earthquakes, and contains 11 volcanoes, some of them active, such as Mount Sapoetan (5938 feet), and, farther east, Mount Klabat (6559 feet), which has now, however, long been quiescent, besides numerous hot springs and sulphur lakes. The mountains of the south peninsula seldom rise above 2000 feet. In the extreme south, however, are Maros (4225 feet) and Bonthain (9994 feet). Between the hills and coast of the south peninsula are extensive grassy plains, affording pasture for large herds of cattle and horses. Celebes is rich in lakes, among them, Passo, in the central nucleus, 35 by 25 miles, and Tondano, nearly 2000 feet above the sea. Thanks to the elevation of the land and its sea exposure, Celebes, no part of which is more than 50 miles from the sea, enjoys a comparatively cool and healthy climate. The vegetation includes rice, maize, coffee, sugar, tobacco, indigo, areca, betel, pepper, clove and nutmeg growing wild; the tree yielding macassar oil, oak, teak, cedar, ebony, sandalwood, bamboos; also the *upas.* Many animals, birds, and insects are wholly peculiar to Celebes. Gold is obtained from surface washings; iron, salt, tin, and copper are likewise worked.

In 1900 the pop. was calculated at 1,878,500. The Bugis and Mangkassars of the south peninsula, tall, shapely, and comparatively fair, are the dominant native race, much disposed to trading and seafaring. The 'Alfuros,' a collective name for the other native tribes, are at a very low grade of culture. Celebes was first visited in 1525 by a Portuguese expedition from the Moluccas. In 1607 the Dutch began to trade with Celebes, and now claim the whole island, which they have divided into the residences of Macassar and Menado, a third division round the north and west of the Gulf of Tolo being included in the residence of the Ternate. The chief town is Macassar (pop. 20,000), with a sea-frontage of nearly 2½ miles. See Lahure, *Célèbes* (Paris, 1879); Hickson, *The Naturalist in North Celebes* (1889).

Cellardyke. See ANSTRUTHER.

Celle. See ZELL.

Cenis. See MONT CENIS.

Cento (*Chen'to*), a town of central Italy, 16 miles N. by W. of Bologna. It is the birthplace of the painter Guercino. Pop. 4975.

Central America, that part of the northern half of the American continent which lies between the isthmuses of Tehuantepec and Panama, sometimes extended so as to embrace Mexico. It

includes the republics of Guatemala, Honduras, San Salvador, Nicaragua, and Costa Rica; Belize; and the Mexican state of Chiapa and peninsula of Yucatan. The republic of Panamá (once Colombian) might now be added.

Central Asia. See ASIA, p. 55.

Central City, the name of several villages and hamlets in the United States, and of the capital of Gilpin county, Colorado, 40 miles W. of Denver by rail, with quartz-mills and rich gold-mines, and 3126 inhabitants.

Central Falls, a city of Providence county, Rhode Island, 4½ miles N. of Providence, with extensive manufactures. Pop. (1900) 18,167.

Central India, the official term for a group of feudatory Indian states which fall into nine political agencies, but are all under the supervision of the governor-general's agent. The region in which these states lie is to the north of the British 'Central Provinces' of India, and touches the North-west Provinces, Rajputana, Khandesh in the Bombay Province, and Chutia-Nagpur in Bengal. The area is 78,800 sq. m.; pop. 8,650,000. The nine subordinate agencies comprised in the Central India Agency are the Indore, Bhil or Bhopawar, Deputy Bhil, Western Malwa, Bhopal, Gwalior, Guna, Bundelkhand, and Baghelkhand agencies.

Central Provinces, a chief-commissionership of India, near the centre of the peninsula, embracing 18 British districts and 15 native states. Area, 86,500 sq. m. British and 30,000 native; pop. 10,000,000 and 2,000,000 respectively. The surface is irregular, the plains being broken by ridges; in the north extend the Vindhyan and Satpura (2000 feet) tablelands, with the Nerbudda between; south of these stretches the great Nagpur plain, with the Chatisgarh plain to the east, and a wild forest-region beyond, reaching almost to the Godavari. The climate is hot and dry, except during the south-west monsoon (June—September), when 41 of the mean annual 45 inches of rain fall. Wheat, rice, oil-seeds, cotton, and tobacco are raised; the only manufactures of note are weaving and the smelting and working of iron ores. Of the population three-fourths are Hindus, and one-seventh aboriginal or non-Aryan tribes who still adhere to their primitive faiths. Only 6 per cent. reside in the 52 towns of above 5000 inhabitants, of which three—Nagpur, Jubbulpore, and Kampti—have over 50,000 inhabitants.

Ceos (modern *Kea*, Italianised as *Zea* or *Tzia*), one of the Cyclades, in the Ægean Sea, 14 miles off the Attic coast. It is 13 miles long, 8 broad, and 39 sq. m. in area. The culminating point is Mount Elias, 1863 feet high. The population is 4311, of whom the great majority live in the capital, Zea or Ceos. In ancient times Ceos was noted as the birthplace of the poets Simonides and Bacchylides, and the physician Erasistratus.

Cephalonia (Homeric *Samē* or *Samos*), the largest of the seven Ionian Islands (q.v.), lies opposite the entrance of the Gulf of Lepanto or Corinth. It is irregular in shape, with a length of 30 miles, and an area of 302 sq. m. Pop. 83,543. The surface is mountainous, attaining 5310 feet; the soil for the most part thin, and water scarce. The capital is Argostoli (q.v.).

Cephissus, one of the two rivers which water the Athenian plain.

Ceram' (SERANG), the largest of the southern Moluccas (q.v.), lies NE. of Amboyna, to which Dutch residency it belongs, and is divided into Great and Little Ceram by the Isthmus of Taruno. Area, 6605 sq. m.; pop. 105,000. A mountain-chain reaches in Nusa Keli 11,000 feet.

Cerignola (*Chereen'yola*), a town of Italy, 22 miles SE. of Foggia by rail. The Spanish victory over the French here in 1503 established Spain's supremacy in Naples. Pop. 34,200.

Cerigo (*Cher'ee-go*), the southernmost of the seven Ionian Islands (q.v.), now officially known again by its old Greek name of *Cythera*, is separated from the Morea by a narrow strait. Area, 107 sq. m.; pop. 14,259. Capsali is the capital. In ancient times the island was sacred to Venus.

Cerne Abbas, a market-town of Dorset, on the Cerne, 7 miles N. of Dorchester. Pop. 834.

Cerreto (*Cher-ray'to*), a cathedral city of south Italy, 14 miles NNW. of Benevento. Pop. 5129.

Cerro de Pasco (*Serro*), the capital of the Peruvian dep. of Junin, stands at an elevation of 14,276 feet, 138 miles NE. of Lima. Near it are rich silver-mines. Pop. 15,000.

Cerro Gordo, a plateau in Mexico, the most easterly on the route from Vera Cruz to the capital. Here, on 18th April 1847, the Americans totally defeated the Mexicans.

Cerro Largo, a dep. in the NE. of Uruguay. Area, 5735 sq. m.; pop. 38,000. Capital, Cerro Largo or Melo; pop. 5000.

Certaldo (*Cher-tahl'do*), a town of central Italy, 19 miles SW. of Florence (37 by rail). Boccaccio was born and died here. His house still stands much as in his time. Pop. 2500.

Cervet'ri (from *Cære Vetus*), a village 19 miles WNW. of Rome, on the site of the ancient *Cære* or *Agylla*, formerly one of the most important cities of Etruria.

Cervin, MONT. See MATTERHORN.

Cesena (*Chez-ay'na*), a cathedral city of central Italy, 12 miles SE. of Forli by rail. It gave birth to Popes Pius VI. and VII. Pop. 16,435. Here Murat defeated the Austrians, 30th March 1815.

Cetinje, or CETTIGNÉ (*Set-tin'yeh*), capital of Montenegro, lies in a rocky valley 2093 feet above sea-level, and 17 miles E. of Cattaro. Pop. 3200.

Cette (*Sett*), a seaport in the French dep. of Hérault, on a neck of land between the lagoon of Thau and the Mediterranean, 23 miles SW. of Montpellier. The harbour enclosed by the piers and breakwater can accommodate about 400 vessels, and is defended by forts. A broad deep canal, lined with excellent quays, connects the port with the Canal du Midi and the Rhone, thus giving to Cette an extensive inland traffic; it has likewise an active foreign commerce. Cette has shipbuilding yards, salt-works, glass-works, factories for the manufacture of syrups and grape-sugar, &c. It is a resort for sea-bathing, and has extensive fisheries. Colbert founded it in 1666. Pop. (1872) 25,181; (1901) 32,364.

Ceuta (Span. pron. *Thay'oo-ta*), a fortified port belonging to Spain, on the coast of Morocco, opposite Gibraltar. It occupies the site of the Roman colony of *Ad Septem Fratres*, so called from the seven hills, of which the most prominent are Montes Almina and Hacho; on the latter, the ancient *Abyla* (one of the Pillars of Hercules), is a strong fort, and on the former, among beautiful gardens, lies the New Town. Ceuta has a cathedral, but is chiefly important as a military and convict station. The harbour is small, and exposed to the north. In 1415 Ceuta, with its territory, was captured by the Portuguese; in 1580 it fell to Spain. Pop. 13,339.

Cévennes (anc. *Cebenna*), the chief mountain-range in the south of France. With its continuations and offsets, it forms the watershed between the Rhone and the Loire and Garonne. The Cevennes extend for over 150 miles, through or into nine deps., the central mass lying in Lozère and Ardèche, where Mont Lozère attains 5584 feet, and Mont Mézenc (the culminating point of the chain) 5754 feet. The average height is from 3000 to 4000 feet. See works by R. L. Stevenson (1879) and E. A. Martel (Paris, 1890).

Ceylon (the *Taprobane* of the Greeks and Romans, and the *Serendib* of the *Arabian Nights*), a British crown colony in the Indian Ocean, is an island to the south-east of India, from which it is separated by the Gulf of Manaar and Palk Strait, 32 to 120 miles broad. Extreme length from north to south, 266 miles; greatest width, 140 miles. Area, 23,330 sq. m., of which about one-sixth is under cultivation. In natural scenery Ceylon can vie with any part of the world; and as its magnificent hills rise from the sapphire ocean, clothed with the rich luxuriance of a tropical vegetation, it seems to the voyager like some enchanted island of Eastern story. Undulating plains cover about four parts of the island, and the fifth is occupied by the mountain-zone of the central south, which has an elevation of from 6000 to 8000 feet above the sea-level. Pedrotallagalla attains the height of 8260 feet; Adam's Peak, 7420 feet; and the tableland of Nuwara-Eliya, 6210 feet. The mountain-system is mainly composed of metamorphic rocks, chiefly gneiss, frequently broken up by intrusive granite. With the exception of some local beds of dolomitic limestone, the gneiss is everywhere the surface rock, and the soil is composed of its disintegrated materials. Iron can be obtained in great quantities, and anthracite and rich veins of plumbago exist on the southern range of hills. Gold has recently been found. The *gems* of Ceylon have been celebrated from time immemorial, and include sapphires, rubies, the oriental topaz, garnets, amethysts, cinnamon stone, and cat's-eye. The pearl-fisheries of Ceylon, known at a very remote date, form a government monopoly, and are under the inspection of an officer, who reports when a sufficient number of pearl-yielding oysters have reached maturity. The fishings occur at irregular dates. The value of pearls obtained varies from £10,000 in some years to £60,000 in others; there was no fishing from 1892 till 1904.

The most important river in Ceylon is the Mahavila-ganga, which drains more than 4000 sq. m. Galle and Trincomalee are the only great natural harbours; but harbour improvements have concentrated the commerce of the island at Colombo, the capital of the island. At Trincomalee are the naval stores and dockyard. In climate, Ceylon has a great advantage over the mainland of India, and as an island enjoys a more equable temperature. The average for the year in Colombo is 80° in ordinary seasons. The beautiful tableland of Nuwara-Eliya is used as a sanatorium. Here the thermometer in the shade never rises above 70°, while the average is 62°; the nights are cool and refreshing. The general botanical features of Ceylon are in many respects similar to those of Southern India; but about 800 species of plants are peculiar to the island. Of animals the quadrumana are represented by the *Loris gracilis* and five species of monkeys. Sixteen species of bats exist in Ceylon, including the flying-fox. Of the larger carnivora, the bear and leopard; and of the smaller, the palm-cat and the glossy genette (the civet of Europeans) may be mentioned. The tiger is not met with in Ceylon. Deer, buffaloes, and the humped ox of India are plentiful, and the wild boar occurs. The elephant, which is for the most part tuskless, is emphatically lord of the forests of Ceylon. Whales are captured off the coast. Three hundred and twenty species of birds are found. The crocodile is the largest reptile in the island; tortoises and lizards are also found. There are a few species of venomous snakes.

The Singhalese (*Sinhalese*, also spelt *Cingalese*), the most numerous of the natives of Ceylon, are supposed to be the descendants of those colonists from the valley of the Ganges who first settled in the island 543 B.C., and speak an Aryan language closely allied to the Pali or modernised Sanskrit. The Kandyans, or Highlanders, are a more sturdy race. The Malabars, or Tamils, have sprung from those early invaders of Ceylon who from time to time swept across from Southern Hindustan. The Moormen, of Arab descent, are enterprising traders. The 'burghers' of Ceylon are people of Portuguese and Dutch descent, who have become naturalised. There is besides a remarkable tribe of outcasts—the Veddahs—hardly removed from the wild animals of the forest. The Singhalese are devoted to Buddhism, which has, however, been adulterated with Brahmanism. The most celebrated Buddhistic relic in Ceylon is the so-called sacred tooth of Gautama or Buddha, really a piece of discoloured ivory, which is guarded with jealous care at Kandy. Another is the sacred Bo-tree of Anuradhapura. Brahmanism or Hinduism is the faith of the Tamils or Malabars, and the Moormen are Mohammedans. After the expulsion of the Dutch Christians, Protestant missions to the natives of Ceylon were commenced by the Baptists in 1813. The Wesleyan Methodists followed in 1814, the Americans in 1816, the Church of England in 1818. Schools, collegiate institutions, and female seminaries, under the direction of the missionaries, are in successful operation; and there is a government system of education. Amongst the antiquities of Ceylon are dagobas or relic-shrines, cave-temples and other temples, and viharas or monasteries; also the ruined tanks, singular monuments of the former greatness of the Singhalese. Thirty colossal reservoirs, and about 700 smaller tanks, still exist, though for the most part in ruins. The restoration of these magnificent works of irrigation is being carried on by the government.

Coffee was long the chief commercial product of the island; but in 1869 a fungus (*Hemileia vastatrix*) attacked the leaves of the coffee-trees, and though everything was tried to mitigate or overcome the pest, it steadily increased in virulence, and the coffee-planters were obliged to turn their attention to other products of the soil. Cinchona, cacao, cardamoms, and many other plants were tried with varying success, but it soon became plain that Ceylon was capable of becoming a great tea-producing country, and tea has become the chief factor in restoring the financial equilibrium. Cinnamon and cocoa-nut cultivation are chiefly in the hands of natives; tea, cinchona, cacao, and cardamom cultivation in the hands of Europeans. The export of coffee fell from 995,493 cwt. in 1873 to 10,315 cwt. in 1902. In 1878 3515 lb. of tea were exported; in 1900-4 over 150,000,000 lb. a year. The other exports are cinchona, cocoa, coco-nut oil, cinnamon, cardamoms, plumbago, tobacco, coir, copra, and cordage—mainly to India and Britain. The chief imports from Britain are cotton goods, iron and

iron goods, coal, and machinery; but the chief import is rice from India. In the early years of the 20th century the exports to Britain averaged £3,500,000 a year, and the imports from Britain £2,100,000.

Ceylon, the largest of the British crown colonies, is administered by a governor aided by executive and legislative councils (the former consisting of five members, the latter of fifteen, partially elective), and municipal councils. Local boards and village tribunals give a measure of self-government to the people. The population of Ceylon, 2,763,984 at the census of 1881, rose by 1901 to 3,578,333, of whom 2,331,045 are Singhalese, 953,535 Tamil immigrants and settlers, 228,706 Moormen (Mohammedans of Arab descent), 9509 Europeans, 23,539 Eurasian descendants of Portuguese and Dutch, 3971 Veddahs, and 11,963 Malays. The revenue in 1882 was 12,161,570 rupees, and in 1902 was 27,198,056 rupees. The expenditure had risen from 12,494,664 rupees in 1882 to 26,341,878 in 1902. In the latter year the rupee had depreciated to 1s. 4d. Buddhism was introduced into Ceylon in 307 B.C. In 237 B.C. the Malabar mercenaries usurped supreme power, which they retained till 1071 A.D., when for 100 years a native dynasty ruled, the reign of Prakrama (from 1153 A.D. on) being the most glorious in the annals of Ceylon. The Malabars struggled with the native dynasties till 1517, when the Portuguese established themselves in the island, to be expelled by the Dutch in 1658; and it was not till the great French wars at the end of the 18th century that the Dutch ceded all their powers and possessions here to Britain, the island being formally annexed to the British crown in 1815.

See various works by John Ferguson (1898, &c.); *Two Happy Years in Ceylon*, by Miss Gordon Cumming (1891); and the *Official Handbook* (1900) by Davidson.

Cezimbra, a coast town of Portugal, 18 miles S. of Lisbon. Pop. 9815.

Chablis (*Shab-lee'*), a town in the dep. of Yonne, 12 miles E. of Auxerre. It gives name to an esteemed white Burgundy wine. Pop. 2300.

Chaco, El Gran. See Gran Chaco.

Chad, Tchad, or Tsad, Lake, a lake in the Soudan, Northern Africa, with an estimated area of 10,000 sq. m. in the dry season, and four or five times that extent during the rainy months. The western half contains the real lake; the eastern is generally a complex of low islands, separated by shallow canals, and inhabited by a race of semi-amphibious Negroes. The few streams that reach the lake are all small, except the Shari, which comes from the south-east. Lake Chad, whose waters are perfectly fresh, has no regular outlet. It sometimes overflows towards a great depressed plain 300 miles to the north-east. The first Europeans to see it were Denham, Clapperton, and Oudney; Nachtigal explored it in 1870. The lake is surrounded by the states of Bornu, Kanem, Wadai, and Bagirmi. Wadai is a strong, independent state, with Kanem and Bagirmi as its vassal states. The line that divides the sphere of French influence from the British sphere runs from Say on the Niger to Barrua on the west shore of Chad, leaving Sokoto and Bornu in the English sphere. The treaty agreed on by England and Germany in 1893 made the line between the English sphere and the German run from the Bight of Biafra to Yola on the Benuë, and thence to the SW. corner of Lake Chad, leaving the southern shore of Chad, with most of Adamawa and part of Bagirmi and the mouth of the Shari, in the German sphere as the 'Hinterland' of Cameroon. This the French hotly contested on the score of treaties made with Adamawa by Mizon. The French have of late done much exploration hereabouts, with a view of extending their influence. See the work on the travels of the unfortunate explorer Crampel by Alis, *A la Conquête du Tchad* (1892); and Dybowski, *La Route du Tchad* (1893).

Chadda, another name for the Benuë (q.v.).

Chadderton, a suburb of Oldham (q.v.).

Chæronea, a town in ancient Bœotia, near the river Cephissus, memorable for the disastrous defeat of the Athenians by Philip of Macedon, 338 B.C. Plutarch was a native.

Chagny (*Shan-yee'*), a town in the French dep. of Saône-et-Loire, 32 miles S. of Dijon. Pop. 4589.

Chagos. See Diego Garcia.

Chagres (*Tchâh-gres*), a town of the republic of Panamá, on the N. coast of the Isthmus of Panamá, at the mouth of the Chagres River. The river Chagres rises about 10 miles NE. of Panama, makes an immense bend round to the NE., and enters the Caribbean Sea. Though towards its mouth it varies in depth from 16 to 30 feet, it is yet but little available for navigation. The proposed route of the Panama Canal was by the valley of the Chagres for part of its course.

Chalce'don, a city of ancient Bithynia, at the entrance of the Euxine, opposite to Byzantium.

Chalcis, the capital of the Greek island of Eubœa, on the Euripus, a strait here only 120 feet wide. It was successively Athenian, Macedonian, Roman, and Venetian, until its conquest by the Turks in 1470. Pop. 9877.

Chaleurs, Bay of, an inlet of the Gulf of St Lawrence, between Gaspé, a district of Quebec, and New Brunswick, having a length of 90 miles east and west, and a width of from 12 to 20.

Chalfont St Giles, a village of Buckinghamshire, 16 miles SE. of Aylesbury. Milton's cottage here (1665) was saved from demolition and purchased by the nation in 1887.

Chalgrove, a village 13 miles SE. of Oxford, the scene of a skirmish between Prince Rupert's cavalry and a parliamentary force under Hampden, who here received his death-wound, June 18, 1643.

Châlons-sur-Marne (*Shâhlon^g-sür-Marn*), the capital of the French dep. of Marne, on the right bank of the river Marne, 107 miles E. of Paris by rail. An old place, with timber houses and many spired churches, it has a 13th-century cathedral, a handsome hôtel-de-ville (1772), and a fine public park, though the Germans in 1870 cut down its immemorial elms for fuel. It still does a considerable trade in champagne wine; but its manufacture of the worsted cloth known as 'shalloon' (Chaucer's *chalons*) is a thing of the past, and the population has dwindled from 60,000 in the 13th century to 21,500 in the 20th. Near Châlons (anc. *Catalauni*) the Romans and Goths in 451 A.D. defeated Attila and his Huns. In 1856 Napoleon III. formed the celebrated camp of Châlons, 16½ miles NE. of the town.

Châlon-sur-Saône (*Shâhlon^g-sür-Sone*), a town in the French dep. of Saône-et-Loire, 84½ miles by rail N. of Lyons. Lying on the right bank of the Saône, which here is joined by the Canal du Centre, uniting it with the Loire, Châlon has an extensive traffic with central France, as well as with the Mediterranean and Atlantic. The industries are copper and iron founding, machinery and shipbuilding, and the manufacture of glass, paper, and chemicals. Pop. 30,000.

Chamalari (*Tcha-ma-lah'ree*), a peak (23,944 feet) of the Himalayas, between Tibet and Bhutan, 140 miles E. of Mount Everest.

Chamba, one of the Punjab Hill States, immediately SE. of Cashmere, with an area of 3180 sq. m. Pop. 128,000, nearly all Hindus. It is shut in by lofty hills, and traversed by two ranges of snowy peaks and glaciers, with fertile valleys to the south and west. The banks of the Ravi and Chenab, two of the five great Punjab rivers, are clothed with mighty forests, leased to the British government.

Chambal, a river rising in the Vindhya Range, 2019 feet above sea-level, and flowing 650 miles north-eastward to the Jumna 40 miles below Etawah.

Chambersburg, capital of Franklin county, Pennsylvania, 52 miles WSW. of Harrisburg by rail. A large part of it was burned by the Confederates in 1864. Pop. 8863.

Chambéry (*Shon^{g}bay-ree'*), capital of the old duchy and present French dep. of Savoy, beautifully situated between two ridges of hills, 370 miles SE. of Paris by rail. The town itself is uninteresting; but the scenery around, with the river Laisse flowing through the valley, is exceedingly fine. Chambéry has a small cathedral, a palace of justice, and the old castle of the Dukes of Savoy. It manufactures clocks, silk-gauze, soap, hats, paper, &c. Pop. 17,100.

Chambeze (*Cham-bee'zeh*), the farthest headstream of the Congo, rises south of Tanganyika, about 9° 40′ S. lat., and 33° 15′ E. long., and flows south-west to Lake Bangweolo (q.v.).

Chambord (*Shon^{g}borr'*), a celebrated chateau in the French dep. of Loir-et-Cher, 12 miles E. of Blois. Commenced in 1526, it is a huge Renaissance pile, and in 1821 was presented to the Comte de Chambord (1820–83).

Chamouni, or CHAMONIX (*Shah-moo-nee'*; Lat. *Campus munitus*, as sheltered by the mountains), a celebrated valley among the French Alps, in the dep. of Upper Savoy, 53 miles ESE. of Geneva, at an elevation of about 3400 feet above sea-level. It is about 13 miles long and 2 broad, and is traversed by the Arve. On the south side lies the giant group of Mont Blanc, from which enormous glaciers glide down, even in summer, almost to the bottom of the valley: one of them, the Glacier des Bois, expands in its upper course into a great mountain-lake of ice, the Mer de Glace. The village of Chamouni, which is the usual starting-point for the ascent of Mont Blanc, owes its origin and its alternative name, Le Prieuré, to the Benedictine convent founded here before 1099. In 1741 Chamouni was visited by two Englishmen, Pococke and Wyndham, but it was only in 1787 that the attention of travellers was effectually called to it by the Genevese naturalist, De Saussure, and others. Since then the number of visitors has increased to over 15,000 tourists, and the railway was opened in 1901. Pop. of village, 600; of commune, 2500.

Champagne, a district and ancient province (180 by 150 miles) of France, now forming the deps. of Marne, Haute-Marne, Aube, and Ardennes, with parts of Yonne, Aisne, Seine-et-Marne, and Meuse. It is famous for its white and red wines, the former either sparkling or still; the best varieties are produced at Rheims and Epernay. The chief towns were Troyes, Bar-sur-Aube, Leon, and Rheims.

Champaign, a city of Illinois, 128 miles SSW. of Chicago. It has furniture and wagon factories, and an Industrial University (1868). Pop. 9839.

Champaran, a British Indian district in the NW. corner of Behar, with an area of 3531 sq. m., and a pop. of 1,859,465.

Champlain', a beautiful lake separating the states of New York and Vermont, and penetrating, at its north end, about 6 miles into Canada. Lying 91 feet above sea-level, it is 110 miles long, by from 1 to 15 broad, empties itself into the St Lawrence by the Richelieu River, and has communication by canal with the Hudson. The lake was discovered by Champlain in 1609; and here a British flotilla was defeated by the Americans, 11th September 1814.

Chancellorsville, a post-station of Virginia, near the Rappahannock, 11 miles W. of Fredericksburg. Here, May 2 and 3, 1863, the Confederates defeated the Federals, but suffered a severe loss in Stonewall Jackson, who was accidentally shot by his own men.

Chanda, chief town of a district of India, on the south-west frontier of the Central Provinces, 90 miles S. of Nagpur. Pop. 16,137.

Chandausi, a town of the United Provinces, 27 miles S. of Moradabad. Pop. 25,000.

Chanderi (*Tchanday'ree*), a town of Central India, 105 miles S. of Gwalior. Now an insignificant place, it once contained 14,000 stone houses.

Chandernagore (properly *Chandan-nagar*, 'city of sandalwood'), a French city, with a territory of about 3½ sq. m., on the right bank of the Hugli, 22 miles above Calcutta. Established in 1673, it for a while rivalled Calcutta; now, through the gradual silting up of the river, it has little external trade. Pop. 25,395.

Chandor, a town in the province of Bombay, 40 miles NE. of Nasik. Its fort, commanding an important pass between Khandesh and Bombay, crowns a hill 3994 feet high. Pop. 4892.

Chandpur, a town of the United Provinces, 19 miles S. of Bijnaur. Pop. 12,000.

Chang-Chow, two cities of China, (1) a city 28 miles W. by S. of Amoy; pop. 1,000,000.—(2) a city 50 miles E. by S. of Nanking; pop. 360,000.

Chang-Sha, a city of China, capital of the province of Hu-nan, on the Heng-kiang, a tributary of the Yang-tse. Pop. 300,000.

Channel, THE ENGLISH (Fr. *La Manche*, 'Sleeve;' Roman *Mare Britannicum*), is the narrow sea between England and France. On the east, it joins the North Sea at the Strait of Dover, 21 miles wide, from which it runs west-south-west for 280 miles, and joins the Atlantic Ocean at the Chops, with a breadth of 100 miles between the Scilly Isles and Ushant Isle. With an average breadth of 70 miles, it is 90 miles wide from Brighton to Havre; 60 miles from Portland Bill to Cape La Hague; 140 miles—its greatest breadth—from Sidmouth to St Malo; and 100 to 110 miles west of the latter line. It occupies 23,900 square geographical miles, and contains the Channel Isles, Ushant Isle, and Isle of Wight. It is shallowest at the Strait of Dover, where a chalk ridge at the depth of twelve to thirty fathoms joins England and France. West of this, the average depth of the central portion is thirty fathoms, with hollows from forty to sixty-two fathoms deep. The English coast-line of the Channel is 390 miles long, and the French coast-line is 570 miles long. The proposed Channel Tunnel, 23 miles long, from Dover to Calais, was discussed first in 1867.

Channel Islands, a group of small islands off the NW. coast of France, which from the 10th century formed part of the old duchy of Normandy, and since the Norman Conquest has remained subject to the British crown. The nearest points are about 12 miles from the French coast. The four principal islands are Jersey, Alderney, Sark, and Guernsey; others being the Caskets (or Casquets), Burhou, Brecqhou, Jethou, Herm, the Minquiers, and the Chausseys. The area is 75 sq. m., the population over 95,000. The islands are administered according to their own laws and customs, and are not bound by British acts of parliament. Jersey has its own lieutenant-governor, judges, and 'states' partly elective; Guernsey, Alderney, and Sark have a governor in common, but separate administrations. English predominates in the towns; elsewhere the vernacular is a local modification of old Norman-French. The scenery is beautiful, the climate delightful to invalids. Frost and snow are rare. Flowering plants and shrubs are about a fortnight earlier in the spring than in England. The produce of the islands is principally agricultural; but horticulture and floriculture are successfully followed—the latter especially in Guernsey. The system of cultivation is very primitive. The principal manure is seaweed. A great quantity is burned for the manufacture of kelp and iodine. The principal crops are potatoes, hay, wheat, turnips, mangel-wurzel, parsnips, and carrots. The Channel Islands are famous for excellent breeds of horned cattle, usually known as 'Alderneys,' though each island has its own special type. The other main articles of exportation are granite, fruit, and early potatoes. See *The Channel Islands*, by Wimbush and Carey (1904).

Chanonry. See FORTROSE.

Chantenay, a growing western suburb of Nantes (q.v.).

Chantibun, or CHANTABON, a town of Siam, a considerable port near the mouth of the Chantabun River, in the Gulf of Siam, occupied by the French as security for the fulfilment of the treaty of Bangkok in 1893. Pop. 30,000.

Chantilly (*Shon^{g}tee-yee'*), a town in the dep. of Oise, 26 m. NNE. of Paris. One of the most beautiful places in the vicinity of the capital, and the headquarters of French horse-racing, it attracts immense numbers of visitors. The magnificent chateau of the great Condé here was pulled down at the Revolution of 1793, but was rebuilt by the Duc d'Aumale, who bought back the estate in 1872, and who in 1886 presented it to the French Institute, with its priceless art collections, its value nearly £2,000,000. The manufacture of silk pillow-lace, or *blonde*, so famous in the 18th century, is all but extinct. Pop. 4702.

Chapala, an isleted lake of Mexico, on the high plateau of Jalisco, surrounded by steep, bare mountains. It has an area of 1300 sq. m., and is traversed by the Rio Grande de Santiago.

Chapel-en-le-Frith, a Derbyshire market-town, 5 miles N. of Buxton. Pop. of parish, 4627.

Chapelizod, a town on the Liffey, 3 miles W. of Dublin. Pop. 1458.

Chapra, a town in Bengal, 1 mile above the Gogra's confluence with the Ganges. Pop. 47,000.

Chapul'tepec, a rock, 150 feet high, 2 miles SW. of the city of Mexico. A castle (1785) crowns it, on the site of Montezuma's palace.

Chard, a municipal borough of Somerset, 15 miles SSE. of Taunton. It has manufactures of lace. Pop. 4575.

Charente (*Sharon^{g}t*), a river, rises in the dep. of Haute-Vienne, and winds 222 miles NW., S., and WNW., mainly through the deps. of Charente and Charente-Inférieure, to the Bay of Biscay, opposite the island of Oléron.

Charente, a French dep. formed chiefly out of the old province of Angoumois. Area, 2285 sq. m. Pop. (1866) 378,218; (1901) 344,376. Generally level, with granite offshoots of the Limousin range in the north, and chalk-hills in the south, it is divided into the five arrondissements of Angoulême, Cognac, Ruffec, Barbezieux, and Confolens. Angoulême is the chief town.

Charente-Inférieure (*Sharon^{g}t-On^{g}fayree-ehr'*), a dep. of France, formed principally from the former provinces of Saintonge, Aunis, and a small portion of Poitou. The Bay of Biscay washes its western boundary. Area, 2625 sq. m. Pop. (1866) 479,529; (1901) 446,294. It is watered on its boundaries by the Sèvre-Niortaise and the Gironde, and in the centre by the navigable Charente. The chief harbours are those of Rochefort and Tonnay-Charente. La Rochelle is the chief town.

Charenton-le-Pont (*Sharon^{g}ton^{g}'-le-Pon^{g}*), a town on the Marne, 4 m. SE. of Paris. Pop. 17,550.

Charjui (*Tchar-joo'ee*), a Russian town of Central Asia, on the Amu-Daria, where the Transcaspian railway from Merv to Bokhara crosses the river by a great bridge opened in 1888.

Charkov'. See KHARKOV.

Charlbury, an Oxfordshire market-town, 6 miles SE. of Chipping Norton. Pop. 1478.

Charlcote House, Warwickshire, 4½ miles ENE. of Stratford-on-Avon, the seat (1558) of the Lucy family.

Charleroi (*Shârl-rwah'*), a Belgian town on the Sambre, 35 miles S. by E. of Brussels. It has manufactures of hardware, glass, yarn, &c., the huge ironworks of Couillet, and neighbouring collieries, smelting-furnaces, and nail-factories. Six times exchanged between France and Spain, it was assigned to Austria by the peace of Aix-la-Chapelle (1748). Pop. 25,000.

Charleston, a port of entry, capital of a county of its own name, and the largest city of South Carolina, is situated on a tongue of land between the rivers Ashley and Cooper, which unite immediately below the town and form a beautiful and spacious harbour, communicating with the ocean at Sullivan's Island, a popular sea-bathing resort, 7 miles below. It is 118 miles NE. of Savannah, 580 miles SW. of Baltimore, and 540 miles SSW. of Washington. A shifting sandbar extends across the mouth of the harbour, but the new jetties (1878–88) secure a depth of 20 feet of water. The harbour is defended by Castle Pinckney and Fort Sumter, each on an island, the former 2 and the latter 6 miles below the city, and also by Fort Moultrie, on Sullivan's Island. At the entrance of the harbour is a flashing light 125 feet high. Charleston is regularly built, and extends about 3 miles in length and nearly 1½ mile in breadth. It has a copious water-supply from a large artesian well (1970 feet deep). Among the public buildings are the custom-house, city hall, court-house, citadel, academy of music, theatre, orphan asylum, and police barracks. The custom-house is a handsome edifice, built of granite and white marble. At the southern extremity of the city is a small park called the Battery or White Point Garden, with a fine promenade on the sea-wall. The

Charleston College (1785; reorganised 1837) has an excellent museum of natural history. Here are also a medical college, the state military academy, &c. Charleston is the seat of an Episcopal and a Roman Catholic bishop. St Michael's Church (Episcopal) is a brick structure, with a steeple 180 feet high, and a chime of bells imported from England in 1764. Charleston is a commercial rather than a manufacturing city, and was formerly the chief cotton port of the United States; but since the civil war it has not developed so rapidly as other ports, and at the close of the 19th century the exports had been declining. They now average from $7,000,000 to about $11,000,000 per annum, the principal items being cotton and phosphates. The other exports are rice, lumber, and naval stores. The imports ($1,500,000 to $2,000,000 yearly) are chiefly salt, iron, ale, brimstone, kainite, and fruits from the West Indies. There is a large wholesale distributing trade in dry-goods, clothing, drugs, &c.; and the city has large machine-shops, cotton-presses, grist-mills, cotton-mills, rice-mills, a bagging-factory, shipyards, a good dry-dock for large ships, and extensive manufactures of phosphate of lime, which abounds in the vicinity. The city was founded in 1680; a few years later a company of French Huguenots settled here. In 1776 Charleston repulsed a British squadron; in 1780 it surrendered to Sir Henry Clinton. On 12th April 1861, the Confederates began the civil war by the bombardment of Fort Sumter, which they took the next day. In 1861 half the city was destroyed by fire, and a considerable part was not rebuilt until after 1865. After a long siege and bombardment, begun in 1863, the place was evacuated by the Confederates, February 17, 1865. On 31st August 1886 a severe earthquake destroyed or seriously injured nearly 7000 buildings. Pop. (1800) 18,711; (1840) 29,261; (1880) 49,984; (1891) 54,955; (1901) 55,807.

Charleston, or KANAWHA, capital of West Virginia, on the Great Kanawha River, at the mouth of the Elk, 369 miles WNW. of Richmond by rail. Large quantities of bituminous coal and salt are procured near by. Charleston was made state-capital in 1885, as it had already been in 1870–75. Pop. 12,000.

Charlestown, a Fife seaport village, on the Firth of Forth, 4 miles SSW. of Dunfermline. Pop. 750.

Charlestown, a Mayo village, 10 miles NW. of Ballaghaderreen. Pop. 640.

Charlestown (Massachusetts). See BOSTON and BUNKER HILL.

Charleville, a market-town, 34 miles N. of Cork. Pop. 2000.

Charleville (*Shârl-veel'*), a town in the French dep. of Ardennes, on the Meuse, opposite Mézières. It has manufactures of hardware, leather, and beer. Pop. 17,900.

Charlotte, capital of Mecklenburg county, North Carolina, 265 miles ENE. of Atlanta, has manufactures of carriages, cotton goods, tobacco, &c., and is the seat of a Presbyterian university (1867). Pop. 18,200.

Charlotte Amalie (*Amâh'lee-eh*), the capital of the West Indian island of St Thomas (q.v.).

Charlottenburg (*Sharlot'tenboorg'*), a Prussian town on the Spree, 3 miles W. of Berlin, with which it is connected by a road leading through the *Thiergarten*. It contains a royal palace, founded in 1696 for Sophie Charlotte, the second wife of Frederick I.; in its mausoleum here are the remains of Frederick William III. and the Emperor William I. In the town are a famous technical high-school or university and military school; the manufactures include ironwares, machinery, porcelain, glass, paper, leather, chemicals, and beer. Pop. (1871) 19,518; (1880) 30,483; (1890) 76,859; (1900) 189,290.

Charlottetown, the capital of Prince Edward Island, on the south coast, stands on the Hillsborough estuary, which forms a secure and commodious harbour for the largest vessels. It has two colleges, an iron-foundry, a woollen-factory, and shipbuilding yards. The population is about 13,000.

Charnwood Forest, a bare Leicestershire hill-tract (853 feet), 5 miles SW. of Loughborough.

Charolais (*Sharolay'*), a district in the French dep. of Sâone-et-Loire, noted for its fine cattle.

Charters Towers, a mining township of North-east Queensland, situated on the northern spurs of the Towers Mountain, 820 miles NW. of Brisbane. It dates from the gold discovery here in 1871. It has railway connection with Townsville on the coast. Pop. 5597.

Chartres (*Shârtr*), capital of the French dep. of Eure-et-Loir, on the double-channelled Eure, 55 miles SW. of Paris. It consists of an upper and lower town, connected by very steep streets; and the highest point is crowned by the glorious cathedral—in Street's opinion, the finest in France. Built chiefly between 1194 and 1260, it has two spires, of which the south-western is 342½ feet high, and the north-western, 371; the latter, built in 1507–14, being, 'on the whole, the most beautiful spire on the Continent.' Other features are the three rose-windows, the splendid portals, and the 13th-century stained glass that fills no fewer than 130 windows. The weekly corn-market is one of the largest in France, and is remarkable as being under a corporation of women. Chartres has manufactures of woollen, hosiery, and leather. Population, about 20,000. The *Autricum* of the Carnutes (hence the present name), Chartres in 1594 was the scene of the coronation of Henry IV.

Chartreuse, LA GRANDE (*Shâhr-trehz'*), the original Carthusian monastery, founded by St Bruno in 1084, in the dep. of Isère, 14 miles NNE. of Grenoble, and 4268 feet above sea-level. A huge 17th-century structure, it had become practically a hotel when in 1904 the monks were expelled by the French government.

Châteaubriant (*Shâh-tō-bree-on^{g}'*), a town in the French dep. of Loire-Inférieure, on the Chère, 40 miles NNE. of Nantes by rail. Pop. 6469.

Châteaudun (*Shâh-tō-dun^{g}'*), a pretty town in the French dep. of Eure-et-Loir, on the Loir, a tributary of the Loire, 83 miles SW. of Paris. It was almost destroyed by fire in 1723. Dunois is buried in the chapel of the stately castle. Pop. 5576.

Château Gaillard. See ANDELYS.

Château-Gontier (*Shâh-tō-Gon^{g}t-yay'*), a town in the French dep. of Mayenne, on the Mayenne, 180 miles WSW. of Paris by rail. Pop. 6281.

Château Margaux. See MARGAUX.

Châteauroux (*Shâhtōroo'*), the capital of the French dep. of Indre, on the left bank of the river Indre, 88 miles S. of Orleans by rail. It has manufactures of woollens, iron, leather, and tobacco. Pop. (1872) 16,858; (1901) 21,060.

Château-Thierry (*Shâh-tō-Tee-er-ree'*), a town in the French dep. of Aisne, 59 miles E. by N. of Paris by rail, with manufactures of mathematical instruments and woollen yarn. Here Napoleon defeated Prussians and Russians in 1814. Pop. 6519.

Chatelineau, a Belgian town in Hainault, on the Sambre, 27 miles E. of Mons, with coal-mines and ironworks. Pop. 12,000.

Châtellerault (*Shâh-tel-ro'*), a town and river-port in the French dep. of Vienne, on the river Vienne, 40 miles S. of Tours by rail. It is a smoky, dingy place, one of the chief seats of the cutlery manufacture in France, and since 1820 has had a government small-arms factory. The title of Duke of Châtellerault was conferred by Henri II. in 1548 on James Hamilton, Earl of Arran and Regent of Scotland. The population of the town is 18,000, of the commune 20,000.

Chatham (*Chat'tam; Ceteham*, 'village of cottages'), a municipal and parl. borough, river-port, and naval arsenal of Kent, on the right bank of the Medway, at the upper part of its estuary, 30 miles ESE. of London. It forms almost one continuous town with Rochester (q.v.) on the west, but itself has few objects of interest. It owes its importance to its naval and military establishments situated at Brompton, a suburb on high ground overlooking the Medway. There is also a large convict establishment. The Chatham fortified lines are the frequent scenes of field-operations, sham fights, and reviews. The dockyard, founded by Elizabeth before the threatened invasion of the Spanish Armada, was in 1662 removed to its present site. In 1667 the Dutch, under De Ruyter, sailed up the Medway, and, in spite of the fire from the castle, destroyed much shipping and stores. In a military point of view, the lines of detached forts connected with Chatham constitute a fortification of great strength; and the whole is regarded as a flank defence for London. In or near Chatham are Fort Pitt, a military hospital and strong fort; Melville Hospital, for marines and sailors; barracks for infantry, marines, artillery, and engineers; a park of artillery; &c. Chatham is one of the principal royal shipbuilding establishments in the kingdom. The dockyard is nearly two miles in length; and the whole is traversed in every direction by tramways for locomotives. Three great wet-docks, with a water area of 67 acres, on reclaimed marsh land were completed in 1883 after the labour of 17 years, and at a total cost of about £3,000,000. In the navy estimates provision is made for about 5000 artisans and labourers. There are statues of Lieutenant Waghorn, a native of Chatham, and the pioneer of the 'overland route' to India, and of General Gordon (1890); but Chatham's most cherished memories are of Charles Dickens. Pop. (1851) 28,424; (1871) 45,792; (1901) 78,755; of these 37,057 were in the municipal borough, which was constituted in 1891. The parliamentary borough returns one member.

Chatham, (1) a town of Ontario, on the Thames, 67 miles SW. of London by rail, with mills and foundries, soap and candle works. Pop. 9000.—(2) A port of entry in the north of New Brunswick, on the Miramichi, 6 miles NE. of Newcastle, with a good harbour, shipyards, foundries, a Catholic cathedral, and a college. Pop. 6000.

Chatham Islands, a small group in the Pacific, lying 360 miles E. of New Zealand, to which they politically belong. There are three islands—of which the largest, Chatham Island, is 38 miles long—and some rocky islets. Total area, 375 sq. m.; pop. 420, of whom about half are Maoris, with a few Morioris or aborigines. The Chatham Islands were discovered in 1791 by Lieutenant Broughton, of the brig *Chatham*. A large brackish lake occupies the interior of Chatham Island, which is of volcanic origin and hilly. Stock-rearing and seal-fishing are the chief industries, the islanders having over 60,000 sheep and 400 to 700 cattle, with which they supply passing vessels. The Morioris numbered 1200 in 1831, when 800 Maoris were landed from New Zealand, by whom the former were reduced to 90 in nine years' time.

Châtillon (*Shâh-tee-yon^g'*), a town in the French dep. of Côte d'Or, on the Seine, 49 miles NNW. of Dijon. A congress of allied sovereigns was held here in 1814. Pop. 5120.

Chat Moss, a bog in Lancashire, the largest in England, 7 miles W. of Manchester, and 10 sq. m. in extent. In 1793–1800 it was the scene of the first great and successful efforts for the reclaiming of bogs, and in 1829 George Stephenson here achieved a great engineering triumph in the construction of the Liverpool and Manchester Railway, constructing the portion of the line through Chat Moss at a smaller expense than any other part of the railway.

Chatsworth, Derbyshire, 25 miles N. by W. of Derby, is the magnificent seat of the Duke of Devonshire, a Palladian pile (1687–1820), with splendid art-collections and grounds.

Chattahoo'chee, a headstream of the Appalachicola (q.v.).

Chattanooga, capital of Hamilton county, Tennessee, a shipping centre on the Tennessee River, 151 miles SE. of Nashville, with good railway connections. It has cotton and other factories, ironworks, tanneries, and sawmills. Pop. (1870) 6093; (1880) 12,892; (1900) 30,150.

Chatteris, a Cambridgeshire market-town, 8 miles S. of March. Pop. of parish, 4787.

Chaudes-Aigues (*Shoad-zayg'*), a town in the dep. of Cantal, 90 miles S. of Clermont, with four mineral springs (135° to 177° F.). They are good for various diseases, rapidly discharge the grease from sheep's wool, and in winter are impounded for heating the houses of the town. Pop. 1046.

Chaudfontaine (*Shoad-fon^g-tayn'*), a Belgian village in the valley of the Vesdre, 5 m. SSE. of Liège by rail, with mineral springs (92° F.). Pop. 1552.

Chaudière (*Sho-dee-ehr'*), a river and lake of Canada. The river joins the St Lawrence from the south 7 miles above Quebec, and 2½ miles from its mouth, forms the celebrated falls of Chaudière. The lake—merely one of the many expansions of the Ottawa—has on its right the city of that name, the capital of the Dominion.

Chaumont (*Sho-mon^g*), a town in the French dep. of Haute-Marne, 1023 feet above sea-level between the rivers Marne and Suize, 140 miles SE. of Paris. There are manufactures of gloves, cutlery, &c. Pop. 11,700.

Chauny (*Sho-nee'*), a town in the French dep. of Aisne, 77 miles NNE. of Paris. Pop. 10,100.

Chautauqua (*ch* as *sh*), a celebrated summer-resort on Chautauqua Lake, in a county of the same name near the south-west extremity of the state of New York, is famous as the seat of the 'Chautauqua Assembly,' founded in 1874 by John H. Vincent, D.D., and Lewis Miller, to provide systematic instruction for Sunday-school teachers, together with popular lecture courses

in literature, science, and art. Lake Chautauqua is a beautiful sheet of water 20 miles long, with an average breadth of 2 miles, lying 700 feet above Lake Erie, from which it is distant 10 miles. The Assembly Grounds, on the northern shore of the lake, comprise about 165 acres, containing over 500 attractive summer cottages, a museum of archæology, an amphitheatre seating over 5000, &c. Large numbers of students and visitors congregate here in the summer season.

Chaux de Fonds (*Sho-d'Fon^{g}d'*), a Swiss town, 18 miles by rail NW. of Neuchâtel, in a bleak valley 3254 feet above the sea. It has for two centuries been a chief seat of the watch manufacture. Pop. (1834) 6500; (1901) 36,390.

Cheadle, (1) a market-town in the moorland district of Staffordshire, 14 miles NNE. of Stafford. Lying in a pleasant vale, engirt by wooded hills, it has a Roman Catholic Church, erected in 1846 from designs by Pugin, at a cost of £60,000. Pop. of parish, 5190.—(2) Cheadle and Gatley, a Cheshire urban district, near the Mersey, 2½ miles WSW. of Stockport, and included partly in that county borough. Pop. 7920.

Chedabucto Bay, an indentation into Nova Scotia, at the entrance of the Gut of Canso, which separates Cape Breton from Nova Scotia.

Cheddar, a Somerset village, on the south side of the Mendip Hills, 21½ miles SSW. of Bristol by rail. It lies at the entrance of a deep rocky gorge, nearly 1 mile long, whose stupendous limestone cliffs contain caverns—one 300 feet long—filled with fantastic stalactites and stalagmites. The famous Cheddar cheese originated here. Pop. of parish, 1901.

Chedu'ba (or *Man-aung*), a wooded island of Arakan, in the Bay of Bengal. Area, 240 sq. m.; pop. 25,867.

Cheesewring, a curious natural pillar, 32 feet high, in Cornwall, 5 miles N. of Liskeard.

Che-foo, a treaty port on the north side of the peninsula of Shan-tung, at the entrance to the Gulf of Pechili, in which it is the only port that remains open throughout the winter. The foreign quarter, with about 420 Europeans and Americans, is in some sense a colony of Shanghai; the Chinese town (spelt also *Cheefoo*, *Chi-fu*, and *Tschifu*) has about 33,000 inhabitants. There is a large import and export trade.

Che-keang, an eastern and maritime province of China. Capital, Hang-chow.

Cheliabinsk (*Tchel-ya-binsk'*), a town in the Russian government of Orenburg, 365 miles NE. of Orenburg, which has rapidly grown in importance as the meeting-point of several great railways—one of them the Trans-Siberian railway. Pop. 25,300.

Chelmer, an Essex tributary of the Blackwater at Maldon, 29 miles long.

Chelmsford, the county town of Essex, at the confluence of the Chelmer and the Cann, 29 miles NE. of London. It has a corn exchange (1857), a shire hall (1792), a grammar-school (1551), and a parish church, which, all but the tower and spire, was rebuilt between 1803 and 1878. There is a considerable trade in agricultural produce. Chelmsford was incorporated in 1888. Pop. (1851) 6033; (1901) 12,580.

Chelsea, a suburb of London, on the north bank of the Thames, here crossed by bridges to Battersea (q.v.). In the sixteenth century the village of Chelsea was the residence of Sir Thomas More, Queen Catharine Parr, the Princess Elizabeth, and Anne of Cleves. Afterwards Walpole, Swift, Steele, and Sir Hans Sloane, and, in later years, Leigh Hunt, Carlyle, Rossetti, and George Eliot lived here. Ranelagh (1742–1803) here was much resorted to, and afterwards Cremorne (closed 1877). Besides Chelsea Hospital (1692) for old and disabled soldiers, there are a Royal Military Asylum for soldiers' children, large barracks for the Foot Guards, a botanic garden, water-works (1722) to supply London, a river-pier, and an embankment (1873) extending to Battersea Bridge on the west. The famous porcelain works were established about 1745. The borough has returned a member to parliament since 1885, and (since 1899) is one of the London metropolitan boroughs. Pop. (1901) 73,842. See the official *History of Chelsea Hospital* (1872), and other works by Martin (1888) and Beaver (1893).

Chelsea, Massachusetts, a north-east suburb of Boston, separated therefrom by the Mystic River estuary. Pop. (1870) 18,547; (1900) 34,072.

Cheltenham, a fashionable watering-place of Gloucestershire, on the Chelt, a little affluent of the Severn, 44 miles NNE. of Bristol, 47 SSW. of Birmingham, and 121 WNW. of London (by road only 95). It lies in a picturesque and fertile valley, on the east and south-east half encircled by the Cotteswolds. A saline spring was discovered here in 1716, and from a mere village the place gradually increased till 1788, when the benefit derived by George III. from its waters suddenly made it a resort of fashion. The four spas—Royal Old Well, Montpellier, Pittville, and Cambray—are all saline but the last, which is chalybeate; they are deemed efficacious for liver complaints and dyspepsia. With its squares, crescents, and terraces, its gardens and promenades, its clubs and pump-rooms, its August 'cricket week,' its healthy climate, the cheapness of living, and the happy absence of manufactures, the town offers many attractions both to visitors and residents, the former largely fox-hunters in winter, the latter retired Anglo-Indians. It is, besides, a great educational centre, the seat of the Proprietary College, for 700 boys, founded in 1840, and occupying a splendid Tudor pile of 1848; a grammar-school (1586; reconstituted 1883); a large ladies' college (1854); a Church of England training college for schoolmasters (1847); and private schools beyond number. Noticeable buildings are the 14th-century parish church; the Roman Catholic Church (1857), with a spire 205 feet high; the Corn Exchange (1863); and the handsome Free Library. Cheltenham has memories of Handel, Lord Tennyson, Frederick Robertson, Sydney Dobell, and Dean Close, under whom (1824–56) it became a stronghold of Evangelicalism. It was incorporated as a municipal borough in 1876, and has returned one member to parliament since 1832, the parliamentary boundary having been extended in 1885. Pop. (1804) 3076; (1841) 31,411; (1901) 52,858, of whom 49,439 were within the municipal boundary.

Chelyuskin, Cape (*Tchel-yoos'kin;* also called *North-east Cape*, and *Cape Severo*), the most northerly point of Asia, on a peninsula of the same name, which forms the western arm of the eastern half of the Taimyr peninsula. It is named after a Russian officer who here succumbed to the fatigues of the journey (1742); it was first revisited by Nordenskjöld in 1878. He found it a low promontory, divided into two parts by a small bay; the lat. of the western is 77° 36′ 37″ N.

Chemnitz (*Kem'neetz*), a Saxon town at the base of the Erzgebirge and the confluence of the Chemnitz with three other streams, 51 miles SSE. of Leipzig by rail, and 43 WSW. of Dresden. It is the 'Saxon Manchester,' its industry consisting in the manufacture of cottons, woollens, silks, calico, cheap hosiery, machinery, and mixed fabrics of wool, cotton, and jute. Pop. (1801) 10,835; (1861) 45,532; (1900) 206,584.

Chemulpo, a town on the west coast of Corea, 25 miles by road WSW. of the capital, Seoul. It is one of the three treaty ports opened in 1883 to foreign commerce, the volume of which has since steadily advanced. Pop. (1905) 20,000, of whom 5000 are foreigners, many Chinese and Japanese.

Chenab', one of the five rivers of the Punjab, rises in the Kashmir range of the Himalayas and enters British territory in Sialkot district. It unites with the Jhelum at Timmu, afterwards receives the Ravi, and, as the Trimab, joins the Sutlej, 50 miles above Mithankot. Its length is 755 miles.

Cheneys, the former seat of the Russells, in Bucks, 4 miles E. by N. of Amersham. The church is their burial-place.

Chengalpat. See CHINGALPAT.

Chepping Wycombe. See WYCOMBE.

Chepstow, a river-port of Monmouthshire, on the right bank of the Wye, 2½ miles from its influx to the Severn estuary, and 17 ENE. of Newport. It lies between bold cliffs, on a slope rising from the river, in the midst of exquisite scenery. Its noble ruined castle stood two sieges during the Great Rebellion, and has been held successively by Fitz-Osbornes, Clares, Bigods, Herberts, and Somersets. The railway crosses the Wye by Brunel's tubular suspension bridge (1852), 600 feet long, and 50 above high-water. Here occurs the highest tide in the British Islands—the greatest recorded difference between low and high water being 53 feet. Pop. 3050. See Marsh's *Annals of Chepstow Castle* (1883).

Cher (*Sher*), a river flowing 200 miles northward and north-westward to the Loire below Tours. It is navigable from Vierzon.—CHER, to which the river gives its name, is the central dep. of France. The surface consists of plain and well-wooded hills (1600 feet). Area, 2770 sq. m.; pop. (1872) 335,392; (1901) 345,543. Bourges is the chief town.

Cherasco (*Kayras'ko*), a town of north Italy, 37 miles SSE. of Turin by rail. Pop. 3341.

Cherbourg (*Sher-boorg'*), a French port and arsenal in the dep. of Manche, at the head of a deep bay on the N. extremity of the peninsula of Cotentin, 70 miles S. of the Isle of Wight, and 230 WNW. of Paris. Begun by Vauban in 1687, the harbour-works and fortifications were pushed on by the great Napoleon, and were supposed to have been completed in 1858 by Napoleon III. at a total outlay of 200 million francs; but less than thirty years after, the French government resolved to spend 49 millions more on the construction of fresh works between 1883 and 1894. The stupendous *digue* or breakwater (1853) is almost 2½ miles long, encloses a space of nearly 2000 acres, and is connected with the strongest fortifications. The commercial harbour of Cherbourg consists of an outer harbour, 786 feet in length by 654 feet wide, and of an inner basin, 1338 feet long by 416 feet wide. The great inner naval floating-harbour was inaugurated by the Emperor Napoleon in 1858, in presence of Queen Victoria. Entirely cut out of the solid rock, it is 20 acres in area, and is surrounded by building-slips and capacious graving-docks. The town itself is insignificant, the streets being narrow and dirty. There are some manufactures of hosiery, chemicals, lace, and leather, sugar and salt refineries, sawing and flour mills; but the industrial energies of the great bulk of the population are absorbed in the arsenal and dockyards. Cherbourg is a very ancient place; originally *Cæsaris Burgum*, in the 11th century it was known under the name of *Carusbur*. In 1758 it was taken by the English, who destroyed the naval and military works, and levied a contribution on the town. Pop. (1872) 34,785; (1901) 42,952; or, with the three suburbs of Tourlaville, Octeville, and Equeurdreville, 60,000.

Cherhill, Wiltshire, 3 miles E. of Calne, with a 'white horse' (1780) in the turf, 129 feet long.

Cheribon, a seaport of Java, on the north coast, 125 miles ESE. of Batavia. Pop. 19,000.

Cherkask. See TCHERKASK.

Chernigov. See TCHERNIGOFF.

Cherso, an Austrian island of Illyria, in the Gulf of Quarnero, 13 miles SSW. of Fiume. Area, 127 sq. m.; pop. 9550. Cherso (pop. 4670), on the west side, has a spacious harbour.

Cherson. See KHERSON.

Chertsey, a town in Surrey, near the right bank of the Thames, here crossed by a seven-arch bridge (1785), 21 miles WSW. of London. It arose in a monastery founded in 666, and refounded in 964 by Edgar for Benedictine monks. Charles James Fox lived on St Anne's Hill, an abrupt elevation a mile distant; and the poet Cowley spent his last two years in a house that is marked with an inscription. The population is about 13,000.

Cherwell, a stream, 30 miles long, rising in Northamptonshire, and falling into the Isis or Thames near Oxford (q.v.).

Chesapeake Bay, in Maryland and Virginia, and dividing the former state into two parts, is the largest inlet on the Atlantic coast of the United States, being 200 miles long, and from 4 to 40 broad. Its entrance, 12 miles wide, has on the north Cape Charles, and on the south Cape Henry, both promontories being in Virginia. The bay receives the Susquehanna, Potomac, Rappahannock, York, and James rivers.

Chesham, a market-town of Buckinghamshire, 18 miles NW. of London. It manufactures cricket bats, racquets, wooden spades, hoops, &c. Pop. 7350.

Cheshire, a maritime county in the west of England, on the Welsh border, bounded N. by the river Mersey, separating it from Lancashire, and partly also by the Irish Sea. Its greatest length from north to south is 48 miles; greatest breadth, 32; and area, 1102 sq. m., of which 76 per cent. is under cultivation. The coast-line is confined to the hammer-headed peninsula called Wirral, about 8 miles broad, between the estuaries of the Mersey and Dee. The surface forms an extensive nearly level plain between the Derbyshire and Welsh mountains, well wooded, and studded with small lakes or meres. This plain, comprising four-fifths of the surface, is crossed, near the middle, by a tract of high ground running south-west from a promontory overlooking the Mersey, near the mouth of the Weaver, to Beeston Castle rock, 366 feet high. In the east are large tracts of peat, and much of the county is wet and rushy. Coal-measures appear on the Flintshire border, and also on the borders of Staffordshire and Derbyshire. The Dee skirts

the county on the west for 55 miles, the Mersey on the north for 40, and the Weaver, rising in the east part, runs 40 miles west-north-west to the Mersey. In addition to its river navigation, the county has an almost unrivalled system of canals, and contains the greater part of the Manchester Ship Canal. The chief mineral products are rock-salt and coal. The rock-salt, discovered in 1670, and mined by gunpowder, is found near the Weaver and its branches, especially near Northwich (q.v.), and at Middlewich, Winsford, and Sandbach. Much salt is also made from brine-springs 20 to 40 yards deep. About 90,000 cows are kept, capable of producing 15,000 tons of cheese. In the cattle-plague of 1865–66 upwards of 70,000 cattle perished, 36,000 of these being slaughtered as a preventive measure. Pop. (1801) 194,305; (1841) 395,660; (1901) 815,099. There are extensive manufactures in the principal towns, especially Birkenhead, Congleton, Chester (the county town), Crewe, Hyde, Macclesfield, Stalybridge, and Stockport. The county is formed into eight parliamentary divisions, each returning one member, and includes the parliamentary boroughs of Birkenhead and Chester, with portions of the boroughs of Ashton-under-Lyne, Stalybridge, Stockport, and Warrington. It contains 503 civil parishes, and is mostly in the diocese of Chester. Cheshire has some Roman roads, tumuli, barrows, remains of religious houses, and many old castles and halls. William the Conqueror erected Cheshire into a county palatine, with an independent council and eight barons. Henry VIII. subordinated it to the English crown; but Cheshire did not send representatives to the English parliament till 1549. See Ormerod's *History of Cheshire* (3 vols. 1819; new ed. 1875), and Earwaker's *East Cheshire* (1877).

Ches'hunt, a large village of Hertfordshire, 14 miles N. of London. It is famous for its rose-gardens, and its college, founded in 1768 for 'the Countess of Huntingdon's Connexion' at Trevecca, Wales, removed hither in 1792, and now a school of London University. Pop. 13,100.

Chesil Bank or BEACH, a bank of gravel and shingle extending 16 miles from Bridport to Portland. It varies in height from 20 to 43 feet, and in width from 170 to 200 yards. For some part of its course it hugs the shore, but the Fleet comes between it and the land for nearly 10 miles from Abbotsbury (q.v.). Towards its west end the bank is composed of sand, grit, and fine gravel, but the materials get gradually larger and larger as it is followed eastward.

Chester, an ancient episcopal city, municipal, parliamentary, and county borough, and river-port, the capital of Cheshire, on the right bank of the Dee, 22 miles from the mouth of its estuary, 16 miles SE. of Liverpool, and 179 miles NNW. of London. One of the most picturesque towns in England, it stands on a rocky sandstone height, and is still surrounded by the entire circuit of its ancient walls, nearly 2 miles round, 7 or 8 feet thick, and forming a promenade with parapets. The castle, with the exception of 'Cæsar's Tower,' has been removed, its site being occupied by barracks and county buildings. The Dee is crossed by two bridges, the old picturesque bridge of seven arches, and the new or Grosvenor Bridge (1832), with a noble single arch of stone 200 feet in length. The two main streets cross each other at right angles, and were cut out of the rock by the Romans 4 to 10 feet below the level of the houses. These streets exhibit the curious arrangement called the 'rows:' the front parts of their second stories, as far back as 16 feet, form a continuous paved promenade or covered gallery, open in front, where there are pillars and steps up from the street below, with private houses above, inferior shops and warehouses below, and the chief shops of the town within. There are a considerable number of the picturesque old timber houses of the 16th century, and many of the more modern buildings are in the same style. The Cathedral is an irregular massive structure of crumbling sandstone, 375 by 200 feet, with a massive tower of 127 feet. Formerly the church of the rich abbey of St Werburgh, it became in 1541, a cathedral church. It is of various dates from Norman to Late Perpendicular, its most striking feature being the fine Perpendicular window of the west front. Chester has manufactures of lead, oil, and chemicals, iron-foundries, and an iron-shipbuilding yard. The making of boots and shoes is an important industry. Since 1885 Chester returns only one member. Pop. (1851) 27,756; (1901) 38,309.

Chester was the *Deva* or *Devana Castra* of the Romans, and the British *Caerleon: Chester* representing the Anglo-Saxon *Ceaster*, from the Roman *Castra*. In 605 it was laid utterly waste by Ethelfrith of Northumbria; and rebuilt in 908, it was the last place in England that held out against William the Conqueror. Llewelyn ravaged it in 1255; and after a long and memorable siege (1643–46), the royalist inhabitants were starved into surrender. A projected Fenian attack on the castle in 1867 proved abortive.

Chester, a city of Pennsylvania, on the Delaware, 15 miles SW. of Philadelphia, with a military academy, large shipbuilding yards, and manufactures of cotton and woollen goods, engines, &c. Swedes founded it as Upland in 1643—the oldest town in the state. Pop. (1860) 4631; (1900) 33,988. There is a *Historical Sketch* of the city by Ashmead (1883).

Chesterfield, a municipal borough in Derbyshire, on the Rother rivulet, 12½ miles SSE. of Sheffield by rail. All-Saints' Church (*c.* 1350) has a curious crooked spire, 228 feet high, and 6 feet off the perpendicular; in Trinity Church (1838) is buried George Stephenson. Other buildings are the townhall (1857), the Stephenson memorial hall, and the grammar-school (1574; rebuilt 1846). There are manufactures of silk, lace, earthenware, and machinery; and the neighbourhood is rich in coal, iron, and other minerals. Brindley's Chesterfield Canal (1776) extends 46 miles to the Trent. Pop. (1851) 7101; (1901) 27,185, within the borough as extended in 1892. See Yeatman's *Records of Chesterfield* (1885).

Chesterfield Inlet, a narrow gulf penetrating 250 miles west from the NW. of Hudson Bay.

Chester-le-Street, a Durham market-town near the left bank of the Wear, 6 miles N. of Durham city. The seat of the Bishop of Bernicia from 883 to 995, it has an old collegiate church; whilst in the neighbourhood are Lambton, Lumley, and Ravensworth Castles, the seats of the Earls of Durham, Scarborough, and Ravensworth. Coal-mines and ironworks are numerous. Pop. of parish, 12,000.

Chesterton, a NE. suburb of Cambridge.

Cheviot Hills, a mountain-range of Northumberland and Roxburghshire, on the English and Scotch border, running 35 miles south-westward, from near the junction of the Till and Tweed, to the sources of the Liddel. The principal points are Cheviot Hill (2676 feet) and Peel Fell (1964).

Cheyenne, the capital of Wyoming state, U.S., situated on the eastern slope of the Laramie Mountains, 6000 feet above sea-level, and 106 miles by rail N. of Denver. Coal and iron are found in its neighbourhood. Pop. (1870) 1450; (1880) 3456; (1900) 14,087.

Chhatísgarh is the south-east division of the Central Provinces of India. Area, 39,761 sq. m.; pop. 3,612,705. Dongargáon is the capital.

Chiana (*Kee-âh'na;* anc. *Clanis*), a river of Italy, originally a tributary of the Tiber, watering the perfectly level Val di Chiana, which its overflow rendered once the most pestilential district of Italy. The bed was deepened in 1789–1816, and in 1823 a northern branch was led through canals to the Arno, a few miles below Arezzo.

Chianti (*Kee-âhn'tee*), an Italian mountain-range, in the province of Siena; it gives name to an excellent red wine.

Chiapas, Las (*Tchee-âh'pas*), a Pacific state of Mexico, adjoining Guatemala. Area, 27,222 sq. m.; pop. 320,000. Capital, San Cristobal.

Chiaramonte (*Kee-âh-ra-mon'teh*), a town of Sicily, 30 miles W. of Syracuse. Pop. 9364.

Chia'ri (*Kee-âh'ree*), a town of Lombardy, 13 miles W. of Brescia by rail. Here the Austrians, under Prince Eugene, defeated the French and Spaniards, under Villeroi, 2d September 1701. Pop. 5999.

Chiavari (*Kee-ah'va-ree*), a port of Italy, 24 miles ESE. of Genoa by rail. Pop. 11,000.

Chiavenna (*Kee-a-ven'na*), a town of Lombardy, to the north of Lake Como. Pop. 4848.

Chicacole, a town on the Languliya River, 567 miles NE. of Madras. Pop. 18,355.

Chicago (pron. *Shekahgo*) is situated in the north-east corner of the state of Illinois, about the fork and mouth of the Chicago River, on the west shore and near the head of Lake Michigan. It is 850 miles from Baltimore, and 2415 from San Francisco. The city is divided by the river and its branches into north, south, and west 'sides,' which are connected with each other by upwards of thirty bridges and two tunnels. The river frontage, counting both sides, extends 41 miles. From a small trading village Chicago has expanded into a great metropolis, ranking, in the United States, second only to New York. The area, in 1887 only 36·7 sq. m., had in 1904 increased to 190; while the city extended lengthwise for 21½ miles, and from east to west 10½ miles. It is the largest grain market in the world; and more hogs are killed, and more pork, bacon, and lard shipped, than in and from any other two cities on the continent. The site was at first barely on a level with the lake; but thoroughfares were gradually raised from 8 to 12 feet, and the surrounding lots progressively filled in. Now Chicago has some of the finest streets (laid out with mathematical regularity) in all America, notably Michigan Avenue and Drexel Boulevard. Among the public buildings of Chicago are the Board of Trade building, of granite; the county court-house and city-hall, erected at a cost of nearly $6,000,000; the criminal court and county jail; the United States custom-house and post-office; the Art Institute building; the Dearborn Observatory; the Auditorium, with a seating capacity of 7500; besides some 300 churches, public schools, numerous hospitals, theatres, music-halls, and many palatial hotels. The Chicago University, opened in 1892, has 2600 students, and assets valued at $15,500,000, of which $9,000,000 were given by Mr Rockefeller. There are also medical and commercial colleges, a university at Evanston, 12 miles to the north, and several theological seminaries in the city and its suburbs. The public library, with 320,000 volumes, is one of the largest in the United States; and the Newberry Library, founded in 1888 as a reference library by a legacy of $3,000,000, has over 250,000 volumes. Many of the office buildings are enormously tall, accessible in the upper stories by rapid elevators; these 'sky-scrapers' are built on the steel-frame system, the brick walls not actually serving as a support.

The park system is without a parallel in America; it embraces Lincoln Park, on the lake shore to the north, and five others, all connected or nearly so by magnificent boulevards, the system measuring some 35 miles. Among other open spaces are 20 large cemeteries, besides numerous smaller parks and squares, and several driving parks. The water-supply system has 640 miles of pipe; a new tunnel, capable of furnishing 100,000,000 gallons a day, and running 4 miles out into Lake Michigan, was constructed in 1888. The sewerage of the city is emptied, by a canal connecting the Chicago and Illinois rivers, into the Mississippi, and thence to the Gulf of Mexico; this scheme, adopted in 1892 (opened in 1900), included an open canal combining a sewage system with a system of navigation between Lake Michigan and the Mississippi, practically between the North Atlantic and the Gulf of Mexico. The city garbage is disposed of by fire in destructors. The great secret of Chicago's phenomenal growth is its transportation facilities by rail and water. Fully one-third of the railroad system of the United States centres there. But the great waterway by Lake Michigan and its connections is unquestionably of most importance for the prosperity of the city. In 1888 for the first time a steamer from London direct landed her cargo at this city. The manufactures of the city include nearly every variety of production, from a child's toy to the largest steam-engine.

Joliet and Marquette visited the place in 1673, and ere long the French built a fort here. 'Fort Dearborn' was built in 1804. The history of Chicago as a city dates from 1837, when its population was 4170; in 1845 it was 12,088. Since that time the city has made prodigious strides in extent and in the acquisition of wealth. Pop. (1860) 109,206; (1880) 503,185; (1900) 1,698,575. In 1900 the number of native-born was 1,111,460 (59 per cent. of foreign parentage), and 587,115 were foreign-born, largely Germans, next Irish, Bohemians, Poles, Swedes, Norwegians, English and Scotch, French, Canadians—besides 30,150 negroes. The manufactures of the city are very various. Over 300,000,000 bushels of grain are dealt with annually in the Chicago elevators. Over 5,000,000 hogs, 2,000,000 cattle and as many sheep are slaughtered annually. The city income is about $35,000,000 yearly.

The great fire, which broke out on Sunday, October 7, 1871, devastated a total area of nearly 3½ sq. m.; about 17,450 buildings were burned, 98,500 persons rendered homeless, and some 200 lives sacrificed, the total money loss being estimated at $190,000,000. As a result of this disaster, when this central portion was rebuilt, brick, iron, and stone structures were erected, and stone pavements also were substituted for wood. Another conflagration, on July 14, 1874, destroyed about $4,000,000 worth of property. In 1886 occurred the 'Haymarket Massacre,' in which eight policemen were killed and sixty maimed by a dynamite bomb thrown by an anarchist from

among a crowd of labour agitators. Another anarchist plot was detected in July 1888. In Jackson Park, to the south-east of the city, was the site chosen for the great World's Columbian Exposition or World's Fair, held 1st May to 30th October 1893, in celebration of the fourth centenary of the discovery of America by Columbus. The buildings were dedicated with elaborate ceremonies on 21st October 1892. The area occupied for the purpose, 633 acres, had a frontage of a mile and a half on Lake Michigan; the enormous building for manufactures itself covering 30½ acres of ground, and having 13½ acres of gallery space. The number of visitors was, from first to last, 23,529,400. See histories by Andreas (1884) and Moses and Kirkland (1895).

Chichen', one of over fifty ruined Indian towns in the Mexican province of Yucatan, a few miles WSW. of Valladolid.

Chichester, a municipal borough and episcopal city in Sussex, 17 miles ENE. of Portsmouth, and 28 W. of Brighton. It stands on a plain between an arm of the sea and the South Downs, which rise gently on the north. The two main streets cross at right angles, and meet in an elaborate eight-sided market-cross (*c.* 1500). Within the suburbs the city is surrounded by an ancient wall, 1½ mile in circuit, now a promenade under the shade of elms. The cathedral, erected in the 12th and 13th centuries, on the site of a wooden one founded 1108, and burned 1114, measures 410 by 131 feet, with a spire 277 feet high (rebuilt 1865–66, after its fall in 1861), and a detached bell-tower or campanile, 120 feet, the only structure of the kind retained by an English cathedral. The bishop's palace is supposed to have been erected on the site of a Roman villa. Chichester has a market-house, guildhall (formed out of the chapel of the Franciscan monastery), a theological college (1872), &c. The chief trade is in agricultural produce and live-stock. Wool-stapling, malting, brewing, and tanning are also carried on. From the time of Edward I. till 1867 Chichester returned two members, and till 1885 one. The port of Chichester, 2 miles to the south-west of the city, is situated on a deep inlet of the English Channel, of about 8 sq. m., and is connected with Chichester by a canal. The Roman *Regnum*, Chichester was partly destroyed in 491 by the South Saxons, but was soon after rebuilt by Cissa, their king, and called Cissanceaster, or Cissa's Camp. It suffered much during the Great Rebellion, when among royalist prisoners of war was the famous Chillingworth, who died here, and lies buried in the cathedral. Pop. 12,244. See works by Willis (1861), Stephens (1876), Swainson (1880), and Corlette (1902).

Chickahom'iny, a river of Virginia, flowing 90 miles south-eastward, within 5 miles of Richmond, to the James. Four battles were fought near it in June 1862.

Chickamauga, a tributary of the Tennessee River, rising in Georgia, and flowing NW. into Tennessee, where, on its banks, the Confederates won a victory, September 19–20, 1863.

Chicken Rock, 2 miles S. of the Calf of Man, with a lighthouse.

Chiclana (*Chee-klah'na*), a town of Spain, 12 m. SE. of Cadiz, with mineral baths. Pop. 12,339.

Chiclayo (*Chee-klī'o*), a town of Peru, 12 miles SE. of Lambayeque. Pop. 11,325.

Chic'opee, a town of Hampden county, Massachusetts, on the east bank of the Connecticut River, 4 miles N. of Springfield, with manufactures of cottons, firearms, swords, tools, bicycles, and bronzes. Pop. (1885) 11,528; (1900) 19,170.

Chiem-See (*Keem-Zay*), a lake of Upper Bavaria, 40 miles SE. of Munich, and 1650 feet above sea-level, is 12 miles long, 7 broad, and 512 feet deep. It has three islands; its surplus water is discharged by the Alz into the Inn.

Chiëri (*Ke-eh'ree*), a town of Italy, 12 miles SE. of Turin by rail. Pop. 9494.

Chiëti (*Ke-ay'tee;* anc. *Teate*), an archiepiscopal city of Italy, on a hill near the Pescara, 69 miles E. of Aquila by rail, and only 8 from the Adriatic. It has a fine Gothic cathedral. Pop. 12,273.

Chignecto Bay, an inlet at the head of the Bay of Fundy, in British North America. It separates Nova Scotia from New Brunswick, is 30 miles long and 8 broad, and has an isthmus of only 14 miles wide, with an unfinished ship-railway (undertaken in 1889) between it and the Gulf of St Lawrence.

Chigwell, an Essex village on the border of Hainault Forest, 13 miles NE. of London. Its 'Maypole Inn' figures in *Barnaby Rudge;* and its grammar-school, founded by Archbishop Harsnet of York in 1629, has been enlarged since 1871 at a cost of £10,000. Penn was a pupil. Pop. of parish, 2500.

Chihuáhua, the largest state of Mexico, bounded N. and NE. by New Mexico and Texas, has an area of 87,802 sq. m., and a pop. of 298,100.—Chihuáhua, the decayed capital, is 225 miles S. of El Paso by rail. It has an imposing cathedral (1717–89). Pop. 25,000.

Chikislar, a small port in Russian Turkestan, on the east shore of the Caspian, north of the Atrek's mouth.

Chili (*Tchee'lee;* Span. *Chile*, pron. *Tchee'lay*), one of the republics of South America, on the west coast and bordering on Peru, Bolivia, and Argentina. It may be described as a long strip of territory lying between the summit of the Andes and the Pacific Ocean, extending from about the 18th parallel of south latitude to the southern extremity of Tierra del Fuego. After the war with Bolivia and Peru (1879–81), Chili acquired the coast between 23° and 25° S. claimed by Bolivia, and annexed the Peruvian province of Tarapacá. Chili occupies the Peruvian province of Tacna (with Arica), subject to the payment of a war indemnity by Peru. In the south the disputed claims of Chili and Argentina to Patagonia have been settled by Chili taking all territory and islands south of the 52d parallel and west of 68° 30′ W. This includes the larger portion of Tierra del Fuego. The Strait of Magellan is by treaty considered neutral. The length of Chili is about 2500 English miles. Its breadth varies from 40 to 200 miles. The Andes extend in two parallel lines throughout nearly the entire length of the country; between these two ranges of the 'Cordillera' there is a central valley or tableland. The streams in the north are mostly shallow brooks; in the south they are larger and more numerous, although most are navigable for only a few miles. The Biobio (q.v.) is the largest; the Callecalle, or Rio de Valdivia (100 miles), is the most important, because of the sheltered harbour at its mouth. In the south are also many deep lakes. Mineral waters, chiefly saline and sulphureous, are abundant. The most important islands are those constituting the southern province of Chiloé; Juan Fernandez also belongs to Chili. Owing to its great

extension from north to south, Chili comprises regions of very different nature and climate. The north provinces, Tarapacá, Atacama, and part of Coquimbo, are arid, rainless districts, where the principal industry is mining and extraction of saltpetre. The middle and southern provinces — Aconcagua, Valparaiso, Santiago, O'Higgins, Colchagua, Curicó, Talca, Linares, Máule, Nuble, Concepcion, Arauco, Biobio, Malleco, Cautin, Valdivia—are agricultural, with coalfields. The Patagonian provinces—Llanhique, Chiloé, and Magellanes territory—are densely wooded. The climate of Chili is, on the whole, temperate. In the north it is rather hot and rainless; in the south it is dry for about eight months of the year, and rainy the other four. In Southern Chili generally the land is poor and of hardly any value for agriculture, which, indeed, is carried on in a very primitive fashion; but the soil of the valleys, where large herds of cattle graze, is very fertile. The Andes are almost everywhere visible, covered with perpetual snow. The highest peak is Aconcagua, 22,867 feet; the average height of the great range is 8000 feet. There are many volcanic peaks, mostly extinct. Chili is subject to frequent shocks of earthquake, and occasionally to destructive *terremotos;* the most notable of these recorded was in 1832, when the coast near Valparaiso was thrown up permanently between 3 and 4 feet. In 1835 Concepcion and Talcahuano were destroyed by a fearful earthquake; in 1868 and again in 1875 Iquique and the northern districts suffered.

The population of Chili at the census of 1885 was 2,524,476; in 1901, 3,146,580. Santiago, the capital, has 296,700 inhabitants; Valparaiso, 132,950; Talca, Concepcion, Iquique, and Chillan, from 50,000 to 30,000. The natives of Chili are a mixture of Spanish with the Araucanian Indians. In the upper classes the race has been kept more purely Spanish than in any other South American country. The working-classes are laborious and docile, but it cannot be said that there is as yet any effectual protection for property. The manufactures are confined to copper-smelting, sugar-refining, tanning, brewing, manufactures of soap and candles, biscuits, boots and shoes, woollens, flax, and nitrates.

Chili is a Roman Catholic country, but other religions are tolerated. Education receives much attention. There is a first-class university at Santiago, and a lyceum in every provincial capital. The language spoken in Chili is Spanish, but with many local words of Indian origin.

The value of imports in 1890–1902 varied from $63,000,000 to $160,000,000; the exports varied from $69,000,000 to $175,000,000. About a third of the imports and two-thirds of the exports are from and to Britain, the German and French trade being next in importance. Mineral products represent five-sixths of the total exports. The chief articles of export are nitrate and iodine, copper, silver, gold, manganese, hides, wool, wheat, and barley. The principal imports are cotton, woollen, and jute goods, iron, hardware, coal, machinery, timber, rice, sugar, earthenware, cement, paper, beer, glassware, kerosene, tallow, matches, tea and coffee.

A government broad-gauge railway line runs from Valparaiso to Santiago, crossing the coast-range of the Andes, and thence southwards through the central valley to Concepcion, and through Araucania towards Valdivia, with a total length of about 1750 miles. A branch also runs to Santa Rosa at the foot of the Andes, from which a line was in progress, under difficulties, from 1890 to 1905, to unite with the Argentine railway system, *viâ* the Uspallata Pass, which it crosses at the elevation of 9843 feet above sea-level by means of a tunnel 6¼ miles in length. The length from Valparaiso to Buenos Ayres (from Pacific to Atlantic) is 880 miles.

The credit of Chili stands higher than that of any other South American state. At the beginning of the century the foreign debt amounted to about $85,000,000, and the internal debt, including forced paper currency in circulation, to $25,000,000. The revenue for 1901 was stated at $41,000,000, and the expenditure $43,000,000. The customs revenue, which in 1856 amounted to $4,147,298, in 1901 reached $23,000,000. The gold standard was adopted in 1895, and a loan of $20,000,000 authorised for the conversion of the paper currency.

The constitution of Chili is republican and based upon that of the United States. The cabinet consists of six ministers. The Council of State consists of five members nominated by the president, and six appointed by congress. The legislature is composed of two chambers—the Deputies, about 100 in number; and the Senate, numbering one to every five deputies. From the war of 1879–81 with Peru, Chili enjoyed peace and prosperity till 1891, when owing to President Balmaceda's aiming at dictatorial powers, a rebellion broke out which ended in Balmaceda's defeat. Boundary disputes with Argentina were referred to British arbitration and arranged in 1898.

See works on Chili by Rumbold (1877), Boyd (1881), Markham (1883), Russell (1890), Hancock (1893), and Perez Garcia (1900).

Chilkoot, a pass from Dyea, on the inlet from the Pacific, over the mountains to the head-waters of the Yukon; on the main route to Klondike till the railway by the White Horse Pass.

Chillan, capital of the Chilian province of Nuble, with bathing establishments on the extinct volcano of Chillan (9445 feet). Pop. 36,000.

Chillianwalla, a Punjab village, 5 miles from the Jhelum's east bank, and 85 NW. of Lahore. Here an indecisive but sanguinary battle was fought in the second Sikh war, 13th January 1849.

Chillico'thé, capital of Ross county, Ohio, on the Scioto River and the Ohio Canal, 50 miles S. of Columbus. It has manufactures of paper, leather, &c., and was from 1800 to 1810 the capital of the state. Pop. 12,282.

Chillingham, a village in the north of Northumberland, on the river Till, 8 miles SW. of Belford. To the south is Chillingham Castle, seat of the Earl of Tankerville, built in the reign of Edward III. In the park, as at Cadzow, are preserved a herd of wild white cattle.

Chillon (Fr. pron. *Shee-yon'*), a castle 1½ mile SSE. of Montreux, at the east end of the Lake of Geneva. It was long a state-prison, and in it languished Byron's 'Prisoner of Chillon,' Bonivard.

Chiltern Hills, the southern part of the low chalk range which runs north-east, about 70 miles, from the north bend of the Thames, in Oxfordshire, through Bucks and the borders of Herts and Beds. In Oxford, Herts, and Beds the Chiltern Hills are 15 to 20 miles broad, and the highest point is near Wendover (950 feet).—The hundreds of Bodenham, Desborough, and Stoke, in Buckinghamshire, are called the Chiltern Hundreds. The Stewardship of them (the salary being as fictitious as the duties) is still held to be an office of profit under the crown, and its acceptance by a member of the House of Commons

entails the vacation of his seat (simple resignation without some disqualification not being provided for in parliamentary usage).

Chimbora'zo, a conical peak of the Andes, in Ecuador, 20,498 feet above the sea, but only about 11,000 above the level of the valley of Quito, to the north. From 1745, when La Condamine ascended as high as 16,730 feet, numerous attempts had been made to scale it before Whymper in 1880 twice reached its summit.—The province of Chimborazo, to the south, has an area of 5523 sq. m., and a pop. of 120,300.

Chimbote (*Tchim-bo'tay*), a seaport of Peru, 250 miles NW. of Lima; pop. 2000.

China, Manchuria (q.v.), and its dependencies of Mongolia, I-li, and Tibet (q.v.), constitute the Chinese empire, embracing a vast territory in Eastern Asia only inferior in extent to the total dominions of Great Britain and Russia. The dependencies are not colonies, but subject territories. China Proper is alone dealt with in this article. By its natives the country is never so called, but usually by the Chinese words for 'The Middle State,' or 'The Kingdom of the Great Pure (dynasty).' The name China (*Chi-na*, land of Chin) comes to us from India through Buddhism. Various old names are Serica and Cathay, and in the Bible 'Land of Sinim' (Isa. xlix. 12).

China Proper, washed on the east by the Pacific, consists of eighteen provinces—the three provinces of Manchuria not being reckoned. On the north are Chih-li, Shan-hsi (Shansi), Shen-hsi (Shensi), and Kan-sû; on the west Sze-chwan (Szechuen) and Yun-nan; on the south Kwang-hsi (Kwangsi) and Kwang-tung; on the east Fû-chien (Fukien), Cheh-chiang (Chehkiang), Cheang-sû (Kiangsu), and Shan-tung; and in the centre are Ho-nan, An-hui (Nganhwei), Hû-pei, Hû-nan, Chiang-hsi (Kiangsi), and Kwei-châu (Kweichow). Hainan and Formosa are the chief islands. The total area, often stated at 1,300,000 sq. m., is probably not much short of 2,000,000. The Chinese empire without Corea has an area of 4,218,400 sq. m. The population of the empire is variously estimated at from 300 to 400 millions. The great bulk of this falls to the provinces of China Proper; the population of all the dependencies (Manchuria, Tibet, Mongolia, Zungaria, East Turkestan) making but some 16,000,000 or 17,000,000 of the total. The population of Peking, the capital, is probably under a million. Of (since 1902) nearly forty ports open to foreign commerce, only five have a population under 50,000. That of Canton is estimated at 2,600,000; of Tien-tsin at 950,000; of Han-kau at 750,000; of Fû-châu at 650,000; of Shang-hâi at 455,000; of Ning-po at 250,000.

China Proper may be described as sloping from the mountainous regions of Tibet towards the shores of the Pacific on the east and south. The most extensive mountain-range is the Nan Ling or Southern Range, a far-extending spur of the Himalayas. Commencing in Yun-nan, it bounds with a continuous barrier (penetrated by only a few difficult passes) Kwang-hsi, Kwang-tung, and Fû-chien on the north, and, passing through Cheh-chiang, reaches the sea at Ning-po. North of this long range, and west of the 113th meridian, on to the borders of Tibet, the country is mountainous, while to the east and from the great wall on the north, to the Po-yang lake in the south, there is the *Great Plain*, comprising the greater part of the provinces of Chih-li and Shan-tung, Ho-nan, An-hui, and Chiang-sû.

In the provinces west from Chih-li—Shan-hsi, Shen-hsi, and Kan-sû—the soil is formed of what are called the loess beds, which are extremely fertile, the fields composed of it hardly requiring any other manure than a sprinkling of its own fresh loam. The husbandman in this way obtains an assured harvest two and even three times a year. This fertility, provided there be a sufficient rainfall, seems inexhaustible. The rivers of China—called for the most part *ho* in the north, and *chiang* (*kiang*) in the south, are one of its most distinguishing features. Two of them stand out conspicuous among the great rivers of the world; the Ho, Hoang-ho, or Yellow River, and the Chiang, or Yang-tsze-kiang. They rise not far from each other among the mountains of Tibet. The Ho pursues a tortuous course seaward through North China; the Chiang or Yang-tsze through Central China. The terrible calamities caused by the inundations of the Hoang-ho have procured for it the name of 'China's Sorrow.' So recently as 1887 it burst its southern bank near Châng Châu, and poured its mighty flood, with hideous devastation and the destruction of millions of lives, into the populous province of Ho-nan. The Ho is not much under the Chiang in length—somewhat over 3000 miles. The Grand Canal, when in good order, afforded water communication from Peking to Hang-châu in Cheh-chiang, a distance of more than 600 miles. Steam communication all along the eastern seaboard from Canton to Tien-tsin has very much superseded its use. The lakes are very many, but not on so great a scale as the rivers.

It was in 214 B.C. that the emperor Shih Hwang Tî determined to erect a grand barrier all along the north of his vast empire. The Great Wall is one of the wonders of China, and extends from the Shan-hâi Pass east of Peking westward to the Chia-yü barrier gate, the road through which leads to the 'Western Regions.' Its length in a straight line would be 1255 miles, but, if measured along its sinuosities, this distance must be increased to 1500. It is formed by two strong retaining walls of brick, rising from granite foundations, the space between being filled up with stones and earth. The breadth of it at the base is about 25 feet, at the top 15, and the height varies from 15 to 30 feet.

The country is rich in the products necessary for the support and comfort of the people. There is in it every variety of climate; but the average temperature is lower than in any other country in the same latitude. Wheat, barley, maize, millet, and other cereals are chiefly cultivated in the northern regions, and rice in the southern. Culinary or kitchen herbs, mushrooms, and aquatic vegetables, with ginger and a variety of other condiments, are everywhere produced and largely used. From Formosa there comes sugar, and the cane thrives also in the southern provinces. Oranges, pummeloes, lichis, pomegranates, peaches, plantains, pine-apples, mangoes, grapes, and many other fruits and nuts, are supplied in most markets. Tea is noted below. Opium is increasingly grown. The Chinese are emphatically an agricultural people; irrigation is assiduously and skilfully employed, and no people are so careful to waste nothing that can be used as manure. Pork is the commonest flesh meat, and the number of pigs is enormous. The seaboard, rivers, lakes, and ponds supply an immense quantity of excellent fish taken by the net. Fowls and ducks are largely produced.

Tea does not grow in the north, but is cultivated extensively in the western provinces and

in those south of the Great Chiang. The infusion of the leaves was little, if at all, drunk in ancient times, but now its use is universal. Fû-chien, Hû-pei, and Hû-nan produce most largely the black teas; the green comes chiefly from Cheh-chiang and An-hui; both kinds come from Kwan-tung and Sze-chwan. Next to silk, tea is China's most valuable export. As compared with the populations of western nations, the Chinese are sparing in the use of strong drink; opium is, however, a common luxury. From the 23d century B.C. and earlier, the care of the silkworm, and the spinning and weaving of its produce, have been the special work of woman. The mulberry-tree grows everywhere, and in all the provinces some silk is produced; but Kwan-tung, Sze-chwan, and Cheh-chiang furnish the best and the most. Indigenous to the country also are hemp and other fibrous plants, such as the *Bœhmeria nivea*. Cotton is cultivated most extensively in the great basin of the Chiang. There are few cities which cannot boast of one or more pagodas. The rhinoceros, elephant, and tapir are said still to exist in the forests and swamps of Yun-nan, and tigers occur in some districts. Both the brown and black bear are met with, and several varieties of deer, including the musk-deer. The breed of horses and cattle is dwarfish; asses and mules are better of their sort. The camel is seen in the north and west.

The coalfields of China are enormous—more than twenty times the extent of those of Great Britain; but up to this time the majority of them can hardly be said to have been more than scratched. Immense quantities of iron ore, moreover, must have been extracted from the earth during the millenniums of its history, but a much greater amount is still untouched. Copper, lead, tin, silver, and gold are known to exist in many places, but little has been done to make the stores of them available. The monetary currency is mainly the copper *cash*, cumbrous and often debased. Even foreign silver coins are treated as bullion, and taken by weight; but since 1890 silver dollars are coined at Canton. Good roads are few. Where communication by water is abundant the want of roads is not so much felt. It is owing doubtless to the want of roads that the wheelbarrow is so much used from the Chiang northwards. A smattering of education is widely diffused; but apart from the official classes, who obtain promotion by competitive examinations, those who can read freely or write readily are few. The three religions of China are Confucianism, Tâoism, and Buddhism. It is difficult to estimate the comparative number of their adherents. To claim a majority for those of any one of them is very absurd. As a matter of fact, Confucianism represents the intelligence and morality of China; Tâoism its superstitions; and Buddhism its ritualism and idolatry, while yet it acknowledges no God. Of the outstanding peculiarities of the Chinese may be reckoned the pigtail of the men and the pinched feet of the women. Infanticide is not so common as is often said.

The government of the empire is conducted from the capital, the central authorities directing and controlling the different provincial administrations. There is the Grand Cabinet, the privy-council of the emperor, whose members are few, and hold other substantive offices. There is also the Grand Secretariat, formerly the supreme council. The business on which the cabinet deliberates comes before it from the Seven Boards—of Civil Office, of Revenue, of Ceremonies (including religion), of War, of Punishment, of Works, and, since 1885, of Admiralty affairs. Each Board has two presidents and four vice-presidents, three of them Manchûs and three Chinese. The Tsungli Yamăn, or foreign office, established in 1861, was in 1902 superseded by a new one called Wai-wu-pu; and the Censorate exercises a supervision over the Boards. In the provinces a governor-general and governor are usually associated; below these two functionaries there are the lieutenant-governor (commonly called the treasurer), the provincial judge, the salt comptroller, and the grain-intendant. Each province is required to support itself and to furnish a certain surplusage for the imperial government. The revenue and expenditure are estimated at from £12,000,000 to £15,000,000, derived mainly from land-tax, customs, likin or transit duties, salt-tax, and licenses. China had no foreign debt till 1874; in 1902 its liabilities amounted to about £120,000,000, including the war indemnity to Japan and £64,000,000 indemnity due to the Powers for the 'Boxer' outrages.

The imports of China from abroad amounted in 1887 to 102,263,000 taels, in 1902 to 315,363,905; the exports in 1887 to 85,860,000, and in 1902 to 215,181,584. Of the imports in 1902, a value of nearly 60,000,000 taels was from Britain, nearly 134,000,000 from Hong-kong (Britain and the other foreign countries indirectly), 33,000,000 from India, and 30,140,000 from the United States; while of the exports in 1902, a value of 10,350,000 taels went to Britain, 82,700,000 to Hong-kong, and 28,900,000 to Japan. The chief imports are cotton goods (127,550,000 taels), opium (35,460,000), rice (23,600,000), sugar, metals, oil and kerosene, woollens, fishery products and 'seaweed,' coal, and raw cotton; the exports, silk (79,220,000 taels), tea (22,880,000), raw cotton (13,160,000), sugar, straw-braid, paper, clothing, hides, and china-ware. These figures do not include the very extensive coasting trade, but only goods passed through the twenty-three treaty ports open to foreign commerce (of which Shanghai is by far the most important, Canton being the second), and the Russian overland trade. Between 1887 and 1902 English imports from China declined, according to English official figures, from £6,667,000 to £2,407,289, while English exports to China, which fell to £5,038,000 in 1889, rose again to £7,188,810 in 1902. Of the total shipping entered and cleared in 1902 at Chinese ports, 69,499 vessels of 53,990,000 tons (many steamers), 24,758 of 26,950,200 were British.

The imperial army proper consists of Manchûs, Mongols, and the descendants of Chinese who revolted from the Ming dynasty and joined the Manchûs on their invasion of the empire, the first defection taking place in 1621. These are divided each into eight *corps* with different coloured banners, and as a whole are styled 'The Eight Banners.' In addition to this there is the national army, distributed in more than one thousand camps throughout the provinces, nearly twice as numerous as the imperial, and called 'The Army of the Green Standard,' being in fact little more than a vast militia or *gendarmerie*. The total force on a peace footing is about 300,000, and on a war footing about 1,000,000, but with little cohesion or discipline. The navy possessed by China was all but annihilated in the war with Japan. Since then some swift vessels have been acquired, including two cruisers launched on the Tyne in 1897–98, three small cruisers launched at Stettin in 1897, and a few smaller vessels.

Chinese historical documents begin with the reigns of Yâo and Shun (2356–2206 B.C.). In 403 B.C. we find only seven great states, all sooner or later claiming to be 'the kingdom,' and contending for the supremacy, till Ts'in (Ch'in) put down all the others, and in 221 B.C. its king assumed the title of Hwang Tî, or Emperor. From that year dates the imperial form of the Chinese government, which has thus existed for more than 2100 years. The changes of dynasty have been many, two or more sometimes ruling together, each having but a nominal supremacy over the whole nation. The greater dynasties have been those of Han (206 B.C.–220 A.D.), T'ang (618–906), Sung (960–1279), Yüan (the Mongol, 1280–1367), the Ming (1368–1643), and the Ch'ing (Manchû-Tartar, from the Manchû conquest of China in 1643 to the present date). It was not till after the Cape of Good Hope was doubled, and the passage to India discovered by Vasco da Gama in 1497, that intercourse between any of the European nations and China was possible by sea. It was in 1516 that the Portuguese first made their appearance at Canton; and they were followed at intervals of time by the Spaniards, the Dutch, and the English in 1635. The Chinese received none of them cordially; and Chinese dislike of them was increased by their mutual jealousies and collisions with one another. In the meantime trade gradually increased, and there grew up the importation of opium from India. Before 1767 the import rarely exceeded 200 chests, but in that year it amounted to 1000. In 1792 the British government wisely sent an embassy under Lord Macartney to Peking. A second embassy from Great Britain in 1816 was dismissed from Peking suddenly and contumeliously because the ambassador would not perform the prostrations required. From the measures of the Chinese to prevent the import of opium came the first war with China in 1840; the result of which was the opening of Canton, Amoy, Foo-chow, Ningpo, and Shanghai to commerce, and the cession of Hong-kong to Britain. A second war in 1857, France being allied with Britain, ended in the opening of five more treaty ports. A third war (1860) and the march on Peking did even more to open China to the world. After a war in 1884–85 France secured permanent control of Tongking and Annam. In 1894 Japan, reviving old claims on Corea, drove the Chinese out of Corea, and after victories on land and at sea, captured Port Arthur and Wei-hai-wei. By the treaty of 1894 Japan secured as indemnity Formosa and the Liao-tung peninsula; but the protests of Russia, Germany, and France made Japan resign Liao-tung. Russia obtained a lease of Port Arthur and Talienwan, with railway and other privileges in Manchuria; Germany obtained Kiao-chau and concessions in Shan-tung; and Britain, as an offset, obtained a lease of Wei-hai-wei and sought to secure trading freedom in the Yang-tsze-kiang valley. Russia's refusal to evacuate Manchuria and her movements in Corea led to war with Japan in 1903, the defeat of the Russian armies in Manchuria, the destruction of the Russian fleet, and the fall of Port Arthur (1905), China being nominally neutral. By the peace (1905) Japan secured dominance in Corea, the Russian leases in Liao-tung, and great influence in southern Manchuria and on China generally.

A series of far-reaching reforms, promoted by a nationalist reform party in 1898, were summarily cancelled by the dowager empress, who assumed supreme authority; and the reactionary and anti-foreign 'Boxer' association (more accurately 'The Fist of Righteous Harmony'), encouraged by the court, made extermination of the foreigners its war-cry and besieged the foreign legations in Peking, relieved after a two months' siege by an international army of Japanese, Russians, British, Americans, French, and Germans.

Many Chinese have sought a livelihood abroad, especially in California, British Columbia, the Straits Settlements and Eastern Archipelago, and Australia. More than half the population of Singapore is Chinese; there are 200,000 Chinese in Java, 90,000 in the United States, 36,000 in Australia, and 17,000 in Canada. From 1855 onwards the immigration of Chinese into the United States increased, in 1882 it was checked, and in 1888 practically prohibited. Australia and Canada also restrict Chinese immigration. The admission of Chinese coolies to work in South African mines was, spite of keen opposition, sanctioned under special arrangements, and in 1904–5 some 47,000 established themselves.

The Chinese people are the result of a fusion of various invading Mongolian tribes, from B.C. 3000 to 700 A.D., with the aborigines of various stocks; the Manchû dynasty has ruled since 1644. Three types may still be recognised in China—a northern Manchû-Corean, a central and nearly pure Chinese, and a southern with Malayan and other admixtures. The Chinese language is monosyllabic, the words being indeclinable and wholly uninflected. It is written by means of some 73,000 characters, each of which is the symbol of an idea. The spoken language differs greatly in different parts of the country, though the written language is everywhere the same.

See works on China by Davis (1857), Williamson (1870), Gray (1877), Wells Williams (1883), Richthofen (German, 1885), Boulger (1884 and 1893), Douglas (1887–1900), Simon (1887), Gundry (1893), Curzon (1894), Colquhoun (1898), Krausse (1898), Scidmore (1900), Little (1899–1902), Parker (1901–3).

Chinampo, or CHINNAMPHO, a free port on the N. coast of Corea, 105 m. NW. of Seoul. Pop. 17,000.

Chinandega (*Tcheenanday'ga*), a Nicaraguan town, 30 miles NW. of Leon. Pop. 11,000.

China Sea, the portion of the Pacific Ocean to the east of China and Siam.

Chincha Islands, three bare, rocky islets of Peru, 6½ miles in area and 200 feet high, which in 1841–74 yielded millions of tons of guano.

Chinchilla (*Tchin-cheel'ya*), a town of Spain, 12 miles SE. of Albacete by rail. Pop. 5972.

Chinchon', a town of Spain, 25 miles SE. of Madrid. Pop. 4913.

Chindwa'ra, a town in the Central Provinces, 70 miles N. by W. of Nagpur. Pop. 10,000.

Chindwin, a tributary of the Irawadi (q.v.).

Chingalpat (*Chengalpat*), a town of India, 36 miles SW. of Madras by rail. Pop. 9617.

Chingford, an Essex village, 9½ miles NE. of London, in Epping Forest, with a golf course. Pop. 4400.

Ching-tu, or CHENTU, capital of Sze-chwan, in a fertile plain and rich mining country. It has a great arsenal and a population of a million.

Chin-Kiang, a Chinese port on the Yang-tsze-kiang, 40 miles ENE. of Nanking, opened to foreign trade in 1861. Pop. 235,000.

Chinon (*Shee-non''*), an antique town in the dep. of Indre-et-Loire, on the Vienne, 31 miles SW. of Tours by rail. On a lofty rock are the ruins of its vast old castle, the death-place of Henry II.;

and the place where, in 1429, Joan of Arc revealed her mission to the Dauphin. A farmhouse across the Vienne is pointed out as Rabelais' birthplace. Pop. 4365.

Chin'sura, a town on the right bank of the Húglí, originally Dutch, but ceded to the British in 1825, and now included in Húglí (q.v.).

Chioggia, or CHIOZZA (*Kee-od'ja, Kee-ot'za*), a seaport and cathedral city of Italy, 15 miles SSW. of Venice, on an island at the southern end of the Venetian Lagoon, connected with the mainland by a stone bridge of 43 arches. Pop., inclusive of Sottomarina, 30,084.

Chios (*Keeos;* now *Chio*, Italianised *Scio*), one of the most beautiful and fertile islands in the Ægean Sea, belonging to Turkey, 7 miles off the coast of Asia Minor, at the entrance to the Gulf of Smyrna. It is 30 miles long from north to south, by 8 to 15 miles broad, with an area of 320 sq. m., and a pop. of 70,600, almost all Greeks. The larger northern part is more mountainous than the southern. The climate is delightful and salubrious. Earthquakes are, however, not rare, and one in 1881 caused the death of 3558 persons, and the destruction of property to the value of three to four millions sterling. The products are wine and figs, both noted in classical days, with mastic, silk, lemons, oranges, olives, antimony, and goats' skins. The capital, Chios, about the middle of the east coast, contains about 13,000 inhabitants. On the west coast is a rich monastery, Nea-Moni, founded in the 11th century. Chios, which is one of the seven birthplaces of Homer, was taken by the Genoese (1346), and by the Turks (1566). A number of the Chiotes having in 1821 joined the revolted Samians, a Turkish fleet and army in 1822 inflicted dreadful vengeance; 25,000 Chiotes fell by the sword, 47,000 were sold into slavery, and only some 5000 escaped. A second rising in 1827 was likewise unsuccessful.

Chippenham, a municipal borough in Wiltshire, on the Avon, here crossed by a bridge of twenty-two arches, 13 miles NE. of Bath. An ancient place, it was captured by the Danes from Alfred the Great in 878, and now consists chiefly of a long well-built street. It has a trade in cheese and other agricultural produce, but its cloth manufactures have declined. It lost its last parliamentary member in 1885. Population, 5100.

Chippewa Falls, capital of Chippewa county, Wisconsin, on the Chippewa River, 114 miles by rail E. of St Paul, with saw and flour mills and a large lumber-trade. Pop. 8094.

Chipping Campden. See CAMPDEN.

Chipping Norton (meaning 'northern market-town'), a municipal borough in the north of Oxfordshire, 85 miles NW. of London by rail, with woollen, tweed, and glove manufactures. Pop. 3780.

Chipping Ongar. See ONGAR.

Chipping Sodbury ('southern market-borough'), a Gloucestershire market-town, near the Frome, 10½ miles NE. of Bristol. Pop. of parish, 1128.

Chipping Wycombe. See WYCOMBE.

Chiquimu'la, a town (pop. 6000) in the east of Guatemala, which gives name to the ISTHMUS OF CHIQUIMULA, with a breadth from the Gulf of Honduras to the Pacific of 150 miles.

Chiquinquirá, the largest town in the dep. of Boyacá, Colombia, near the Suarez, 30 miles W. of Tunja, since Indian times a place of pilgrimage. Pop. 18,000.

Chiriquí (*Tchee-re-kee'*), an administrative division of the dep. of Panamá, Colombia, adjoining Costa Rica. Area, 6500 sq. m.; pop. 43,000.

Chirk, a Denbighshire market-town, on the Ellesmere Canal, 9¼ miles S. by W. of Wrexham. Pop. of parish, 2272.

Chislehurst, a village in Kent, 11 miles SE. of London. Sir Nicholas Bacon was a native. Camden Park estate (now built over) was the residence of Camden the antiquary. Napoleon III. died at Camden Place in 1873. There are an Orphanage and a Governesses' Institution here. Pop. of parish, 7500.

Chiswick, a suburban parish of Middlesex, on the north bank of the Thames, 7½ miles W. by S. of St Paul's. Here are some charming old riverside houses (one of them William Morris's home); here too are extensive market-gardens to supply London, and the gardens of the Horticultural Society. In the churchyard are Hogarth's grave and Foscolo's cenotaph; and at the Duke of Devonshire's beautiful villa, Chiswick House, died Fox and Canning. The population is over 30,000.

Chita, or TCHITA, capital of Transbaikalia, on the Chita River and the great Siberian railway, 545 miles E. of Irkutsk. Pop. 12,500.

Chitaldrúg, a town of Mysore, India, 126 miles NW. of Bangalore. Pop. 4571.

Chitrál, a small state under the supremacy of Cashmere, in the upper basin of the Kunar, or Kashkar, a tributary of the Kabul River, and on the borders of Kafiristan.

Chittagong, or ISLAMABAD, a port of Bengal, 220 miles E. of Calcutta, on the eastern side of the Bay of Bengal, and on the Karnaphuli River, about 12 miles from its mouth. Formerly an important centre of trade under the Portuguese, with one of the best ports in India, it has recently regained much of the commerce it lost with the rise of Calcutta. Since 1905 it is a sub-capital of Eastern Bengal and Assam. Pop. 23,200.

Chittor' ('little town'), a town of India, on the Poini, 100 miles W. of Madras. Pop. 9809.

Chiusa (*Kee-oo'za*), the name of several Italian towns, the largest being CHIUSA SCLAFANI, in Sicily, 31 miles SSW. of Palermo. Pop. 6874.

Chiusi (*Kee-oo'zee*), a town 102 miles NNW. of Rome by rail, on an olive-clad eminence in the Val di Chiana, not far from the small Lago di Chiusi. The *Clusium* of the Etruscans, it has yielded many antiquities. Pop. 1824.

Chivasso (*Kee-vas'so*), a town of Italy, on the Po, 18 miles NE. of Turin by rail. Pop. 4375.

Chivilcoy, in the Argentine province of Buenos Ayres, is 110 miles W. of the capital. Pop. 15,000.

Chobe, a tributary of the Zambesi.

Chobham, a Surrey parish, 4 miles NW. of Woking. A camp was formed here in 1853.

Cholet (*Sho-lay'*), in the French dep. of Maine-et-Loire, on the Maine, has manufactures of linens and woollens. Pop. 17,150.

Holu'la, a decayed town of the Mexican state of Puebla, stands nearly 7000 feet above sea-level, on the tableland of Anahuac, 55 miles ESE. of the city of Mexico. The pop. has dwindled from 100,000 in Cortes' day to only 9000. The most remarkable memorial of aboriginal times is the huge *Teocalli* pyramid of earth, clay, brick, and stone, dedicated to the god Quetzalcoatl.

Chon, a loch, 1¾ mile long and 3 furlongs wide, 7 miles WNW. of Aberfoyle.

Chonos Archipelago, a group of bare, thinly peopled islands off the west coast of Patagonia, 44°–46° S. lat., belonging to Chili.

Chorley, a busy town in North Lancashire, 9 miles S. by E. of Preston by rail. It has manufactures of cotton-yarn, jaconets, muslins, fancy goods, calicoes, ginghams, and railway wagons, with neighbouring bleach-fields, print-works, coal-mines, and stone quarries. It became a municipal borough in 1881. Pop. (1851) 8907; (1901) 26,852.

Chosŏn. See COREA.

Chota Nagpore (*Chutiá Nágpur*), a south-west commissionership of Bengal, embracing four British districts, seven petty tributary states, and two semi-independent states. Area of the British districts, 26,966 sq. m.; pop. 4,900,000. Area of the division, 43,020 sq. m.; pop. 6,000,000.

Christchurch, a parliamentary and municipal borough of Hampshire, at the head of the estuary formed by the Avon and Stour, 24 miles SW. of Southampton by road, but 33¾ by rail. The noble church of an Augustinian priory (1150) is 303 feet long by 101 across the transept, and includes every style from Norman to Perpendicular. Special features of interest are the splendid Early English porch, a monument to Shelley, a beautiful rood-screen, and the chapel built by Henry VIII.'s victim, Margaret, Countess of Salisbury. Little remains of a Norman castle. Christchurch possesses one notable specialty, the making of watch and clock fusee-chains. The harbour has high-water twice every tide. The parliamentary borough, 22,350 acres in area, comprises the favourite watering-place Bournemouth, and returns one member; but of the population of 70,000 only 4500 are within the municipal borough of Christchurch, which was incorporated in 1886.

Christchurch, capital of the provincial district of Canterbury, New Zealand, on the river Avon, about 8 miles from Port Lyttelton by rail. It has tramways, government offices, a museum (with many specimens of the Moa), a cathedral (1881; a reproduction of that of Caen in France), and a hospital. The water-supply is derived from artesian wells. Two parks and the Government Domain afford ample pleasure-grounds. Boot manufacturing is one of the chief industries. An earthquake in 1888 damaged the cathedral and other buildings. Pop. 18,500, but with Sydenham and the suburbs, 52,000.

Christiania, the modern capital and chief commercial town of Norway (the ancient capital is Trondhjem, 'home of the throne,' where the kings are still crowned), 59° 56′ N. lat., 10° 50′ E. long., is built on the northern end of the Christiania Fiord. Pop. (1801) 8931; (1891) 151,239; (1900) 227,626. Christiania is named after Christian IV., who commenced building it in 1624 after the destruction of the ancient city of Oslo by fire. It is the seat of the national parliament, of the High Court of Judicature, and of the National University, with over 1500 students. Connected with this is the students' garden, a library of 350,000 volumes, a botanical garden, zoological and other museums, laboratories, and observatory. The Meteorological Institute was established in 1866. There are two national and historical palaces here, one in the city quite near the university, and one, Oscarshall, beautifully situated two miles from the city on an eminence overlooking the fiord. There is a national picture-gallery, and a very interesting museum of northern antiquities. The *Dom* or Cathedral and Trinity Church are the principal ecclesiastical buildings. The old fortress *Akershus Faestning* still remains, and is used as a promenade, but has little military value. Among other public buildings are the Houses of Parliament, two theatres, the Freemasons' Hall, &c. The staple industry of Christiania is its shipping trade; its chief export is timber. A considerable industry is the brewing of *Christiania öl*, a sort of lager beer, with resinous flavour, largely consumed throughout Norway, and exported. The minor manufactures are cotton, canvas, engine-works, nail-works, paper-mills, and cariole-making. The harbour is closed by ice for three or four months most winters.

Christiansand, a city of Norway, near its southernmost extremity, on a sandy plain at the mouth of the Otteraa. A garrisoned town, built by Christian IV. in 1641, it has several dockyards, and a good harbour much used for refuge. At the mouth of the harbour is the beautiful island of Odderö, laid out with public gardens and promenades. Christiansand has a considerable trade in timber, pitch, stock-fish (salted cod), fish-oil for curriers, salmon, mackerel, lobsters, and white ptarmigans, the last two chiefly for the London market. Ship-building is a considerable industry. Christiansand, which suffered much by fire in July 1892, has a cathedral. Pop. 14,813.

Christiansfeld, a settlement (1772) of Moravian Brethren in Northern Sleswick.

Christianstad, a Swedish town, on the Helge, 14 miles from the Baltic, and 351 SSW. of Stockholm by rail. It possesses an arsenal, a magnificent church, and a senate-house. Pop. 10,370.

Christianstadt, the chief town of the Danish West Indian island of Santa Cruz, on the north shore. Pop. 5500.

Christiansund (63° 10′ N. lat., 7° 50′ E. long.), sometimes confounded with Christiansand though 350 miles farther north, is a picturesque Norwegian coast-town, built on three wooded islands. It has a considerable trade with Spain and Italy in salt-fish, and is a calling-place for passenger steamers. Pop. 12,331.

Christmas Island, in the Pacific, is in 1° 57′ N. lat., and 157° 27′ W. long., with some guano deposits, and is a British possession.—Another Christmas Island, annexed to Britain in 1888, lies about 250 miles SW. of Java, is 6 miles long by 4 broad, and consists of rich phosphate deposits and coral on a volcanic substratum, part of it covered with luxuriant vegetation.—There is a third Christmas Island in the Bras d'Or, Cape Breton.

Chrudim, a town of Bohemia, 74 miles ESE. of Prague by rail. It manufactures sugar, beer, alcohol, and artificial manure. Pop. 12,886.

Chubut, or CHUPAT, a Welsh colony in Patagonia, so named from a river whose mouth is 600 miles S. of the river Plate. The first settlers, 151, arrived in July 1865; and the population, after dwindling to 120, rose to 690 in 1876, and 3800 in 1900. The principal town, Trerawson, or Rawsonville, about 5 miles from the sea, is named after Dr Rawson, an Argentine statesman.

Chudleigh, a Devon market-town, on the Teign, 10 miles SSW. of Exeter. Pop. of parish, 2000.

Chudleigh, Cape, on the north coast of Labrador, at the entrance of Hudson Strait.

Chumbi, the valley leading by the Chola Pass from Sikkim into Tibet.

Chumbul', an Indian river, rising in the Vindhyan Mountains, and flowing 650 miles NE. to the Jumna.

Chunar', a town of India, on the right bank of the Ganges, 26 miles SW. of Benares. Pop. 9548.

Chungking, the commercial capital of Western China, a treaty port in Sze-chwan (q.v.), on the Yang-tsze-kiang, 1500 miles from its mouth. Pop. 900,000.

Chupra, a town of Bengal, on the Gogra, near its confluence with the Ganges. Pop. 46,500.

Chuquisaca (*Tchoo-kee-zâh'ka*), or Sucre, capital of Bolivia, on a mountain-closed tableland, 8825 feet above the sea. Pop. 21,000.

Chuquito (*Tchoo-kee'to*), a town of Peru, on the west shore of Lake Titicaca. Pop. 5000.

Chur (Fr. *Coire;* Roumansch *Cuera*), capital of the Swiss canton of Grisons, 80 miles SE. of Zurich by rail, stands 1940 feet above the sea, on the road to the Splügen pass. Pop. 11,500.

Church, States of the, a territory or group of 'Papal States' in Central Italy, once under the sovereignty of the pope, since 1870 incorporated with the kingdom of Italy. Till 1859 they covered 15,000 sq. m., and had a population of 3,000,000—including, besides Rome, the Romagna, Umbria, the March of Ancona, and the towns of Bologna, Perugia, and Viterbo.

Churchill River, Canada, rises under 55° N. lat., and flows near 1000 miles generally NE. through a series of lakes to Hudson Bay, near Fort Churchill.

Churn, a headstream of the Thames, 16 miles long, rising 3¾ miles S. by E. of Cheltenham.

Chusan', the largest island of a small archipelago, a mile off the E. coast of China, opposite Ningpo. Area, over 230 sq. m.; pop. 200,000 to 250,000. Although mountainous in the centre, it is generally fertile. Ting-hai, the capital (pop. 40,000), has a land-locked harbour. It was held by the British in 1840–41, and again in 1860. The sacred island of Pu-tu, a mile E. of Chusan, is covered with Buddhist temples, pagodas, and monasteries, with over a thousand monks.

Cicester. See Cirencester.

Cienfuegos (*See-en-foo-ay'gōs*), a port of Cuba, on the south coast, on the Bahia de Jagua, 140 miles ESE. of Havana by rail. Pop. 30,560.

Cieza (*Thee-ay'tha*), a town of Spain, 26 miles NW. of Murcia. Pop. 13,892.

Cilicia, an ancient division of Asia Minor, now included in the Turkish province of Adana, lay between the Taurus range and the Cilician Sea.

Cimiez (anc. *Civitas Cemeneliensis*), a place with many fine villas, 2¾ miles N. of Nice. Queen Victoria stayed here in 1895.

Cincinnati (*Sin-sin-nah'tee*), the second city of Ohio, on the north bank of the river Ohio, 270 miles SE. of Chicago by rail, opposite the cities of Covington and Newport in Kentucky. Steam-ferries and six lofty bridges connect the city with the Kentucky shore; the suspension bridge by Roebling is 2250 feet long, and cost $1,800,000. Cincinnati occupies an exceedingly broken and irregular site, the more densely built parts being enclosed between the river and steep hills. The lower business streets are liable to be flooded at times. The river front is upwards of 14 miles in length. A second terrace is 50 or 60 feet higher, and a district between the hills and the Miami Canal, known as 'over the Rhine,' is appropriated to the large German colony. The suburbs are built on a succession of irregular hills, by whose steepness they are broken into a series of some five and twenty villages, interspersed with parks (including Eden Park, of 216 acres). Among the public buildings are the post-office; the Chamber of Commerce; a large art museum; an art school, and a college of music (1878); a large music-hall, with a noted grand organ; a commodious city building; and a court-house. There are more than 250 churches, including a Roman Catholic cathedral; besides many handsome theatres, hotels, and public halls, hospitals and asylums, and schools of every grade, including medical, law, and divinity seminaries—the Presbyterian Lane Theological Seminary is famous. To the Cincinnati University, the Cincinnati Observatory and Astronomical School are attached; there are large libraries, a zoological garden, the Cuvier Club and the Historical and Philosophical Society. The city is a centre of musical and art culture, and its decorative pottery and wood-carving have a national reputation. It has a large river and canal traffic, and many railways converge here. Amongst the factories are clothes-factories, foundries, machine shops, coach-works, works for the manufacture of furniture, tobacco, shoes, leather, &c. There is some boat-building and printing; and the slaughter-houses, stock-yards, and grain-elevators are very extensive. Cincinnati was settled by white men in 1780, and was named in honour of the military Society of the Cincinnati. It was incorporated as a city in 1819, and early attained the name of 'the queen city of the west;' as also that of 'Porkopolis,' from its great trade in pork. Great riots occurred in 1884, and were with difficulty suppressed by the military. Pop. (1850) 115,436; (1880) 255,139; (1890) 296,908; (1900) 325,902, about a third being of German origin.

Cinque Ports. The five great ports on the coast of Kent and Sussex lying opposite to France—Sandwich, Dover, Hythe, Romney, and Hastings—were, subsequently to the battle of Hastings, constituted by the Conqueror a jurisdiction entirely separate from the counties of Kent and Sussex, and erected into a sort of county palatine, under a warden, the seat of whose administration was Dover Castle (now Walmer Castle). Privileges similar to theirs were afterwards extended to Winchelsea and Rye; and all the seven municipal towns except Winchelsea had subordinate ports and towns attached to them, which were called *limbs* or *members*. See Montagu Burrows, *Cinque Ports* (1888).

Cintra, a town of Portugal, 17 miles WNW. of Lisbon. Pop. 5500. The convention of Cintra (1808), between Britain and France, provided for the evacuation of Portugal by the French.

Ciotat, La (*She-o-ta'*), a seaport in the French dep. of Bouches-du-Rhône, on the Mediterranean, 23 miles SE. of Marseilles by rail. Pop. 11,474.

Circars, The Northern (*Sarkár*, 'a government'), the historical name for an Indian territory lying along the coast of the Bay of Bengal, from 18 to 100 miles wide, with an area of 17,000 miles. It nearly corresponds with the present Madras districts of Ganjam, Vizagapatam, Godavari, Kistna, and parts of Nellore and Karnûl.

Circassia, a territory on both sides of the western Caucasus. See Caucasus.

Cirencester, a town of Gloucestershire, amid the Cotteswold Hills, on the Churn, a headstream of the Thames, and on the Thames and Severn Canal, 14 miles SSE. of Cheltenham, and 18 NW. of Swindon. It has a very fine Perpendicular church (restored 1867), a public hall (1863), some remains of an abbey (1117), and, 1 mile distant, an agricultural college (1846), a Tudor edifice. Near this is the handsome seat of Earl Bathurst. There is a considerable trade in wool and agricultural produce, and the town is a hunting centre. Till 1867 it returned two members; till 1885 one. The population is over 7500. Cirencester (pron. *Cisseter*) was the Roman *Corinium*, and was stormed by Rupert in 1642 and 1643. The chronicler Richard of Cirencester was a native.

Cis-Sutlej States, a term including the British districts of Umballa (Ambala), Ludhiana, Firozpur, Hissar, and the native states of Patiala, Jind, and Nabha.

Citeaux (*See-tō'*; anc. *Cistercium*), the mother abbey of the great Cistercian monastic order (founded here in 1098), stands 12 miles S. of Dijon, in the French dep. of Côte d'Or. The abbey buildings, nearly destroyed in 1798, have been converted into an industrial and agricultural reformatory for juvenile offenders.

Città di Castello, a cathedral city of Italy, on the Tiber, 25 miles NNW. of Perugia. Pop. 5433.

Cittavec'chia. See MALTA.

Ciudad Bolivar. See ANGOSTURA.

Ciudadela (*The-oo-da-day'la*), a seaport town (formerly capital) of Minorca, on the west coast, with a cathedral. Pop. 8431.

Ciudad Real (*The-oo-dhadh Ray-al'*; 'royal city'), a town of Spain, between the Guadiana and Jabalon, 105 miles S. of Madrid by rail. Pop. 14,500. Area of province of Ciudad Real, 7840 sq. m.; pop. 305,000.

Ciudad Rodrigo (*The-oo-dhadh Rodh-ree'go*; 'Roderic's Town'), a fortified cathedral city of Spain, 17 m. from Portuguese frontier, 56 SW. of Salamanca by rail, on a steep hill above the Agueda; taken by the English (1706) and French (1707), by Wellington (Jan. 1812). Pop. 6984.

Civita Castellana (*Chee'vi-ta Kas-tel-lah'na*), a town of Italy, 25 miles N. of Rome. It has a cathedral (1210), and a citadel, now a state-prison. Pop. 5251. In the neighbourhood are remains of the Etruscan *Falerii*.

Civita Vecchia (*Chee'vi-ta Vek'ki-a*; anc. *Portus Trajani*), an Italian fortified port, 50 miles NW. of Rome by rail. Pop. 14,980.

Clackmannan, the county town of Clackmannanshire, on the Devon, 2 miles E. by S. of Alloa. An eminence is crowned by the ruined tower of the Bruces. Pop. 1505.

Clackmannanshire, the smallest county of Scotland, lies between the counties of Perth, Fife, and Stirling, and slopes from the green Ochil Hills to the Forth. Its greatest length is 10 miles; area, 38 sq. m. Pop. (1871) 23,747; (1901) 32,019. Clackmannan is the county town, but Alloa and Alva are more important places. Clackmannanshire, with Kinross-shire, returns one member to parliament. See Beveridge, *Between the Forth and the Ochils* (1888).

Clacton, an Essex watering-place, 15 miles SE. of Colchester. Pop. 7500.

Clairac, a town in the French dep. of Lot-et-Garonne, on the Lot, 18 miles NW. of Agen. Pop. 1550.

Clairvaux (*Clair-vō'*), a village of France, 10 miles SE. of Bar-sur-Aube. Its once famous Cistercian abbey, founded in 1115 by St Bernard, was suppressed at the Revolution, and the extensive buildings are now used as a prison.

Clanwilliam, a division of the Western Province, N. of Capetown, South Africa, embracing the rich valley of Olifant River West. Chief village, Clanwilliam, on Jan Dissels River.

Clap'ham, a south-western suburb of London, lying a mile S. of the Thames, and forms one of the London parliamentary boroughs, returning one member, but for municipal purposes it is divided between the metropolitan boroughs of Battersea and Wandsworth. Clapham Common is still an open common of 200 acres.—The 'Clapham Sect' was a name given by Sydney Smith to the Evangelical party, as represented especially by Venn, Romaine, Zachary Macaulay, and Wilberforce.

Clapton, a north-east district of London.

Clara, a market-town of King's county, 65 miles W. of Dublin. Pop. 1111.

Clare, a maritime county in the province of Munster, Ireland, lying between Galway Bay and the Shannon. It has a length of 67 miles, a greatest breadth of 43, and an area of 1294 sq. m. In the east the hills reach a height of 1758 feet. The sea-line is high and rocky, in parts precipitous, and occasionally from 400 to 680 feet high, with many isles and fantastic detached rocks. The chief rivers are the Shannon and the Fergus. The county has about 100 small lakes. The south-west third of the county forms part of the Munster coalfield. There are lead-mines, slate and marble quarries, and many chalybeate springs. The chief towns are Ennis (the county town), Kilrush, Kilkee, Ennistimon, and Killaloe. Pop. (1841) 286,394; (1901) 112,129, nearly all Catholics. The county returns two members. There are many cromlechs, raths, remains of abbeys, and old castles, and several round towers, one at Kilrush being 120 feet high. Till Elizabeth's time the county was called Thomond; its present name comes from an English adventurer, Thomas de Clare, who received from Henry III. a part of all the land he might conquer from the Irish.

Clare, (1) one of the most interesting of the smaller towns of Suffolk, 19 miles SSW. of Bury. It has a fine old castle, and gives an earl's title to the British sovereign. Pop. of parish, 1657. —(2) A village of County Clare, on the Fergus, 23 miles NW. of Limerick. Pop. 590.—(3) Or CLAREMORRIS, a town of County Mayo, 14 miles SE. of Castlebar. Pop. 1119.

Clare Island, a Mayo island (5 × 3 miles), in the Atlantic, at the entrance of Clew Bay.

Claremont, a mansion at Esher, Surrey, 14½ miles SW. of London. Built for himself by Sir John Vanbrugh, and rebuilt by Clive in 1768, it was the death-place of the Princess Charlotte and of Louis Philippe, and in 1882 became the private property of Queen Victoria.

Claremont, a village of New Hampshire, U.S., on the Sugar River, 55 miles by rail WNW. of Concord. Pop. 6565.

Claremorris. See CLARE.

Clarence, an English ducal title, by some derived from Clare in Suffolk, but usually understood to be the French form of *Glarentza* (Ital. *Chiarenza*), a small port on the west coast of the Morea, in Greece, 50 miles SW. of Patras—the title having come to Edward III. through his wife, Philippa of Hainault.

Clarendon Park, Wiltshire, 3 miles ESE. of Salisbury, the seat of a former royal palace, where a great council met in 1164.

Clarens, a beautiful Swiss village on the Lake of Geneva, 3½ miles SE. of Vevey by rail.

Clase, a northern suburb of Swansea.

Clausthal. See KLAUSTHAL.

Clava, a plain 6 miles E. of Inverness, with many stone-circles and standing-stones.

Claverdon, a Warwickshire village, 8 miles N. of Stratford-on-Avon.

Claverhouse, 3½ miles N. by E. of Dundee, the birthplace of Viscount Dundee.

Claycross, or CLAYLANE, a town of Derbyshire, on the Rother, in a coal and iron region, 4½ miles S. of Chesterfield. Pop. 8358.

Clayton, a Yorkshire township, 3½ miles W. by S. of Bradford. Pop. 5119.

Clear, CAPE, a headland of Clear Island, the most southerly point of Ireland, with a lighthouse and telegraph station. Clear Island, 66 miles SW. of Cork, is 1504 acres in area.

Cleator Moor, a town of Cumberland, 4 miles SE. of Whitehaven, with coal-mines and iron-furnaces. Pop. 8120.

Cleaven Dyke, a rampart in Caputh parish, Perthshire, at the Isla's junction with the Tay, a supposed site of the Battle of the Grampians (86 A.D.).

Cleckheaton, a town in the West Riding of Yorkshire, 5 miles SSE. of Bradford, with manufactures of textiles and machinery. Pop. 12,826.

Clee Hills, a Shropshire range (1805 feet) to the N. of Ludlow.

Cleethorpe, a Lincolnshire watering-place, at the mouth of the Humber, 2½ miles ESE. of Great Grimsby. Pop. (with Thrunscoe) 13,000.

Cleeve Abbey, Somerset, 2½ miles SW. of Watchett, a ruined Cistercian abbey (1188).

Cleish Hills, Kinross-shire, 1240 feet high.

Cleland, a Lanarkshire mining village, 3½ miles E. by N. of Motherwell. Pop., with Omoa, 3000.

Cleobury-Mortimer, a Shropshire market-town, on the Rea, 12 miles E. of Ludlow. Pop. of parish, 1463.

Clerkenwell, a London parish, lying within the parliamentary borough of Finsbury, and due north of St Paul's. It is largely inhabited by watchmakers, goldsmiths, and opticians. The Fenian attempt to blow up Clerkenwell prison took place 13th December 1867.

Clermont (mediæval *Clair-mon*^{rt} ; *Clarus Mons*, or *Clarimontium*), the name of several towns in France. (1) In the dep. of Oise, 41 miles N. of Paris by rail. Pop. 4617.—(2) CLERMONT-FERRAND (Roman *Augustonemetum*), the capital of the dep. of Puy-de-Dôme, between the rivers Bedat and Allier, 135 miles S. of Paris by rail. Among its buildings are the old Gothic cathedral, built of dark lava from a neighbouring range of extinct volcanoes ; the fine church of Notre Dame, where Peter the Hermit preached the first Crusade ; the handsome Palais des Facultés ; and the government buildings, formerly a convent (1250). The chief manufactures are candied fruits, wax matches, chemicals, linen, rope, lace, and machines. There are several mineral springs. The bishopric of Clermont was founded in 253 ; and seven ecclesiastical councils were held here during the middle ages. A statue has been erected to Pascal, who, as well as Gregory of Tours, was a native of Clermont. Pop. (1872) 32,963 ; (1901) 45,367.—(3) CLERMONT L' HERAULT, 33 miles W. of Montpellier by rail. Pop. 4803.

Clevedon, a pleasant Somersetshire watering-place, on the Bristol Channel, 12 miles by road but 16 by rail WSW. of Bristol. The historian Hallam, and Arthur, his son, lie in the old parish church ; Coleridge lived a while here at Myrtle Cottage (1795) ; and Clevedon Court, a mediæval mansion of singular beauty, though much damaged by fire in 1882, is the 'Castlewood' of Thackeray's *Esmond*. The population is about 6000.

Cleveland, a wild mountainous district, with some picturesque fertile valleys, forming the east part of the North Riding of Yorkshire between Whitby and the Tees. In the south the hills rise 1300 to 1850 feet. An extraordinary change has been wrought in the aspect of the country by a discovery of ironstone in the Cleveland hills ; since 1851, lonely hamlets have become populous towns. See works by J. C. Atkinson (1891) and J. Leyland (1892).

Cleveland, the largest city of Ohio, is on the south shore of Lake Erie, 350 miles by rail E. of Chicago. The city is built mainly upon a plain from 60 to 150 feet above the lake, and is divided into the east and west sides by the tortuous valley of the Cuyahoga River, which is crossed by two high-level bridges—one mainly of stone (1878), and one of iron (1888, 3931 feet long). There are other bridges at the lower level in the valley. The 'flats' along the river are occupied by vast lumber-yards, factories, mills, coal-yards, ore docks, ship-yards, &c. The river is the harbour, and an outer harbour is protected by an immense United States breakwater. The business centre of Cleveland extends east from the lower part of the river-valley for three-fourths of a mile along Superior Street. On the Public Square, 10 acres in area, are the custom-house and post-office, a court-house, the fine old 'Stone' (first Presbyterian) Church, a theatre, an hotel, banks, and fountains. From the south-east corner of the square Euclid Avenue, according to Bayard Taylor the most beautiful street in the world, runs eastward beyond Wade Park, a beautiful tract of about 65 acres. Farther east is Lake View Cemetery, with the monument of President Garfield, 125 feet high. A great wealth of gardens and shade-trees is noticeable throughout the 'Forest City,' except in the poorest quarters ; few houses are built in blocks, and tenements are virtually unknown. The water is supplied from Lake Erie. Cleveland has a large music-hall, several theatres, over 250 churches, the Western Reserve University, and colleges, medical schools, hospitals, asylums, and two large libraries ; some 60 periodicals, daily, tri-weekly, weekly, and monthly, are published in the city. Cleveland's rapid growth is due mainly to the fact that nowhere else can the rich iron ores of Lake Superior, the coal of Northern Ohio, and the limestone of the Lake Erie islands, be brought together so cheaply ; its position at the north terminus of the Ohio Canal being very advantageous, and seven railways terminate here. The chief industries of the city are the various manufactures of iron, including steel rails, forgings, wire, bridges, steel and iron ships, engines, boilers, nails, screws, sewing-machines, agricultural implements and machinery of all kinds, the refining of petroleum, wood-work, and other manufactures of endless variety. Cleveland is the greatest iron ore receiving point in America, one of the largest lumber markets in the

country, and the mercantile centre of an extensive and productive region. The site was laid out by General Moses Cleveland in 1796; in 1836 it was incorporated. Pop. (1850) 17,034; (1880) 160,146; (1890) 261,353; (1900) 381,768.

Cleves (Ger. *Kleve*, Dutch *Kleef*), a town of Rhenish Prussia, 2½ miles from the Rhine, and 48 NW. of Düsseldorf. The fine old castle, the Schwanenburg, partly built on a commanding rock, is the reputed scene of the legend of the Knight of the Swan, made familiar by Wagner's opera of *Lohengrin*. Anne of Cleves, fourth wife of Henry VIII., was born here. Cleves has manufactures of cotton and leather goods, tobacco, &c. Pop. 14,170.

Clew Bay, an inlet of the Atlantic, on the west coast of County Mayo, about 15 miles long by 9 broad. At the entrance is Clare Island (3949 acres; pop. 62), which, as well as Inishgort (27 acres; pop. 23), has a lighthouse.

Clewer, a Berkshire parish, on the Thames, 1 mile W. of Windsor. Here is a well-known Anglican sisterhood. Pop. 5766.

Clichy (*Clee-shee'*), a town on the Seine, to the north-west of Paris, of which it forms a suburb. It has numerous manufactories, especially of chemicals and catgut, and is much affected by washerwomen. Pop. 40,000.

Cliefden. See CLIVEDEN.

Clifden, a Connemara seaport, 50 miles NW. of Galway. Pop. 911.

Clifford Castle, a ruin on the Wye, Herefordshire, 2 miles NNE. of Hay, the traditional birthplace of Fair Rosamond.

Clifton. See BRISTOL.

Clifton, a town and port of entry of Ontario, on the Niagara River, 2 miles below the Falls. Here is a noble railway suspension bridge, 800 feet long and 240 above the water. Pop. 1610.

Clifton Moor, Westmorland, 3 miles SSE. of Penrith, the scene of a Jacobite skirmish (1745).

Clinton, (1) capital of Clinton county, Iowa, on the Mississippi, here crossed by an iron railroad bridge, 4000 feet long, 60 miles SSE. of Dubuque by rail. It has numerous mills, foundries, and factories, and a trade in lumber and grain. Pop. (1870) 6129; (1900) 22,698.—(2) A town of Massachusetts, on the Nashua River, 45 miles W. of Boston by rail. It has large manufactures of ginghams and plaids, carpets, combs, and machinery. Pop. 13,424.—(3) A post-village of New York, 9 miles WSW. of Utica, is the seat of Hamilton College (1812), a Presbyterian foundation. Pop. 1336.

Clippens, a Renfrewshire village, 1 mile NNE. of Johnstone. Pop. 428.

Clipstone, in Sherwood Forest, Notts, 5 miles NE. of Mansfield, the seat of an ancient royal palace.

Clitheroe, a municipal borough in Lancashire, on the Ribble, 35 miles N. of Manchester. It lies on a low eminence, at the base of Pendle Hill (1831 feet). Clitheroe has cotton and paper mills, and extensive lime-quarries are wrought in the neighbourhood. Its 12th-century castle was dismantled by the parliamentarians in 1649. The free grammar-school dates from 1554. Stonyhurst College (q.v.) lies 4 miles SW. A borough since about 1280, Clitheroe till 1832 returned two members to parliament, then till 1885 one. Pop. (1851) 7300; now 11,500. See Whitaker's *History of Whalley and Clitheroe* (1801; 4th ed. 1876).

Cliveden, a seat with noble woods in Bucks, on the Thames, 3¼ miles NNE. of Maidenhead. Originally built by Charles II.'s Duke of Buckingham, but burned in 1795 and 1849, it was sold in 1893 by the Duke of Westminster to the American millionaire, W. W. Astor.

Cloch Point, on the Clyde, opposite Dunoon, with a lighthouse.

Cloghan (*Clo'an*), a village of King's county, 5 miles NE. of Banagher.

Clogher (*Clo'er*), (1) a decayed episcopal city and quondam parliamentary borough of Tyrone, on the Blackwater, 15 miles SSE. of Omagh. The Protestant see is now united to Armagh. The cathedral and episcopal palace are handsome edifices. Pop. 225.—(2) A fishing-village of County Louth, 7 miles NE. of Drogheda. Pop. 653.

Clonakilty, a seaport of County Cork, at the head of Clonakilty Bay, 33 miles SW. of Cork. Pop. 3098.

Clones, a town of County Monaghan, 94 miles NW. of Dublin by rail. Pop. 2062.

Clonfert, an ancient episcopal city of Ireland, is in the extreme east of County Galway. The bishopric was founded in the 6th century, and ceased to be a separate Anglican one in 1602, being ultimately incorporated with Killaloe; but it is still the see of a Roman Catholic bishop.

Clonmacnoise, a holy place of Ireland, on the Shannon, 10 miles by river S. of Athlone. An abbey was founded here by St Kieran in 548; and the spot is still marked by the ruins of the 'seven churches' (including the 'cathedral,' the ruins of which belong to the church rebuilt in 14th century), two round towers, and a great Celtic cross. This 'Iona of Ireland' was the burial-place of many princes.

Clonmel', a municipal borough in Tipperary and Waterford counties, on the Suir, 135 miles SW. of Dublin by rail. In 1650 Cromwell besieged it, and demolished the castle. It gave birth to Sterne and Lady Blessington, and was the scene of Smith O'Brien's attempted rising in 1848. Till 1885 it returned one member. Here Bianconi first established his jaunting-cars; and Clonmel is still a tourist centre. Pop. 10,167.

Clontarf', where in 1014 Brian Boru defeated the Danes, was long famous as a watering-place, and in 1900 was incorporated with Dublin city.

Cloughjordan, a village of Tipperary, 87 miles SW. of Dublin. Pop. 518.

Clovelly, a coast-village of North Devon, 11 miles WSW. of Bideford. From its rude little pier it climbs 400 feet upwards in a steep narrow combe. Pop. of parish, 641.

Clovenfords, a famous vinery on the Tweed, 3½ miles W. of Galashiels.

Cloyne, an ancient episcopal town of County Cork, 15 miles ESE. of Cork. The cathedral was founded in the 6th century by St Colman; opposite is a finely preserved round tower over 90 feet high. The see, held once by Bishop Berkeley, is united to that of Cork; but there is also a Catholic diocese. Pop. 820.

Clugny (*Clün-yee'*), or CLUNI, a town in the dep. of Saône-et-Loire, on the Grosne, 15 m. NW. of Mâcon by rail. Pop. 3618. Its famous Benedictine abbey (910–1790) attained a degree of splendour and influence unrivalled by any similar institution of the middle ages. The grand basilica or abbey church, commenced by St Hugh, the eighth abbot, in 1089, and dedicated by Pope Innocent II. in 1131, was, until

the construction of St Peter's at Rome, the largest church in Christendom. Of this magnificent and imposing pile one tower and part of the transept alone remain; the site of the nave is traversed by a road. See two works by Sir G. F. Duckett (1886–88), with others in French by Pignot, Lorain, Penjon, Cuchérat, and Champly.

Clumber Park, a seat of the Duke of Newcastle, in Notts, 3 miles SE. of Worksop.

Clun, a Shropshire market-town, 6½ miles N. by E. of Knighton. Pop. of parish, 2115.

Clunes, a gold-mining township of Victoria, 97 miles NW. of Melbourne by rail. Pop. 4242.

Clunie, a Perthshire parish, 5½ miles W. by S. of Blairgowrie, with an isleted loch, and a castle associated with the 'Admirable' Crichton.

Clusium. See Chiusi.

Clwyd (*Kloo'id*), a river of north Wales, rises on Craig Bronbanog, in Denbighshire, and runs 30 miles to the Irish Sea, below Ruthin flowing through the fertile Vale of Clwyd, 24 miles long, and 2 to 7 wide.

Clyde (Welsh *Clwyd*, 'strong'), a world-famous river and firth of south-west Scotland. The river rises as Daer Water at an altitude of 1600 feet, and runs 106 miles northward and north-westward, round Tinto Hill (2335 feet), and past Lanark, Bothwell, Glasgow, and Renfrew, till at Dumbarton it merges in the firth. Its drainage area is 1481 sq. m., of which 111 belong to the South, North, and Rotten Calders, 127 to the Kelvin, 200 to the Black and White Carts, and 305 to the Leven and Loch Lomond. Tributaries higher up are Powtrail Water, Little Clydes Burn, Douglas Water, Medwyn Water, Mouse Water with its deep gorge through the Cartland Crags, and, near Hamilton, the Avon. In the four miles of its course near Lanark the river descends from 560 to 200 feet, and forms the four celebrated Falls of Clyde—Bonnington, Corra, Dundaff, and Stonebyres Linns, of which the finest, Corra, makes a triple leap of 84 feet. Above the falls the Clyde is a beautiful pure trout-stream, traversing pastoral uplands; below, it flows through a rich fertile valley, here broadening out into plain, there pent between bold wooded banks. But its waters become more and more sluggish, begrimed, and polluted, the nearer they get to Glasgow. Since 1765 upwards of ten millions sterling has been expended on rectifying and deepening the channel from Glasgow to Dumbarton, no less than 40,000,000 cubic yards of materials having been lifted by steam-dredgers during 1844–1905. The result has been that whereas 'a hundred years ago there was a depth at low-water of 15 inches, now they have at Glasgow from 18 to 20 feet at low-water;' and that whereas even lighters could once 'not pass to and from Glasgow except it be in the time of flood or high-water at spring-tides,' now a steamer has been docked at Glasgow that is second in size only to the *Great Eastern*. In 1812 Henry Bell launched on the Clyde the first boat in Europe successfully propelled by steam; and since then the river's shipping and shipbuilding (the latter dating from about 1718) have both grown enormously.—The Firth, which some make begin at Glasgow (the highest point of the tide), and some not until Gourock, extends 12 miles westward and 52 southward, and broadens from 1 mile at Dumbarton to 1⅞ at Dunoon, and 37 at Ailsa Craig. It sends off the Gareloch, Loch Long, Holy Loch, and the Kyles of Bute; contains the islands of Bute, Arran, and the two Cumbraes; is bordered along its ancient sea-margin with an almost continuous fringe of seaports and watering-places (Greenock, Rothesay, Ayr, &c.); and, like the last 14 miles of the river, is one of the world's chief commercial water-ways. See works by Deas (1881–87), Millar (1888), and Pollock (new ed. 1893).

Clydebank, a town of Dumbartonshire, on the right bank of the Clyde, 5½ miles NW. of Glasgow. It has great shipbuilding works. Pop. (1881) 1634; (1891) 10,589; (1901) 21,591.

Clydesdale. See Clyde and Lanarkshire.

Clynder, a Dumbartonshire watering-place on the Gareloch. Pop. 331.

Cnossus, Gnossos, or Knossos, anciently the chief town of Crete, said to have been built by Minos, where since 1900 very important excavations of the great palace have been made by Mr A. J. Evans and others. It stood N. of the centre, three miles from the sea.

Coahuila (*Ko-a-wee'la*), a state of Mexico, next to Texas. Area, 64,000 sq. m.; pop. 281,000.

Coalbrookdale, in Shropshire, extends 8 miles along the Severn, rich in coal, iron, and lime.

Coalisland, a village of Tyrone, 5 miles NE. of Dungannon. Pop. 785.

Coalville, an urban district of Leicestershire, 16 miles NW. of Leicester by rail. Pop. (1901) 15,280.

Coänza, Kwanza, or Quanza, a river of West Africa, rising in the east of the Portuguese territory, and after a generally NW. course, entering the Atlantic 30 miles S. of St Paul de Loando. It is navigable for light vessels as far as the Cambambe cataracts, over 120 miles.

Coast Range, a range of mountains nearly parallel to the Pacific Coast in California (q.v.).

Coatbridge, a thriving manufacturing town of Lanarkshire, since 1885 a municipal burgh, 9 miles E. of Glasgow by rail, and 32 W. by S. of Edinburgh. The centre of a great mineral district, it is surrounded by numerous blast-furnaces, and produces malleable iron, boilers, tubes, tin-plate, firebricks and tiles, and railway waggons. Coatbridge has grown very rapidly in size and prosperity—a growth largely due to the development of the Gartsherrie Ironworks of Messrs Baird, first put in blast, 4th May 1830. Pop. (1831) 741; (1851) 8564; (1881) 18,425; (1901) 36,991. See A. Miller's *Rise and Progress of Coatbridge* (Glas. 1864).

Coatzacoalco (*Co-at'za-co-al'co*), a river of the isthmus of Tehuantepec in Mexico, rises in the Sierra Madre, and falls into the Gulf of Mexico, 130 miles SE. of Vera Cruz.

Cobán (*Ko-bâhn'*), capital of the dep. of Vera Paz, in Guatemala, on the fertile Tierra Templada plateau, 85 miles N. of the town of Guatemala. Pop. 24,700.

Cobham, (1) a village of Kent, 4 miles SSE. of Gravesend.—(2) A Surrey village, on the Mole, 6½ miles W. of Epsom. Pop. of parish, 3978.

Cobija (*Ko-bee'ha*), a seaport of the Chilian province of Antofagasta, on a shallow, open bay.

Coblenz, or Koblenz (*Kō-blentz*), capital of Rhenish Prussia, 56 m. SSE. of Cologne by rail, at the junction of the Rhine and Moselle. It is very strongly fortified with a wall and a series of detached forts, including the almost impregnable castle of Ehrenbreitstein (q.v.), on the opposite side of the Rhine. Among the principal buildings are the church of St Castor (836), the oldest

in the Rhine district; the Kaufhaus (1479); the Protestant Florins Kirche (12th century); the church of Our Lady (1250–1431); and the old Jesuit College, now a gymnasium. The extensive palace was built in 1778–86 by the last Elector of Trèves, and restored in 1845. The favourable position of Coblenz secures it an active commerce in wine, corn, mineral waters, &c. It manufactures champagne (about 1,000,000 bottles annually, exported chiefly to England), cigars, japanned goods, and furniture. Pop. (1875) 29,290; (1901) 45,146. Coblenz (Fr. *Coblence*) was known to the Romans as *Confluentes*. From 1018 till 1796 it belonged to Trèves. In 1798 it was made the capital of the new French dep. Rhine and Moselle, and by the treaty of 1815 was given to Prussia.

Cobourg, a port of entry of Ontario, on Lake Ontario, 69 miles NE. of Toronto. It contains a Wesleyan university, and several woollen-mills, foundries, and breweries. Pop. 4242.

Coburg (*Ko'boorg*), capital of the duchy of Coburg, in the united duchy of Saxe-Coburg-Gotha, is picturesquely situated on the left bank of the Itz, 81 m. SSE. of Eisenach by rail. The ducal palace (1549) is one of the principal buildings, others being the government buildings, the arsenal, containing a public library, the town-house, and the palace of the Duke of Edinburgh. The old castle of Coburg, mentioned in 1057, beside which Coburg originally grew up, is situated on an eminence 530 feet above the town. It afforded Luther a shelter during the Diet of Augsburg in 1530, and in 1632 successfully resisted a siege by Wallenstein. In 1782 it was converted into a prison, but in 1838 it was thoroughly restored. Luther's apartments are preserved as he used them. Coburg has manufactures of woollen, cotton, marquetry, baskets, porcelain, furniture, and carriages, and exports beer. Pop. (1875) 14,567; (1900) 20,460. Prince Albert, to whom a statue was erected in the market-place of Coburg by Queen Victoria in 1865, was born at Rosenau, a ducal seat 4 miles to the north.

Coburg Peninsula, the most northerly part of Australia to the west of the Gulf of Carpentaria, running out north-westward towards Melville Island.

Cocanada (*Cocanah'da*), a seaport and headquarters of Godavari district 315 miles N. of Madras. Pop. (1881) 30,441; (1901) 48,096.

Cochabamba, a central dep. of Bolivia, with offshoots of the Eastern Cordilleras, and extensive plateaus. Area, 26,685 sq. m.; pop. 360,000. The capital, Cochabamba (8396 feet above the sea), on a tributary of the Guapay, was founded in 1565, as Ciudad de Oropesa. Pop. 34,705.

Cochin, a native state of India, politically connected with Madras, between the British district of Malabar and the state of Travancore, with the Arabian Sea on the SW. Area, 1362 sq. m.; pop. 822,906. Cochin formed a treaty with the East India Company in 1798.

Cochin, once the capital of the above principality, but now a seaport of Malabar district, in the Madras presidency. In spite of a bar, it is next to Bombay on this coast for shipbuilding and maritime commerce. Here the Portuguese erected their first fort in India in 1503. They were supplanted by the Dutch in 1663; and in 1796 Cochin was captured by the British. Pop. 17,698. Half a mile south is a town of the same name, in the native state (pop. 15,775).

Cochin-China, a name for Annam (q.v.), is used specially for French Cochin-China, a part of French Indo-Chine, occupying the south extremity of the Indo-China peninsula, and bounded N. by Cambodia and Annam; area, 23,000 sq. m.; population, 3,000,000, chiefly Annamites, but comprising also Cambodians, Chinese, &c. Through nearly its whole extent Cochin-China is low and almost flat, but to the north and east rises into hills. It is watered in the west by two branches of the Mekong, the Han-giang and the Tien-giang. In the east the Dong-nai River flows from north-east to south-west, receiving the Saigon River from the north-west. These and other rivers are all connected with one another by the innumerable *arroyos* and canals which intersect Cochin-China in all directions. The temperature rises in the dry season (October to April) to 95° F. by day and 62° by night, and in the wet season varies between 68° and 86°. The soil, mostly alluvial, is exceedingly fertile, producing the best rice in the world. Sugar-cane, tobacco, cotton, arachis, mulberry, indigo, maize, tea, betel, hemp, are raised on a small scale; and coffee, cacao, and vanilla have also been introduced. A railway of 44 miles and a steam-tramway run from Saïgon, the capital; Cape St Jacques is joined by telegraph to Singapore, Tonkin, and Hong-kong.

Cockburnspath, a Berwickshire village, 7 miles SE. of Dunbar.

Cockenzie, a Haddingtonshire fishing-village, 1 mile NE. of Prestonpans. Pop. 1678.

Cockermouth, a town of Cumberland, on the Derwent, 25 miles SW. of Carlisle, and 12 NW. of Keswick. A ruined castle crowns a bold height on the left bank of the Cocker, near its influx to the Derwent. It became Mary Stuart's prison in 1568, and in 1648 was dismantled by the parliamentarians. Wordsworth was born here in an old-fashioned house still standing. Till 1867 Cockermouth returned two members to parliament; till 1885 one. Pop. 5364.

Cockpen', a Midlothian parish, 7½ miles SE. of Edinburgh.

Cockthorpe, a Norfolk parish, 5 miles NE. of Walsingham. Sir Cloudesley Shovel was a native.

Cocos. See KEELING ISLANDS.

Cod. See CAPE COD.

Codogno, a town of Northern Italy, 17 miles SE. of Lodi by rail. Pop. 8935.

Cœle-Syria (*See-leh'*; 'Hollow Syria'), now called El-Bukâ'a, 'the deep plain,' a valley of Syria, extending between the ranges of the Lebanon and Anti-Lebanon. It is 1706 feet above the sea, and is watered by the Orontes (now El-Asi). Above the valley stand the ruins of Baalbek.

Coggeshall, a town of Essex, on the Blackwater, 44 miles NE. of London. It has a school, founded by Sir Robert Hitcham (1636), remains of a Cistercian abbey (1142), a good Decorated church, and some manufactures of silk, velvet, and lace. It is supposed to have been the Roman *Canonium*. John Owen was minister here. Pop. of parish, 2730. See Beaumont's *History of Coggeshall* (1890).

Cognac (*Kon-yak'*), a town in the French dep. of Charente, on an old castle-crowned hill over the Charente, 42 miles SE. of Rochefort by rail. The cultivation of the vine and distillation of brandy, hence called *Cognac*, form the chief industry of the district. Francis I. was born here. Pop. (1872) 12,950; (1901) 18,454.

Cohoes, a manufacturing city of Albany county, New York, on the Hudson, at the mouth of the Mohawk, 3 miles above Troy, and on the Erie Canal. It has cotton-mills, knitting-mills, and manufactures of axes, gas-piping, machines, &c. Pop. (1860) 8799; (1900) 23,910.

Coilsfield, or MONTGOMERIE, an Ayrshire estate near Tarbolton, with memories of Burns and Highland Mary.

Coimbatore (*Co-im'ba-tore*), a town of Madras Presidency, on the Noyil, 304 miles SW. of Madras by rail, and 1437 feet above the sea. Population, 55,000.

Coimbra (*Co-im'bra*), capital of the Portuguese province of Beira, on a hill above the Mondego, 135 m. NNE. of Lisbon by rail. It was the capital of Portugal for about two centuries and a half from its erection into a kingdom in 1139, and many of the early kings are buried in and around the old town. It has two cathedrals, and a university, the only one in Portugal, with over 700 students. It was originally established at Lisbon in 1288, but was permanently transferred here in 1537. Pop. 18,369.

Coína, a town of Spain, 20 miles WSW. of Malaga. Pop. 9972.

Coire. See CHUR.

Cojutepeque (*Ko-hoo-te-pay'kay*), a town of San Salvador, Central America, 15 miles E. of the capital. Pop. 10,000.

Colberg, or KOLBERG, a seaport and watering-place of Prussia, in Pomerania, on the Persante, near its mouth in the Baltic, 170 miles NNE. of Berlin by rail. It manufactures woollens, agricultural machines, and spirits. Pop. 20,250.

Colchester, an ancient municipal and parliamentary borough in the NE. of Essex, on the right bank of the Colne, 51 miles NE. of London, and 12 miles from the sea. It is built on the ridge and sides of a promontory, with a port on the river at a suburb called the Hythe, which has a quay for vessels of 150 tons. It is a town of special historical and antiquarian interest. Before the Roman conquest of the island it was the British 'Royal Town' of *Cunobelin* (the *Cymbeline* of Shakespeare); and here the Emperor Claudius founded a *colonia*—the first Roman town in Britain. There are still many remains of that town. The walls are the most perfect Roman walls in England. Immense quantities of pavements, coins, pottery, and other remains of domestic use and personal adornment have been found here. The tower of Holy Trinity Church has all the characteristics of Saxon architecture. The castle, homing a very interesting museum, is the largest Norman keep in England. In the Norman west front of St Botolph's Priory the Roman bricks are a striking feature; and all the old churches have an intermixture of Roman brick in their walls. The Protestant refugees from the Low Countries at the end of the 16th century introduced the baize and serge trade, which became an important manufacture, and spread into the neighbouring towns and villages. Colchester was one of the eight 'Dutch Congregations' incorporated by royal license. The wars with Spain in the reign of Queen Anne closed the markets for these goods, and the trade died out. A chief historical event was the siege and capture of the town by the parliamentarians (1648). Colchester now is a large military depot; and the fishery of the Colne and its creeks has for centuries been famous for the quality of its oysters. Colchester returns one member. Pop. (1851) 19,443; (1901) 38,373. See the Rev. E. Cutts's *Colchester* ('Historic Towns' series, 1888).

Coldingham, a Berwickshire village, 46 miles ESE. of Edinburgh, with remains of an Augustinian priory (1098). Pop. 482.

Coldstream, a Berwickshire town, 15 miles SW. of Berwick by rail, on the Tweed, with a fine bridge by Smeaton (1766). Pop. 1482.

Coleford, in Gloucestershire, 4 miles ESE. of Monmouth, pop. 2540; also a town of Somerset, 6 miles NW. of Frome, pop. 1520.

Colenso, a small town of Natal, on the Tugela, 15 miles S. of Ladysmith, where on 15th Dec. 1899 Buller was defeated by the Boers.

Coleorton, Leicestershire, 3 miles E. by N. of Ashby-de-la-Zouch, the seat of Sir George Beaumont, connoisseur and art-patron. See Knight's *Memorials of Coleorton* (2 vols. 1887).

Coleraine, a river-port in County Londonderry, on the Bann, 4 miles from its mouth, 33 by rail NE. of Londonderry. It has manufactures of fine linens, pork-curing, distilling, and important river fisheries. Until 1885 Coleraine returned a member to Parliament. Pop. (1861) 6236; (1901) 6929.

Coleroon, the largest and most northerly branch from the Kaveri, flows 94 miles to the Bay of Bengal.

Colesberg, a town of Cape Colony, 142 miles by rail SW. of Bloemfontein. It was the scene of active operations during the war, 1899–1902. Pop. about 2000.

Coleshill, a Warwickshire market-town, 10 miles ENE. of Birmingham. Pop. of parish, 2535.

Colima (*Ko-lee'ma*), a Pacific Mexican state, with an area of 2694 sq. m., and a pop. (1890) of 72,591. The capital is Colima, 1450 feet above the sea, and 40 miles ENE. of the port of Manzanillo. Pop. 20,251. Beyond the state frontier, about 35 miles NE. of the capital, rises the volcano of Colima (12,750 feet), which burst out in June 1869.

Colinsburgh, a Fife village, 1¾ mile N. by W. of Kilconquhar station. It was founded about 1718 by Colin, Earl of Balcarres. Pop. 354.

Colinton, a Midlothian village, on the Water of Leith, 4 miles SW. of Edinburgh. Pop. 776.

Coll, one of the Argyllshire Hebrides, 16 miles W. of Tobermory in Mull. It is 13 miles long, 1 to 3½ broad, 326 feet high, and 30 sq. m. in area. Pop. (1801) 1162; (1901) 432.

Colle, a cathedral city of Italy, on the Elsa, 24 miles SSW. of Florence. Pop. 5090.

Collingwood, a town of Ontario, on the south shore of Georgian Bay. It has factories, shipyards, and grain-elevators, and a considerable trade in lumber and grain. Pop. 5445.—Another Collingwood is a suburb of Melbourne (q.v.).

Collumpton. See CULLOMPTON.

Colmar, the capital of the German district of Upper Alsace, on a plain near the Vosges, 42 miles SSW. of Strasburg. It is one of the chief seats of the cotton industry in Alsace, other manufactures being paper, leather, ribbons, and hosiery. Colmar is an old place, having been raised to the rank of a free imperial city in 1226. Fortified in 1552, its fortifications were razed in 1673 by Louis XIV. Pleasant boulevards now occupy their place. Colmar was formally ceded to France in 1697, but was recovered by Germany in 1871. Pop. (1875) 23,778; (1900) 36,800.

Colne, a town of East Lancashire, on a high ridge near the source of the Calder, a western branch of the Ribble, 26 miles N. of Manchester. It manufactures cotton calicoes and mousselines-de-laine. Pop. (1871) 7335; (1901) 23,000.

Colney Hatch, a village of Middlesex, 6½ miles N. of London, with a great lunatic asylum, opened in 1851.

Cologne (Ger. *Köln*), a city and free port on the left bank of the Rhine, 362 miles by rail WSW. of Berlin, 175 SE. of Rotterdam, 149 E. of Brussels, and 302 NE. of Paris. Formerly an independent city of the German empire, it is now the most important town of Rhenish Prussia; a fortress of the first rank, forming a semicircle along the Rhine, and connected with the town of Deutz on the opposite bank by a bridge of boats, and an iron bridge, 1362 feet long, for railway and carriage traffic. Pop. (1871) 129,233; (1900) 372,229. The old streets are mostly narrow and crooked; but the area freed by the removal of the ancient fortifications was purchased in 1882 by the corporation for about £600,000; its most prominent feature is the handsome 'Ringstrasse' or boulevard, nowhere less than 60 feet wide, which encircles the entire old town. The new fortifications include a number of detached forts, planted round Cologne and Deutz, within a radius of about 4 miles from the cathedral. The church of St Maria im Capitol was consecrated in 1049; in St Ursula are preserved the bones of the 11,000 virgins. The cathedral is one of the noblest specimens of Gothic architecture in Europe. Traditionally founded by Archbishop Hildebold, during Charlemagne's reign in 814, and gifted by Frederic Barbarossa in 1162 with the bones of the three Magi, it was rebuilt after burning in 1248. The choir was consecrated in 1322; and the work was carried on till 1509, when it was suspended; but the work of renovation began in 1823, and in 1842 the foundation-stone of the new part was laid. The naves, aisles, and transepts were opened in 1848; the magnificent south portal was completed in 1859; in 1860 the iron central *flèche* was added; and the western spires, the crown of the edifice, were finished in 1880. The church measures 440 feet in length, and 240 in breadth; the spires rise 515 feet. The great bell, the 'Kaiserglocke' (1887), made of French cannon, weighs over 26 tons. Among secular buildings are the 14th-century town-house; the noble Gothic Gürzenich (1441–52), a banqueting-hall, now containing the exchange; the modern law-courts; and the Wallraf-Richartz Museum, with a good collection of paintings. The situation of Cologne is extremely favourable for commerce; and the manufactures include the making of eau-de-Cologne, beet-sugar, tobacco, glue, carpets, soap, leather, furniture, pianos, chemicals, and spirits of wine. The city was founded by the Ubii, about 37 B.C., and was at first called *Ubiorum oppidum;* but a colony being planted here in 50 A.D. by Agrippina, the wife of the Emperor Claudius, it received the name of *Colonia Agrippina*. It entered the league of the Hanse towns in 1201, and contended with Lübeck for the first rank. Cologne was at a very early period the seat of a bishopric, elevated at the end of the 8th century into an archbishopric, whose holders took their place amongst the princes and electors of the empire. The archbishopric was secularised in 1801, when the city also lost its independence, and the Congress of Vienna assigned the whole territories to Prussia.

Colombia, a republic occupying the north-west corner of the South American continent, and till 1903, when Panamá (q.v.) became independent, including also the Isthmus of Panamá. Its area is estimated at about 510,000 sq. miles (nearly as large as Great Britain, France, and Spain together). The population amounts to about 4,000,000, including some 200,000 uncivilised Indians in the remote forests. The situation of Colombia, washed by two oceans, with a coast-line of nearly 3000 miles, and many good harbours, is very favourable to commerce. The surface of the country is extremely varied, with lofty mountains in the west, and vast plains in the east scarcely above the level of the sea. For the mountain system, which spreads out in three great ranges, like the rays of a fan, see ANDES. From the Central Cordillera descend the two principal rivers of Colombia, the Magdalena and its tributary the Cauca, which flow north into the Caribbean Sea, besides several affluents of the Amazon in the east, and the Patía, which forces its way to the Pacific through a gorge between cliffs 10,000 to 12,000 feet high. The Eastern Cordillera, by far the largest chain, consists of a series of extensive tablelands, cool and healthy, and is the most thickly populated portion of the republic; on one of its plateaus, at an elevation of 8694 feet, stands the capital, Bogotá (q.v.). Eastward from this Cordillera stretch vast *llaños* or plains, through which flow many tributaries of the Orinoco. Other rivers are the San Juan (navigable 150 miles), on the Pacific coast, and the Atrato and Zulia flowing north. In the course of one day's journey, the traveller may experience in this country all the climates of the world; perpetual snows cover the summits of the Cordilleras, while the valleys are smothered in the rich vegetation of the tropics. The climate of Panamá is notoriously unwholesome, and in some parts of Bolívar and Magdalena marsh fevers abound. The hot region, extending to an elevation of about 3200 feet, produces in abundance rice, cacao, sugar-cane, bananas, yams, tobacco, indigo, cotton, caoutchouc, vegetable ivory, medicinal plants, resins, and dyewoods. In the temperate zone, from 3200 to 8500 feet above the sea, the coffee plant, the fig, and the cinchona-tree flourish. The wax-palm extends beyond this region, and is found at a height of nearly 11,000 feet, and large crops of potatoes, grain, and leguminous plants are raised in the cold region; but from 10,000 feet rises the bleak *páramo*, with its scanty vegetation, ending in lichens at the snow-line. The fauna of Colombia is very varied, including the condor, capybara, tapir, armadillo, sloth, seventeen kinds of monkeys, jaguar, puma, ocelot, margay, and bear. The boa and numerous other snakes are common, alligators swarm in the rivers. Enormous herds of cattle are found throughout the temperate zone. In minerals the country is exceedingly rich, although the mines have been little wrought, owing to the lack of roads. Yet from the dep. of Antioquia alone over £400,000 worth of gold is annually exported. The dep. of Tolima is the richest in silver. Iron, copper, lead, platinum, coal, sulphur, zinc, antimony, arsenic, cinnabar, rock-salt, crystal, granite, marble, lime, gypsum, jet, amethysts, rubies, emeralds, porphyry, and jasper are also found.

The only industries common to all the deps. of Colombia are agriculture and the rearing of cattle. Coarse cloths, soap, and candles are manufactured; and the so-called Panamá straw-hats are exported. The transit trade across the

Isthmus of Panamá (q.v.), which was formerly very important, was lost to the republic in 1903, when Panamá became a separate state. The foreign trade proper is mainly with Great Britain and the United States. The imports are mostly food-stuffs, textiles, machinery, and ironwares; the exports, coffee, gold, silver, and other ores, caoutchouc, ivory-nuts, divi-divi pods (for tanning), tobacco, cacao, cotton, cinchona, cattle, balsams, timber and dyewoods, hides and wool. At the beginning of the 20th century the annual value of exports was $20,000,000, and of imports $19,000,000. Of the export trade 27 per cent. goes to the United States, and 25 per cent. to Britain. The revenue for the usual biennial periods averages about $29,000,000, and the expenditure about $40,000,000, showing a serious deficit. The internal debt amounts to about $11,350,000. The foreign debt, mostly to Britain, was cut down in 1897, by arrangement, to $13,122,000, but even so the interest fell steadily into arrears. There are 400 miles of railway in Colombia and over 9000 miles of telegraph.

The population is mainly descended from the numerous Indian tribes, partly Hispanicised in language and habits. The chief aborigines of the country, the *Chibchas* or Muyscas, inhabiting the plateau of Bogotá, were a comparatively civilised race at the discovery of the New World; the uncivilised Indians are now mostly confined to the eastern plains, the northern portion of Magdalena, and the district of Darien and the Atrato. The pure whites form about a fifth of the entire population, and the Indian half-breeds more than half; mulattoes and *zambos*, resulting respectively from the union of negroes with whites and Indians, exceed a sixth of the whole. Slavery was finally abolished in 1852, and in 1870 a system of compulsory education was adopted. The state church is Roman Catholic, but toleration in matters of religion is guaranteed.

Colombo (*Kalan-totta*, 'the Kalany ferry'), the capital of Ceylon, is situated on the western side of the island. Since the construction of the great breakwater begun in 1875, the harbour has been greatly improved, especially by works in 1894–1906; trade has of late years vastly increased, Colombo having superseded Galle. It is the seat of an Anglican bishop, and is an important missionary centre. Colpetty, a beautiful suburb, shaded by groves of the cocoa-nut palm, is a favourite retreat. Lord Napier of Magdala was born here. The Portuguese, who fortified the place in 1517, altered its older name Kalambu, in honour of Columbus. The Dutch succeeded to the Portuguese, and to the Dutch the British in 1796. Pop. (1871) 100,238; (1901) 158,093.

Colon'. See Aspinwall.

Colonia, a dep. of Uruguay, on the Plata, below the Uruguay River. Area, 2200 sq. m.; population, 54,000. The capital, Colonia del Sacramento, on the Plata, 100 miles above Monte Video, has a good harbour, a dock for vessels of 1000 tons, and 1500 inhabitants.

Colonna, Cape (anc. *Sunium Promontorium*), a Greek headland, the southmost point of Attica, crowned by a temple of Minerva, thirteen of whose white marble columns (whence the modern name) are still standing.

Colonsay and **Oronsay**, two of the Argyllshire Hebrides, 16 miles NNW. of Port Askaig in Islay, separated from each other by a sound, 100 yards wide, and dry at low-water. Colonsay, which rises to a height of 493 feet, is 16 sq. m. in area; Oronsay, only 3. On the latter are a sculptured cross and a 14th-century Austin priory; whilst in the former are standing-stones, a bone cave, Colonsay House (1772), and an obelisk to the lawyer, Duncan M'Neill, Lord Colonsay (1794–1874). Pop. (1851) 933; (1901) 313, of whom 12 were in Oronsay.

Colorado (*Co-lo-rah'do*; Span. 'reddish'), a remarkable river of North America, formed in 39° 17′ N. lat., 109° 50′ W. long., by the union of the Grand and Green rivers, rising, one in Colorado state, the other in Wyoming. Below the junction, the main affluent in Utah is the San Juan, and in Arizona the Colorado Chiquito or Flax River, the Bill Williams, and the Rio Gila, all from the left. The only important affluent the Colorado receives from the right is the Rio Virgen. From the junction of the Grand and Green, the general course of the stream is to the south-west, through the southern part of Utah and the north-west of Arizona; and it afterwards separates Arizona from Nevada and California. The lower part of its course is in Mexican territory, where it flows into the north extremity of the Gulf of California. The most striking features of the Colorado basin are its dryness, and the deeply channelled surface of the greater part of the country. Almost every stream and watercourse, and most of all the Colorado itself, has cut its way through stratum after stratum of rock, until now it flows, in a great part of its course, at the bottom of a deep trench or cañon. For nearly 400 miles below the mouth of the Colorado Chiquito, the main stream thus makes its way through a great plateau, forming what is called the Grand Cañon of the Colorado, one of the most remarkable ravines in the world. The cañon-walls throughout the upper part of the great cañon are from 4000 to 7000 feet in height, and are often nearly perpendicular. This over-drained river basin has an area of 240,000 sq. m. The whole course of the river below the junction is about 900 miles; to its remotest sources it is 2000 miles. Navigation, though much impeded by rocks and sand-bars, is possible for light-draught steamers for over 600 miles. See Powell's *Canyons of the Colorado* (1893), Dutton's book on the geology, and Dellenbaugh's *Romance of the Colorado* (1903).

Colorado River of Texas rises by many head-streams in north-west Texas, winds 900 miles south-eastward, and discharges its waters by two main outlets into Matagorda Bay. It is little used for navigation. Its valley is fairly fertile and supplied with timber.

Colorado, a state of the American Union, in 37°–41° N. lat., and 102°–109° W. long., traversed from north to south by ranges of the Rocky Mountains. It takes its name from the river Colorado, to the basin of which all the western slope of the state belongs, as the eastern does to the Mississippi valley; while part of the south is drained by the Rio Grande and its head-streams. The area is 103,645 sq. m., or rather more than half that of France, Colorado being fifth of the states in size. The high plains and over-drained *mesas* to the west are not clearly marked off from the mountain-region; and much of the western slope is actually mountainous. The eastern slope, which embraces about two-fifths of the whole state, is, apart from the foot-hills skirting the flank of the mountain-region, an open and comparatively treeless plain, with a surface singularly monotonous, and for the most part devoted to the pasturage of cattle and sheep. This level region averages 5000 feet in altitude.

and its lowest point is 3000 feet above sea-level. The mountain region contains more than a hundred peaks exceeding 13,000 feet, the loftiest being Blanca Peak (14,464 feet). Six passes cross mountain-ranges at points over 12,000 feet high; the Argentine Pass is 13,000 feet in altitude. Railways are led across many of these passes. A marked feature of the mountain-region is presented in the *parks*, or rich mountain-valleys, often very spacious, and generally bearing evidence of being the dried basins of lakes. The central mountain-region, with its parks, cañons, and hot springs, and its rich mineral deposits, has attracted most attention; the western part of the state is far less accessible and less developed. The rainfall is small; but a good many important streams take their rise in the state, including several tributaries of the Colorado; the Arkansas and South-Platte, flowing to the Mississippi; and the Rio Grande. Extensive and important irrigation-works are fed by some of these streams. From the dryness of the air, Colorado has a great reputation as a health-resort. The medicinal and thermal springs are numerous. A disease called 'mountain fever' is endemic in some places. Agriculture is remunerative in all sections where irrigation can be effected. Insect-plagues, including the Colorado potato-beetle, have proved very destructive; the Rocky-mountain locust has of late been comparatively harmless.

The discovery of gold (1858) in the neighbourhood of Pike's Peak led to the first important settlements in this region. Since 1873 the silver production has far exceeded that of gold, and the state took rank as the first in out-turn of silver, second or third in its gold, and first or second in the production of the precious metals in general. The depreciation of silver and the currency legislation of 1893 led to the closing of some of the silver-mines, and on the other hand a development of gold-mining took place, so that from 1897 Colorado was the chief gold-producing state of the Union, and from 1900 onwards produced annually twice as much as California. In the working of the silver ores much lead is obtained. There are great beds of coal. Iron and Bessemer steel rails are among the manufactures; copper, cement, fireclay, and manganese are wrought; and there are thirty petroleum wells near Florence. Not quite one-half of this region was acquired by the United States from France in 1804; the remainder was ceded by Mexico in 1848. The southern part has a small Spanish-speaking population, partially of Indian descent. Colorado was organised as a territory in 1861, and was admitted as a state in 1876. The principal towns are Denver, the capital (106,713), and Pueblo (24,558). Pop. of Colorado (1860) 34,277; (1870) 39,864; (1880) 194,327; (1885) 243,910; (1890) 412,198; (1900) 539,700.

Colorado Springs, a popular summer-resort of Colorado, situated on the *Fontaine qui Bouille* Creek, 75 miles S. of Denver by rail. Pop. (1880) 4226; (1890) 11,140; (1900) 21,085.

Columbia, the name of nearly thirty places in the United States, of which the most important are: (1) The capital of South Carolina, at the head of navigation on the Congaree River, 130 miles NNW. of Charleston by rail. It has a fine granite state-house ($3,000,000), a Presbyterian theological seminary, and the university of South Carolina (1806). Pop. (1880) 10,036; (1900) 21,118. —(2) A borough of Pennsylvania, on the Susquehanna, 80 miles W. of Philadelphia, with iron-furnaces and rolling-mills, and manufactures of machinery, flour, &c. Pop. 12,599.—(3) The capital of Maury county, Tennessee, on the Duck River, 45 miles SSW. of Nashville by rail, with manufactures of ploughs, furniture, and flour. Pop. 6370.—(4) The capital of Boone county, Missouri, 24 miles E. of Boonville, with manufactures of flour, tobacco, and woollens, and with the state university (1840). Pop. 6000.

Columbia, or OREGON, after the Yukon the largest river on the west side of America, rises in British Columbia, on the west slope of the Rocky Mountains, near Mounts Brown and Hooker, in about 50° N. lat., has a very irregular course, generally south-west, through Washington, forms the northern boundary of Oregon for about 350 miles, and enters the Pacific by an estuary 35 miles long and from 3 to 7 wide. Its estimated length is 1400 miles; its drainage area 298,000 miles, its chief affluents being Clarke's Fork and the Snake River (with very remarkable cañons). Navigation is rendered difficult by a surf-beaten bar, and by falls and rapids; still, goods are conveyed by steamboats and short intermediate railways for nearly 500 miles. The extraordinarily abundant salmon-fisheries of the Columbia have been largely developed; and there are many canneries, mostly near the mouth of the river.

Columbia, BRITISH, is a province of the Dominion of Canada, bounded on the N. by the 60th parallel of latitude; on the S. by the United States; on the W. by the Pacific Ocean and part of Alaska; and on the E. by the provisional districts of Alberta and Athabasca (North-west Territories). Its area is 390,344 sq. m., including Vancouver Island (14,000 sq. m.) and Queen Charlotte Islands (5100 sq. m.), 200 miles NW. of Vancouver Island. British Columbia was practically under the control of the Hudson Bay Company until 1858, when, owing to the discovery of gold, it was made a crown colony. Vancouver Island was united with it in 1866, and the province joined the Canadian Confederation in 1871. The scenery is rugged and picturesque. Between the western slopes of the Rocky Mountains (highest peaks, Mount Brown, 16,000 feet, and Mount Hooker, 15,700 feet) and the sea the area is largely occupied by spurs and outlying groups of that chain. Near the coast these form the Cascade Range. Of the rivers the most important is the Fraser, 800 miles long, and 600 yards wide at its principal outlet in the Gulf of Georgia. Of the Columbia only the upper portion is within the province. Many varieties of climate are found. That of Vancouver Island and the coast of the mainland is very similar to that of the south of England. The interior is divided as to climate into three zones—the south, the middle, and the north. In 1881 the population was 49,459, and in 1901, 190,000, including about 25,000 Indians and 10,000 Chinese. The principal towns on Vancouver Island are Victoria, the capital (pop. 21,000), and Nanaimo; on the mainland there are New Westminster, formerly the capital of British Columbia, and Vancouver (27,000), the terminus of the Canadian Pacific Railway. The provincial government is administered by a lieutenant-governor, appointed and paid by the Dominion, and a Legislative Assembly, elected by the inhabitants.

The province is not likely to become an agricultural country, but there is a considerable area of land available for arable and pastoral farming both on Vancouver Island and on the mainland in the river-valleys. The rich valley of the lower

Fraser, or New Westminster district, is the largest compact agricultural area on the mainland. Of the total area (say 250,000,000 acres) only about 900,000 acres are as yet occupied. The fruit-growing industry is still in its infancy. The principal industries of the province are connected with the mines, the fisheries, and the forests. The minerals form one of its chief resources. Gold, coal, silver, iron, copper, galena, mercury, platinum, antimony, bismuth, molybdenum, plumbago, mica, and other minerals have been discovered in different parts, copper being very widely distributed. The quartz-mines have been little drawn on; most of the metal secured has come from the alluvial deposits. Coal and lignite exist in many parts of the mainland. At Nanaimo, on Vancouver Island, there is a large coalfield, and an extensive export, largely to the United States. Excepting the salmon-fishery, the rich fisheries have not yet been developed. The fur-sealing industry in the Pacific is also valuable. But little timber has yet been cut, notwithstanding the immense forests of magnificent trees that abound. Until the completion of the Canadian Pacific Railway in 1885, British Columbia was isolated from the rest of the Dominion. Now, however, it occupies a favourable position in regard to the markets of the west of South America and Australasia. Lines of steamers connect Vancouver with Hong-kong and Australian ports. The telegraph cable to Australia was completed in 1902. The dispute as to the boundary between Alaska and British Columbia was finally settled by a commission in 1903. See works by Pemberton, Rattray, Macdonald, Macfie, Leonard (published between 1860 and 1870), H. H. Bancroft (1887), Lees and Clutterbuck (1888), Begg (1896), and Baillie-Grohman (1900).

Columbia, District of, in the United States. See District of Columbia.

Columbus, the capital of the state of Ohio, on the Scioto River, 116 miles NE. of Cincinnati and 138 SSW. of Cleveland. In a central square of 10 acres stands the state capitol, a fine stone structure 304 feet long by 184 wide. Other edifices are the city-hall, with a public library; a court-house erected at a cost of $400,000; U. S. government and Board of Trade buildings; a large state penitentiary; a hospital for the insane, erected at a cost of $1,520,980; and institutions for the blind, the deaf and dumb, &c. Here also are the Ohio State University and the Capital University (Lutheran). Fourteen lines of railway radiate in all directions, which, added to the natural advantage of proximity to the great coal and iron fields of the state, tend to a rapid development of the manufacturing industries. Columbus was founded in 1812. Pop. (1870) 31,274; (1880) 51,647; (1890) 88,150; (1900) 125,560.

Columbus is also the name of some twenty other places in the United States, the most important being: (1) Capital of Muscogee county, Georgia, on the Chattahoochee River, 100 miles SSW. of Atlanta. It has a large trade in cotton, and extensive manufactures of cotton, woollen, and iron goods. Pop. (1880) 10,123; (1900) 17,614. —(2) Capital of Bartholomew county, Indiana, 41 miles S. by E. of Indianapolis. Pop. 8739.—(3) Capital of Lowndes county, Mississippi, on the Tombigbee River, 150 miles NE. of Jackson. Pop. 6599.—(4) Capital of Colorado county, Texas, on the Colorado River, 95 miles SSE. of Austin by rail. Pop. 2500.

Colwyn Bay, a beautiful watering-place of Denbighshire, 6 miles W. of Abergele. Pop. of district, 9000.

Colyton, a Devon market-town, on the Coly (a feeder of the Axe), 4½ miles SW. of Axminster. Pop. of parish, 1950.

Comacchio (*Co-mak'ki-o*), a walled cathedral city of Italy, 30 miles ESE. of Ferrara, on an island in a shallow lagoon. Pop. 7535.

Comaya'gua, a city of Honduras, Central America, on the Rio Humuya, 190 miles E. of Guatemala. Founded in 1540, it has a handsome cathedral. Pop. 10,000.

Combaconum (*Kumbhakonam*), one of the oldest and most sacred cities of southern India, in the centre of the richest part of the Kaveri delta, 193 miles SW. of Madras by rail, with Hindu temples, a government college, &c. Population, above 60,000.

Combe-Florey, a Somerset parish, 5 miles NE. of Wiveliscombe. Sydney Smith was rector.

Combemartin, a Devon coast-village, 4 miles E. of Ilfracombe. Pop. of parish, 1507.

Comber, a market-town of Down, on the river Comber, 8 miles SE. of Belfast. Pop. 2051.

Comines (*Comeen'*), a town on the borders of Belgium and France, 15 m. SW. of Courtrai by rail, divided by the Lys into two parts, of which that on the left (pop. 4381) belongs to Belgium; the other, on the right (pop. 6435), to France.

Comi'so, a town of Sicily, 37 miles WSW. of Syracuse. Pop. 20,333.

Commentrey, a town in the French dep. of Allier, 211 miles S. of Paris by rail, with collieries and ironworks. Pop. 9316.

Commondyke, an Ayrshire collier village, 3 miles NNE. of Cumnock. Pop. 412.

Como, a walled city of Lombardy, Northern Italy, at the south-west extremity of the Lake of Como, 30 miles N. of Milan by rail. It lies in a valley, surrounded by hills, clad with luxuriant gardens, olive plantations, and orange groves, with here and there an old ruin cropping out. Among the principal buildings of Como are the cathedral (1396–1732), and the marble 13th-century town-hall. The chief articles of manufacture are silk, satin, gloves, and soap. Pop. 38,560. Como, the ancient *Comum*, was the birthplace of Cæcilius Statius, the two Plinys, several popes, and the physicist Volta.

The Lake of Como (Ital. *Lago di Como*, or *Il Lario*, anc. *Larius Lacus*), a lake of Northern Italy, lying at the foot of the Bernine Alps, and formed by an expansion of the Adda, which enters it at its north, and issues at its south-eastern extremity. Its total length is 30 miles; but midway the promontory of Bellaggio divides it into two branches, the shorter of which is called the Lago di Lecco. The greatest breadth is 2½ miles. It is 663 feet above sea-level, has a mean depth of 870, and a maximum of 1352 feet. The beauty of the surrounding scenery and the salubrity of the climate have made the Lake of Como the most resorted to in Italy, its shores being everywhere studded with noble villas. See Lund, *Como and the Italian Lakes* (1887).

Comorin', Cape (*Kumári*), the most southerly extremity of the peninsula of India, in 8° 4′ 20″ N., and 77° 35′ 35″ E.

Co'moro Isles, a group of four islands belonging since 1886 to France, in the Mozambique Channel, between Africa and Madagascar. Area, 761 sq. m.; pop. 63,000. Of volcanic origin, and mountainous, attaining 8400 feet, they are four

in number—Great Comoro or Angaziya, Anjouan or Johanna, Mohilla, and Mayotta; the last has been French since 1841. In all, the blood of the natives is partly Arab, partly Malagasy.

Compiègne (*Com-pee-eñ'*), a town in the French dep. of Oise, on the river Oise, a little below its junction with the Aisne, 52 miles NNE. of Paris by rail. It has three interesting churches, a Gothic hôtel-de-ville with a fine belfry, and a palace, rebuilt by Louis XV., and splendidly fitted up by Napoleon. The beautiful Forest of Compiègne, 30,000 acres in area, was a favourite hunting-ground of the kings of France. The manufactures include canvas, cordage, and sugar. Pop. (1872) 11,859; (1901) 14,000. It was at the siege of Compiègne, in 1430, that the Maid of Orleans was captured; and here, in 1810, Napoleon first met Maria Louisa of Austria.

Compostella. See SANTIAGO DE COMPOSTELLA.

Compstone, the ruined castle of the soldier-poet, Alexander Montgomerie, on Tarf Water, 2½ miles N. by W. of Kirkcudbright.

Compton Castle, Devon, 4 miles W. of Torquay, a fine old fortified house.

Comrie, a pleasant, sheltered village of Perthshire, on the Earn, 7 miles W. of Crieff by rail (1893), often disturbed by earthquakes, notably in 1839 and 1876. Pop. 1200.

Comstock. See VIRGINIA CITY.

Cona, an Argyllshire stream, flowing 9½ miles eastward to Loch Linnhe. See also GLENCOE.

Conacry, or KONAKRY, a town on the small Tombo island (9° 50′ N. lat.), capital of the French territory called Rivières du Sud on the west coast of Africa; pop. 2000.

Concarneau (*Con^{g}cáhr-no'*), a fishing-village of Brittany, on the east coast of Finistère, 15 miles by rail SE. of Quimper. Pop. 5845.

Concepcion, (1) a province of Chili, stretching from the Andes to the coast north of Arauco. Area, 3535 sq. m.; population, 215,000.—CONCEPCION, the capital, near the mouth of the Biobio, is a regular and handsome town, with a fine cathedral. Its port, Talcahuano, on Concepcion Bay, is the safest and best harbour in all Chili. Pop. 54,180.—(2) CONCEPCION DEL URUGUAY, the former capital of the Argentine province of Entre Rios, on the Uruguay, 180 miles SE. of Paraná by the Entre Rios Railway. Pop. 10,000.—(3) CONCEPCION, a town of Paraguay, on the Paraguay River, 260 miles above Asuncion. Pop. 2000; or 15,000 with the surrounding districts.—(4) The name of several places in Bolivia, the largest being CONCEPCION DE APOLOBAMBA, capital of the province of Caupolican, formerly a Franciscan mission.—(5) CONCEPCION, a town of Mexico, 50 miles W. of Chihuahua, in the upper Yaqui valley,—(6) CONCEPCION DE LA VEGA, a town of San Domingo, 5 miles SE. of Santiago. Pop. 9000.

Concord, (1) a town of Massachusetts, 23 miles by rail NW. of Boston. As early as 1767 the people of Concord opposed the British government, and in the revolutionary skirmish here on the 19th April 1775, 'the embattled farmers stood and fired the shot heard round the world.' The place was the home of Emerson, Hawthorne, and Thoreau, and the Alcotts. In the Old Manse Emerson was born, and in it Hawthorne wrote his 'Mosses from an Old Manse.' Pop. 5727. See Bartlett's *Concord* (1880).—(2) Capital of New Hampshire, U.S., on the Merrimac River, 73 miles NNW. of Boston by rail. It has a fine granite state-house, celebrated quarries of white granite, and, with abundant water-power, manufactures of cotton, woollens, leather, &c. Population, 25,000.

Concordia, a river-port of the Argentine state of Entre Rios, on the Uruguay, 302 miles N. of Buenos Ayres by river. Pop. 12,000.

Condamine, a headstream of the Darling (q.v.).

Condé-sur-l'Escaut (*Con^{g}day-sür-l'Esco'*), a fortified town in the French dep. of Nord, at the confluence of the Haine and Scheldt, 7 miles NNE. of Valenciennes by rail. Pop. 4586.

Condé-sur-Noireau (*Con^{g}day-sür-Nwahro'*), a French town in the dep. of Calvados, 23 miles SSW. of Caen. Pop. 6551.

Condom (*Con^{g}don^{g}'*), a town in the dep. of Gers, on a height above the confluence of the Baise and the Gèle, 20 miles SW. of Agen by rail. Pop. 6735.

Conegliano (*Con-el-yáh'no*), a picturesque town of Italy, 31 m. NE. of Venice by rail. Pop. 4682.

Coney Island, barely separated from the south-west angle of Long Island, at the entrance to New York harbour, is a narrow strip of sand, 5 miles long, by ½ mile broad, with a fine beach. It is a crowded place of summer resort, with huge bathing pavilions, a tubular iron pier (1000 feet), a look-out tower (300 feet), and the Brooklyn seaside home for poor invalid children.

Congleton, a market-town and ancient municipal borough in the east of Cheshire, picturesquely situated in a deep valley on the banks of the Dane, an affluent of the Weaver, 26 miles S. of Manchester. It has a handsome town-hall (1866), a market-house (1882), manufactures of silk, and neighbouring coal-mines. Pop. (1851) 11,505; (1901) 10,707.

Congo, the great equatorial river of Central Africa, in respect of its basin the second largest river of the world, has its reservoir in Lake Bangweolo, of which the Chambezi is the largest feeder, and into which also flow numerous streams from the Lokinga Mountains on the south. From Bangweolo the great river issues under the name of the Luapula; and flowing in a northerly direction, it expands into Lake Moero, on leaving which it is called, as far as Nyangwe, the Lualaba. From Nyangwe to Stanley Falls, Stanley christened it the Livingstone; and from Stanley Falls to the mouth it is known by the name of the Congo.

Its length has been calculated variously at a little under and a little over 3000 miles; it drains an area of more than 1,300,000 sq. m.; and it discharges a body of water into the ocean second only to the Amazon. Such is the power and force of this mighty stream that no delta exists at its mouth. Vessels take in fresh water at its entrance into the sea. The two largest tributaries of the Congo are the Kassai from the south, explored (1885) by Wissmann; and the Mobangi, from the north, explored (1884–85) by Grenfell, and afterwards by Vangele. Other tributaries are the Kwa or Kwango, the Juapa and Bosira, the Ikelemba, the Lulongo, and the Lumami rivers on the south or left bank; and the Aruwimi, the Mbura, the Loika, the Ngala, the Lokinga Nkundji, &c., on the north or right bank. As regards commerce and navigation, the Congo may be divided into three parts—Lower, Middle, and Upper. The lower region extends from Banana at the mouth to the foot of the first rapids, 110 miles, navigable by ocean steamers drawing 18 feet. The middle or cataract region extends from Vivi to Stanley Pool, 235 miles, navigable for 70 miles by small steamers or iron whaleboats; and a railway, surveyed in 1888,

from Vivi to Leopoldville (250 miles), was soon thereafter begun, keeping mostly at a distance of about 30 miles south of the river. The mortality of the workers employed in the construction of the railway was very high, and labourers had to be imported from Dahomey and the Gold Coast regions. Chinese coolies were also employed. The first 25 miles were open for traffic in 1893, and the railway from Matadi to Leopoldville was completed by 1898. The upper region of the river from Stanley Pool to Stanley Falls, 1068 miles, is navigable for steamers with a draught of four feet, besides over 3000 miles of navigable tributaries.

The river, whose mouth was discovered in 1484–85 by Diego Cam, was known to the Portuguese as the Zaire, a corruption of the native words Nzari, Nyali, or Niadi, meaning 'river;' while the country about it and south of it was known as Congo. The centre of Portuguese missions was San Salvador. In 1818 Captain Tuckey was sent by the British government, and explored 118 miles of the river. In 1867–71 Livingstone discovered the Luapula and Lualaba, which he supposed to be the head-waters of the Nile; but which in 1876–77 Stanley proved, by following it down, to be really the Congo.

Congo Free State, now called INDEPENDENT STATE OF THE CONGO, developed out of the Association Internationale formed by Leopold II., king of the Belgians, was recognised as a state by the European Powers in conference at Berlin in 1885. At first under the sovereignty of Leopold as an individual, it was by him made over, with all his sovereign rights, to Belgium in 1890, and Belgium reserved the right of annexing it at the end of ten years. The state comprises a small strip of territory north of the Congo River, from its mouth to Manyanga, thence it is bounded N. by the Congo River (with French Congo to the northwards) to the Mobangi, thence to the NE. watershed of the Congo basin, eastwards to 30° E. long., and southwards to near Lake Bangweolo, westwards to the Kassai River sources, and thence by a zigzag to the Kwango, and then to the Congo at Nokki (the south bank of the river from that point being Portuguese). The state borders accordingly on French Congo, several minor native states, the Equatorial province, the British East Africa Company's sphere and Uganda, German East Africa, the British sphere on the S. (Zambesia), and Portuguese territory on the W. and SW. The west shore of Lake Tanganyika belongs to the Congo State.

The Congo Free State is governed by an administrative bureau at Brussels, consisting of three secretariats—Control, Finance, and Foreign Affairs, under the direct supervision of His Majesty the King of the Belgians; also by an administrator on the Congo who has his headquarters at Boma, 60 miles from the sea, on the right bank of the river. Its present income is derived from an endowment of £40,000 a year bestowed upon it by the King of the Belgians, a loan from Belgium, from taxes, dues, and the sale and letting of public lands. The state, formerly allowing free imports, was allowed in 1890 to impose duties. The annual revenue is about 28,000,000 francs. The inhabitants of the Congo basin belong to what has been termed the Bantu race. They are a happy, inoffensive people, not so dark as the Fan or Ethiopian. Split up into numberless tribal communities, they can offer but slight resistance to the advance of civilisation; and as they are born traders, they take very readily to commerce. The dialects throughout the country are very numerous, but many of them would appear to have a common origin. Pop. from twenty to thirty millions. The climate is purely tropical, the average temperature ranging between 78° and 82°. Malarial fevers, especially on the coast, are not infrequent. The interior is healthier than the coast. The principal products are ivory, palm-oil, palm-kernels, india-rubber, various gums, ground-nuts, camwood, beeswax, orchilla, &c. Wild coffee, tobacco, and hill rice are cultivated on the upper river, also various kinds of maize and sorghum. The annual value of the special exports (principally ivory, palm-oil and kernels, coffee and caoutchouc) from the Congo is about 50,000,000 francs (general exports, 57,000,000 francs), and of the general imports 21,000,000 francs. As Belgium had not exercised the right of annexing it, the Free State was in 1905 still nominally an independent state managed like a colony; and the administration was charged with allowing systematic cruelty in enforcing labour and extorting produce and taxes.

See works on the Congo State and River by Stanley (1885), Bentley, Ward, and Johnston (1895), and, impeaching the administration for cruelty, Fox Bourne (1903) and Guy Burrows (1903); French books by Alexis, Coquilhat, Dupont, Jeannest, Wauters, Allart, and Bourguignon (1898); the German work by Pechuel-Loesche; Silva White's *Development of Africa* (1890), Scott Keltie's *Partition of Africa* (1895), and Sir H. Johnston's *Colonization of Africa* (1899). For French Congo, see GABOON.

Coní (*Ko'nee*), or CUNEO, capital of an Italian province, 48 miles SW. of Turin by rail. It has a fine cathedral. Pop. 12,413.

Conisborough Castle, a Norman-Saxon round tower in the West Riding of Yorkshire, 5 miles WSW. of Doncaster. It is Athelstan's stronghold in *Ivanhoe*.

Conishead Priory, Lancashire, 2 miles SSE. of Ulverstone, a hydropathic on the site of a 12th-century monastery.

Coniston Lake, in the English Lake District, lies in North Lancashire, at the east foot of the Coniston Fells, 9 miles W. of Bowness on Windermere. It is 5 miles long, ½ mile broad, 147 feet above the sea, and 260 feet deep. On the east shore stand Ruskin's home, Brantwood, and Tent House, once Tennyson's residence. The Old Man of Coniston, to the NW., is 2633 feet high.

Conjeveram (*Kánchivaram*), the Benares of southern India, 45 miles SW. of Madras by rail, with three large Hindu temples, seven old tanks, and an annual fair. It was long a Buddhist centre. The Free Church of Scotland has a mission here. Pop. 48,000.

Conn, LOUGH, a picturesque Irish lake of County Mayo, together with Lough Cullin (from which it is separated by a narrow neck of land), 13 miles long, and 1 to 3 broad.

Connah's Quay, a seaport on the Dee estuary, 4 miles SE. of Flint.

Connaught, the most westerly and the smallest of the four provinces of Ireland. It contains the counties of Galway, Leitrim, Mayo, Roscommon, and Sligo. Greatest length from north to south, 105 miles; greatest breadth, not including Achil Island, 92 miles. Area, 6863 sq. m.; pop. (1841) 1,420,705; (1901) 646,932. The west coast has many fine bays and harbours, and the surface, especially in the western half, is mountainous and rugged, forming grand and picturesque scenery. The people are almost purely Celtic.

Connecticut (*kon-net'-e-cut*), one of the six New England states of the American Union, is bounded by Massachusetts, Rhode Island, Long Island Sound, and the state of New York. The smallest in area of all the states except Rhode Island and Delaware, with a surface of 4990 sq. m. (two-thirds that of Wales), it is one of the most densely peopled states of the Union. The surface is rocky and uneven, and the low Green and Taconic Mountains of the Appalachian system occupy part of the west. Much of the soil is not easily cultivated, and rather unfertile; but part of the valley of the Connecticut River is very productive, and grows tobacco. The Connecticut River, rising in New Hampshire, and forming the boundary with Vermont, flows south through Massachusetts and Connecticut to Long Island Sound, after a course of 450 miles, navigable for small vessels to Hartford. In the east of the state is the Thames, and in the west the Housatonic. The chief value of the very numerous streams is as a source of water-power for manufactories. The brown hematites of the north-west yield excellent iron; there are quarries of sandstone, granites, trap, limestone, and gneissoid building-stones, as well as of serpentine and verde-antique; and lead, copper, and cobalt have been mined. Mineral-waters occur. The climate is very changeable, and is rather severe in winter, but generally healthful. Some good harbours favour the coastwise trade, but the whale and seal fisheries have declined. Oyster-fishing and other fisheries are engaged in. The state stands in the first rank as respects the amount and aggregate value of manufactured goods; clocks, hardware, india-rubber goods, firearms, silks and other textiles, small-wares in great variety, and subscription books are produced on a large scale. In very few parts of the world has more been done for popular education than in this state. Yale University at New Haven comprises collegiate and post-graduate courses, besides medical, theological, scientific, law, and art schools. Trinity College is at Hartford, and the Wesleyan University at Middletown, and there are several divinity schools. Among the principal cities and towns are Hartford, the capital (pop. 80,000), New Haven (110,000), Bridgeport, Waterbury, Meriden, New Britain, Norwalk, Danbury, Norwich, Stamford, and New London.

The old stock of inhabitants were of English Puritan origin, but of later years there has been a large immigration of Irish, German, English, and others. The originally Puritan colony of Connecticut may be said to date from the secession in 1634 of the more democratic element from Massachusetts. Its constitution of 1639 was 'the first written democratic constitution on record.' The royal charter of 1662, essentially a confirmation of the older one, was superseded by the present state constitution only in 1818. Prominent events in Connecticut history have been the bloody war with the Pequot Indians, 1637; the governorship of Sir Edmund Andros, during a part of which (1687–88) the colonial charter was in abeyance; and the abolition of slavery in 1818. Pop. (1870) 537,454; (1880) 622,700; (1900) 908,420. See Johnston's *Connecticut* (1887).

Connel Ferry, Argyllshire, at the mouth of Loch Etive, 6 miles NE. of Oban.

Connemara (*Con-ne-mah'ra*), a wild district forming the westernmost division of Galway.

Connor, an Antrim village, 5 miles S. of Ballymena. Here Edward Bruce defeated the English (1315). There is a diocese of Connor.

Consett, a Durham town, on the Derwent, 8½ miles N. of Wolsingham, with ironworks and coal-pits. Pop. 10,000.

Constance, or KOSTNITZ, a city of Baden, once a free imperial city, is situated on both sides of the Rhine, at its exit from Lake Constance, 91 miles E. of Basel by rail. One of the most ancient towns of Germany, Constance owed its prosperity to its linen industry, already famous in the 12th century. Its manufactures also include cotton, jute, and waterproof fabrics, canvas, carpets, chemicals, bell-founding, &c. It has a cathedral (dating partly from the 11th century), an old Dominican convent (now an hotel), and the present market-hall, in which three places the sessions of the great Church Council of Constance (1414–18) were held. Pop. 26,235.

LAKE CONSTANCE (German *Bodensee* or *Bodmansee;* Roman *Lacus Brigantinus*) lies between Switzerland and Germany, on the north side of the Swiss Alps, and forms a meeting-point of the five territories—Baden, Würtemberg, Bavaria, Vorarlberg (Austria), and Switzerland. Lying 1306 feet above the sea, and traversed by the Rhine from east to west, it has a length of 44 miles, an extreme breadth of 9 miles, an area of 208 sq. m., and a depth of 490 feet (maximum 906). Towns on its shores are Constance, Bregenz, Lindau, and Friedrichshafen.

Constantia, a district of Cape Colony, in South Africa, lying on the eastern and north-eastern slopes of Table Mountain range, and distant from Capetown 7 miles by rail. It produces red and white wines of delicious aroma.

Constantina, a town of Spain, in Andalusia, 40 miles NNE. of Seville, with silver-mines. Pop. 11,503.

Constantine, capital of the easternmost province of Algeria, is very picturesquely situated on a nearly isolated chalk rock, 830 feet high, 40 miles SW. of its port Philippeville by rail. It is surrounded by walls, and consists of French and Arab quarters. The ancient capital of Numidia, called *Carta* by the Carthaginians, *Cirta* by the Romans, it was destroyed about 311 A.D., but was soon rebuilt by Constantine the Great, from whom it derives its present name. It manufactures woollen cloths, saddlery, leather goods, and carpets, and is a great trade centre. Pop. 53,000, of whom 20,000 are French and 3500 Jews.

Constantinople, the capital of the Ottoman empire, in 49° N. lat., 28° 59′ E. long., was founded in 330 A.D. by Constantine the Great, from whom it derives its name, on a site partly occupied by the ancient Greek colony (658 B.C.) of Byzantium. The Turks call it Istambol or Stambol, probably a mere corruption of Turkish mispronunciation of Constan*tinopolis*. The original Byzantium was built on the apex of the triangular peninsula which juts out towards Asia on the southern side of the Golden Horn, where the present Eski Serai or 'Old Seraglio' stands, and its commanding position made it an object of strife among the nations—Persians, Gauls, and Greeks. In the 4th century B.C., the Athenians repelled the siege of Philip of Macedon, aided, according to the legend, by the supernatural appearance of a crescent in the sky, which revealed the presence of the invaders, and was forthwith adopted as the badge or crest of the city, as it is to this day.

Constantinople consists of two distinct parts —Stambol or Constantinople proper, and Christian Constantinople (Pera, Galata, Top-hâna),

The two are separated by the Golden Horn, a creek about five miles long and half a mile wide at the entrance, a safe and spacious harbour, and so deep that the largest ironclads of the Turkish navy can lie quite close to the shore. Stambol or Turkish Constantinople lies on the southern side of the Golden Horn, and Christian Constantinople lies on the north side: the two are connected by a couple of rude but convenient bridges. The old walls, in courses of stone and red brick, and 14 miles in circuit, show that the modern Turkish city occupies much the same area as the capital of the first Christian emperor. Within these walls the city rises, like Rome, upon seven low hills, crowned by noble mosques, with a wilderness of picturesque, tumble-down, filthy, wooden houses and bazaars climbing up their sides. In Stambol are nearly all the monuments and antiquities worth seeing in Constantinople. First is Agia Sophia, Saint Sophia, the church dedicated by Constantine to 'Eternal Wisdom,' rebuilt with added splendour by Theodosius (415) and by Justinian (538–568), and now converted into a mosque. Outside it is not worth a second glance; but within, the airy grace of its stupendous dome, and the beauty of its marbles and mosaics, despite all the ravages of Moslem and tourists' desecrations, fascinate and amaze the vision. Next, but not less beautiful, is the Suleymaniya, the mosque which the Great Suleyman erected in 1550–5. Scarcely less stately is the mosque of Sultan Ahmed I. in the Hippodrome, distinguished without by its six minarets (instead of the usual four). The mosque of the conqueror Mohammed II. is also notable. There are over two hundred other mosques in Constantinople, and an even larger number of chapels, besides hundreds of *medresés* or mosque colleges. The Fanar, or Greek quarter of Stambol, recalls the memory of famous Fanariote statesmen in the Turkish service. The Hippodrome (now called At-Meydân, or 'Horse Manège'), originally a circus surrounded by marble seats, long since removed, still shows remains of antiquity, such as the famous column of the Three Serpents which once stood at the Temple of Delphi, and an obelisk brought from Heliopolis in Egypt in the reign of Theodosius; whilst hard by are the Burnt Column, the column of Theodosius, and the Seraskier's Tower. Among the remains of Mohammedan splendour the Old Seraglio (Eski Serai) is the most important, though it has not been a royal residence since the days of Mahmûd II. Its first gate, Bab-i-Humayûn or 'Sublime Porte,' has given its name to the Turkish government in its foreign relations.

Christian Constantinople, on the north side of the Golden Horn, comprises Galata, Pera, and Top-hâna. Galata is pre-eminently the merchant quarter, founded by a colony of Genoese merchants in 1216. The Tower of Galata, a Genoese erection, serves the same purpose as the Seraskier's Tower on the opposite side in giving alarms of fires. A tunnelled railway drags passengers up the steep ascent to Pera. Pera is the aristocratic quarter; here are all the embassies and consulates. The steep and badly paved Grande Rue is lined with fair if expensive shops, and boasts a rude opera-house, many cafés and restaurants, besides most of the principal hotels, and probably the worst morals in Europe. Turks preponderate at Top-hâna, which is so named from its cannon-foundry; the magnificent palace of Dolmabagché is on the brink of the Bosphorus. Other suburbs are Kâsim Pasha, on the Golden Horn, the seat of the admiralty; Hasköi, and the picturesque village of Eyyûb. Along the European shore of the Bosphorus are the summer-resorts of Therapia and Biyukderé. The Asiatic shore is also lined with settlements from Scutari (q.v.) to Candili. The new palace of Yildiz Köshki stands at the top of the hill of Beshiktâsh, beyond Pera. The population of Constantinople is estimated at about 1,250,000, of whom half are Mohammedans. The trade, chiefly in the hands of Europeans, is increasing, but much below what it might be if properly developed. The local manufactures are insignificant. The burden of vessels entering and clearing the port exceeds 15,000,000 tons. The first through express train from Paris (*viâ* Belgrade and Adrianople) reached Stambol in 1888.—In 330 A.D., impressed by its magnificent site, Constantine the Great abandoned the old capital of the Roman Empire on the Tiber, and founded in the place of Byzantium a new metropolis on the Bosphorus, which he called Constantinople. Its walls and public buildings were enlarged and beautified by Justinian in 527–565. Since then it has undergone many sieges by Sassanians, Persians, Avars, Saracens (six times), Russians (in 9th to 11th century), Latins, and Turks; and of its twenty-six sieges and eight captures, that of the Latins under Baldwin and Dandolo in 1204 was by far the most disastrous, barbarous, and spoliating. In comparison, the Turkish sieges were humane and chivalrous: the first took place in 1356; Murâd II. made the attempt again in 1422; and Mohammed II. carried the city in 1453. The great church Councils of Constantinople were held in 381 and 553 A.D.

See books by De Amicis (trans. 1878), Mordtmann, F. Marion Crawford (1895), Grosvenor (1895), and W. H. Hutton (1900); and on its past history by Brodribb and Besant (1878), Van Millingen (1899), and Pears (1903).

Constanza. See KUSTENDJI.

Contrexéville, a small place in the centre of the Vosges department, with alkaline mineral waters. Pop. 850.

Conversano (*Kon-ver-sâh'no*), a cathedral city of South Italy, 18 miles SE. of Bari. Pop. 11,006.

Conway, a river of North Wales, rises in a mountain-lake where Merioneth, Denbigh, and Carnarvon meet, and runs 30 miles northward past Conway to Beaumaris Bay.

Conway, or ABERCONWAY, a picturesque little seaport of North Wales, in Carnarvonshire, on the left bank of the river Conway at its estuary, 45½ miles WNW. of Chester by rail. The river is crossed by a fine tubular bridge (412 feet long), constructed by Stephenson in 1848, as well as by Telford's suspension bridge (1826). The town is triangular in form, and is surrounded by a high wall 12 feet thick and 1 mile in circumference, pierced by four Moorish-looking gates, and crowned by twenty-one round towers. In its south-eastern corner, rising proudly from a rock above the river, is the ruined castle, built soon after the Conquest by Hugh, Earl of Chester, and rebuilt in 1284 by Edward I., to check the Welsh. Its walls are 12 to 15 feet thick, with eight vast towers, four of which are each surmounted by a slender turret. The Plâs Mawr ('great mansion') is a noble timber house (1585), without and within profusely covered with ornament. Conway (a chartered borough since 1876) is one of the six Carnarvon boroughs. Pop. 4800.

Cooch Behar. See BEHAR.

Cook, Mount, or Aorangi, one of the Southern Alps, on the western side of the South Island of New Zealand. It is 12,349 feet high, and is covered with perpetual snow.

Cook Islands, or Hervey Archipelago, a cluster lying midway between the Society and Navigator groups, are near 20° S. lat., and 158° W. long., some being volcanic, some coralline. The principal are Raratonga, Mangaia, Aitutaki, and Atiou. The natives are about 6000 in all. The islands were made a British protectorate in 1888, and annexed to New Zealand in 1901.

Cook's Garth, Captain Cook's birthplace, in the North Riding of Yorkshire, 7 miles W. of Guisborough.

Cookstown, a town of County Tyrone, 53 miles W. of Belfast by rail, with manufactures of linen and bleach-works. Pop. 3541.

Cook Strait, discovered by Captain Cook in 1769, separates the North and South Islands of New Zealand, and is 20 to 80 miles wide.

Cooktown, a town in the north of Queensland, 1050 miles NNW. of Brisbane, already one of the chief ports of the colony, though only founded in 1873. It is built along 1½ mile of the southern bank of the Endeavour River, and is almost environed by hills. There are already handsome public buildings, and a monument (1889) to Captain Cook, who beached his ship here in 1770. Near there are gold-diggings and tin-mines, with pearl and trepang fisheries. Pop. 2480.

Coolgardie, since 1893 a great gold-mining centre in Western Australia, 350 miles ENE. of Perth by rail. Pop. in 1905, 5000.

Coolins. See Cuchullins.

Coomassie, the capital of Ashanti, Western Africa, 120 miles NNW. of Cape Coast Castle. It occupies the side of a rocky hill, and is about four miles in circuit. The king's palace was burned by Wolseley in 1874. Pop. 20,000.

Coonoor (*Kúnúr*), a pass in the Neilgherry Hills, half-way between Coimbatore and Ootacamund, with a hill sanatorium.

Cooper's Hill, a ridge on the borders of Berks and Surrey, commanding a beautiful view of the Thames valley, and the scene of a famous poem by Denham. Cooper's Hill College (1870), training engineers for the Indian Works Department, with its forestry school (1885), was closed in 1906.

Coorg (a corruption of *Kodagu*, 'steep mountain'), a province under the government of India, lying below the Western Ghats and Mysore. Area, 1583 sq. m.; pop. (1871) 168,312; (1901) 180,600, speaking a Dravidian language akin to Canarese. Great part of its area is 3000 feet above the sea.

Cootehill, a town in County Cavan, Ireland, 88 miles NW. of Dublin. Pop. 1503.

Copais, or Topolias, a marshy lake of Bœotia, NW. of Thebes, was almost all successfully drained in 1876–86.

Copan, an Indian village in the south-western corner of the Central American state of Honduras, in a mountainous region, the site of a ruined city of great magnificence.

Copeland Forest, a Cumberland moorland, 2927 feet high, between Ennerdale and Wast Waters.

Copeland Islands, belonging to Bangor parish, County Down.

Copenhagen (Dan. *Kjöbenhavn*, 'Merchants' Haven'), the capital of Denmark, is situated on the low-lying eastern shore of the island of Zealand, in the Sound, which is here about 12 miles broad. The channel forms a fine and capacious harbour, which is bridged over so as to connect the isolated suburb of Christianshavn and the main part of the city at two points. Pop. (1835) 120,000; (1880) 235,254; now 390,000, or, with suburbs, 500,000. Copenhagen is still defended by the old citadel of Frederikshavn and by forts on the seaward side; the old fortifications, removed since 1863, have been succeeded by exterior works. Amongst its few buildings of historical interest or intrinsic beauty, the cathedral, rebuilt after the bombardment of 1807, possesses statues of Christ and the Apostles, and a baptismal font, designed and in part executed by Thorwaldsen. Trinitatiskirke is remarkable for its round tower, which is ascended by a spiral incline instead of steps; and an English church, built at a cost of £10,000, was consecrated in 1887. The royal palace, called Christiansborg, was rebuilt between 1794 and 1828, but suffered greatly from fire in 1884. In the castle of Rosenborg (1610–24) are kept the regalia; the palace of Charlottenborg (1624) is now used as an academy of arts. The university was founded by Christian I. in 1479, has 1300 students, and a library of 350,000 volumes; the royal library contains 600,000. Copenhagen is the centre, not only of Danish, but of northern literature and art, and is the seat of the unrivalled Museum of Northern Antiquities, and the Thorwaldsen Museum (1846). The exports include grain, rape-seed, butter, cheese, beef, cattle, wool, &c.; and porcelain, pianos, clocks, watches, mathematical instruments, chemicals, sugar, beer, and tobacco are manufactured. To counterbalance the prejudicial effect of the Baltic Ship Canal (see Baltic Sea) on the commerce of Copenhagen, the Danes established here in 1890–94 a great free port, fenced off from Danish customs territory, and designed to be an entrepôt between Baltic lands and the outer world.

In 1254 the village of Copenhagen obtained the privileges of a town, and in 1443 King Christopher made it the capital of the kingdom. It was several times attacked by the Hanseatic League; was besieged by the Swedes in the 17th century; was bombarded by the English, Dutch, and Swedes in 1700; suffered grievously by fires in 1728, 1794, and 1795; witnessed a great sea-fight in its roads on 2d April 1801, when the English, under Sir Hyde Parker and Nelson, destroyed the Danish fleet; and (to prevent the Danish fleet from falling into the power of Napoleon) was bombarded by the English from the 2d to the 5th of September 1807, when hundreds of persons lost their lives.

Copiapo (*Co-pe-a-po'*), capital of the Chilian dep. of Atacama, on the Copiapo River, 30 miles from its mouth; pop. 10,374.

Copinshay, a small Orkney island, 2½ miles from the SE. point of Mainland. Pop. 9.

Coppermine River, so named, like the Copper Mountains to the west of it, from the copper of the vicinity, runs 250 miles through the Northwest Territory of Canada to the Arctic Ocean, about 68° N. lat., and 116° W. long. Hearne discovered it in 1771.

Coppet (*Coppay'*), a Swiss village, 8 m. N. by E. of Geneva by rail, with a chateau, where Necker and his daughter, Mme. de Staël, are buried, and where the latter spent much of her life.

Coquet, a beautiful stream of Northumberland, flowing 40 miles to the sea below Warkworth. Coquet Island is 1 mile E. by S. of its mouth.

Coquimbo, or La Serena, capital of a province of Chili, near the mouth of the river Coquimbo, is a handsome town, with a cathedral. Pop. 16,000. The port of Coquimbo is on a bay 6 miles SW., and has a pop. of 7000.—Area of province, 12,855 sq. m.; pop. 200,000.

Coral Sea is that section of the Pacific which stretches between Australia on the west and the New Hebrides on the east.

Corato (*Co-rä'to*), a town of southern Italy, 25 miles W. of Bari. Pop. 40,428.

Corbeil (*Cor-bayl'*), a town in the French dep. of Seine-et-Oise, on the Seine, 21 miles S. of Paris by rail. Pop. 9541.

Corby Castle, a Cumberland mansion, 4¼ miles ESE. of Carlisle.

Corcyra, the ancient name for Corfu (q.v.).

Cordilleras (*Cor-dil-yay'ras*; lit. 'chains'), a name of several American mountain-chains. The Andes include the Cordilleras of South America, those to which the name is most frequently given; and the Rocky Mountains those of North America. Those of Central America extend from Darien to the north of Mexico, and gradually increase in elevation from the Isthmus of Panamá, until they form magnificent plateaus, and reach a height of more than 17,000 feet in Mexico.

Cor'doba, a central province of the Argentine Republic. Area, 55,350 sq. m.; population, 430,000. The capital, Cordoba, lies in the valley of the Rio Primero, 246 miles WNW. of Rosario by rail. It has tramways, a cathedral, a handsome city-hall, a university (1613), &c. Founded by Cabrera in 1573, the town was famous as a centre of the Jesuit missions. It was afterwards falling into decay, but the opening of the railway in 1870 has greatly restored its prosperity. Population, 50,000.

Cor'doba, a town of Mexico, 66 miles WSW. of Vera Cruz by rail. Pop. 12,302.

Cor'dova, or Cordoba, a city of Spain, 81 miles ENE. of Seville by rail. It stands on the right bank of the Guadalquivir, here crossed by the Moorish 'Puente Viejo' of sixteen arches. The old turreted walls enclose gardens and vineyards; but the interior shows narrow and dirty streets. Founded in 152 B.C. by the Romans as *Corduba*, and a great Moorish town from 711 A.D. until 1236, it has a cathedral, built as a mosque in the 8th century, the most magnificent Mohammedan temple in Europe. Cordova was formerly celebrated for its manufacture of goat leather, called *cordovan*, whence the term *cordwain*, but that industry is now almost entirely extinct. It manufactures silverware, silk fabrics, &c. Cordova was the birthplace of Lucan, Seneca, and Averroes. Pop. 58,466.—Area of Cordova province, 5190 sq. m.; pop. 456,000.

Corea (native name *Chosön*, 'Morning Radiance'), a kingdom on the east coast of Asia, stretching as a peninsula from 34° 30′ to 43° N. lat., and from 124° 30′ to 130° 30′ E. long., between the Sea of Japan and the Yellow Sea, and separated by the Strait of Corea from the Japanese islands. From about the beginning of the Christian era Corea has been alternately dependent on Japan and China; from the 16th c. it was formally a vassal state of China, paying at least a ceremonial tribute. But even before the war between China and Japan in 1894–95, Japan had acquired commercial and fiscal predominance. In consequence of internal troubles in 1894 (fomented by Japanese residents), Japan intervened and drove the Chinese across the Yalu (see China), and Corea was declared an independent state. The growing power of Russia in Manchuria, and its encroachments on Corea, created great anxiety in Japan in 1900–4, led to the Japanese ultimatum, and was the cause of the war of 1904–5, in which the Japanese took Port Arthur, triumphed at Mukden and elsewhere, and utterly destroyed the Russian fleet. By the peace (1905) Japan's predominating interest in Corea was fully recognised.

Occupying about the same latitude as Italy, Corea, with an area of 83,000 sq. m., is also like Italy hemmed in on the north by alpine ranges, and traversed from north to south by a branch chain. Among the summits are Hienfung (8114 feet), Mount Popoff, and Coxcomb (4800), north-east of Seoul. The climate is healthy, bracing in the north, but colder in winter and hotter in summer than in corresponding European latitudes. Some of the rivers are frozen for from three to five months in the year. Among the products are rice, wheat, beans, cotton, hemp, maize, millet, sesame, and ginseng. Iron ores of excellent quality are mined; and there are copper-mines in several places. The principal industries are the manufacture of paper, mats woven of grass, split bamboo blinds, oil-paper, and silk. Three-fourths of the trade is with Japan, and over a fifth with China. Several railways were in progress before the war of 1904–5.

The population is estimated at from 8,000,000 to 16,000,000. The language is intermediate between Mongolo-Tartar and Japanese, polysyllabic and agglutinating. It has an alphabetic system of its own; but Chinese characters have taken the place of Corean in official writing and correspondence. The philosophy of Corea is Confucian, but in spite of great restrictions on Buddhism there are numerous Buddhist monasteries. The government is an hereditary and absolute monarchy, and carried on through three ministers, besides whom are ministers of six departments. Seoul, the capital, has a pop. of 196,940. Phyöng-yang, 36 miles from the sea, on the Tai-dong, has a pop. of over 40,000. It is the centre of a silk industry, and 20 miles off, at Keum-san, are gold-washings. Kai-söng is important as the capital of the old dynasty, and for its cultivation of ginseng.

The earliest records of Corea carry us back to 1122 B.C., when Ki-tze with 5000 Chinese colonists brought to Corea Chinese arts and politics. Down to modern times Corea has remained perfectly secluded. Almost the first knowledge of Corea obtained by Europe was through the shipwreck of some Dutchmen on the coast in 1653. The missionary De Cespedes had, however, entered Corea at the end of the 16th century, and from 1777 other missionaries followed. In 1835 M. Maubant gained a footing in Corea, but in 1866, after thousands of converts had been put to death, the only three Catholic missionaries left had to flee for their lives. To avenge the death of the Catholics the French sent an expedition, which was, however, repulsed, while a stranded American schooner was burned with her crew in sight of Phyöng-yang. Japan was the first to effect a footing in Corea in 1876, when a treaty was concluded between the two countries. Corea followed this up by treaties with China, the United States, and other countries (1882–86); and Chemulpo, Fusan, and Gensan were opened to foreign trade. The war of 1904–5 opened the country much more fully. See works by Oppert (1880), Ross, Griffis, Lowell, Carles (1888), Cavendish, Landor, Bishop, Hamilton, Laguérie, and Whigham (1904).

Corentyn, a river of South America, rising in 1° 50′ N. lat., and flowing northward to the Atlantic between British and Dutch Guiana. It forms an estuary 25 miles wide.

Corfe Castle, a village-borough of Dorsetshire, in the 'Isle' of Purbeck, 4 miles SE. of Wareham. Its famous castle, the traditional scene of the murder of King Edward the Martyr, by his step-mother Elfrida (979), was gallantly defended in 1643 by Lady Bankes for six weeks against 600 Roundheads. Taken through treachery two years later, it was dismantled; and its beautiful ruins cover nearly 3½ acres. Pop. of parish, 1708. See works by G. Bankes (1853) and T. Bond (1884).

Corfu, the most northerly and important of the Ionian Islands (q.v.), at the entrance to the Adriatic, separated from Albania by a channel 2 to 12 miles broad. It is 40 miles long, 3½ to 20 miles broad, and culminates in Pantocrator (2997 feet). Area, 270 sq. m.; pop. 126,000. The surface is largely covered with luxuriant groves of olive, cypress, and ilex. The principal products are olives and wine, oranges, citrons, figs, carob, silk, and honey. The minerals are sulphur, salt, coal, and marble. The principal town, Corfu (pop. 28,328), is finely situated on the east coast, and has a good harbour. It is the seat of a Greek archbishop and of a Catholic bishop, and has a royal palace, an Ionian academy, founded by Lord Guildford in 1823, with a library of 35,000 volumes, a gymnasium, theatre, &c. The ancient name of the island is Corcyra, but from its shape it was also called Drepane, or 'sickle.'

Cori (*Coree;* anc. *Cora*), a town of Italy, 30 miles SE. of Rome. Pop. 7450.

Corigliano (*Cor-eel-yâh'no*), an Italian town, 4 miles from the Gulf of Taranto. Pop. 12,271.

Coringa, a decayed seaport of Madras, at the northern mouth of the Godavari River, 8 miles S. of Cocanada. Pop. 4397.

Corinth, a city of Greece, celebrated in antiquity for its vices, situated on the rocky isthmus of Corinth (3¾ miles wide, and 262 feet high), which connects the Peloponnesus with the mainland. It lay under the northern declivity of the mountain (1886 feet high), on which stood its citadel (Acrocorinthus); and its position, midway between the Ægean and Adriatic, was exceptionally advantageous for trade. Founded, according to tradition, about 1350 B.C., Corinth at its zenith is said to have had 300,000 inhabitants, but was utterly destroyed by the Romans in 146 B.C. Exactly a century afterwards it was rebuilt by Julius Cæsar; in 1459 it was captured by the Turks. After being delivered from them in 1822, it slowly increased till 1858, when it was utterly destroyed by an earthquake. The town has since been rebuilt in a more convenient position, 3 miles to the north-east. Pop. 4000. A mile and a half ENE. of New Corinth, on the Gulf of Lepanto (anciently Gulf of Corinth), is the western mouth of the Corinth Ship Canal (1882–93) through the isthmus, 4 miles long. Two new towns have been laid out at its east and west mouths, the eastern named Isthmia, the western Posidonia.

Corinth, a town of Mississippi, 93 miles E. by S. of Memphis. Here the Confederates were defeated, October 3–4, 1862. Pop. 3275.

Cork, a maritime county in Munster, the southmost and largest of the Irish counties. Greatest length from east to west, 110 miles; greatest breadth, 70; area, 2890 sq. m. Cork is hilly, with great variety of surface. The west part is rocky, mountainous, and boggy; the east and south, rich, fertile, and picturesque. The ranges run east and west, except the Boghra Mountains, between the Lee and Blackwater. The coast is bold and rocky, and from its indentations, 250 miles long; the bays run 3 to 25 miles inland, the chief being Bantry, Dunmanus, Baltimore, Glandore, Clonakilty, Kinsale, Cork Harbour, and Youghal. There are many isles off the coast, including Cape Clear Island. In the west, Cork is divided from Kerry by a range running north-east and north, the chief points being 1200 to 2240 feet high. This range sends offshoots to the east, which divide the county into the parallel basins of the three chief rivers of Cork, the Blackwater, Lee, and Bandon. Part of the Munster coalfield occupies 400 sq. m. in the north-west. Cork has many small lakes in the west. The chief mineral products are coal, iron, copper, barytes, limestone, marble, fullers' earth, brick-clay, marl. There is a thermal magnesian spring at Mallow. The climate is moist but genial. The dairies are extensive, and Cork butter stands in high estimation. Of the total area, about 30 per cent. is under crops. The chief manufactures are leather, tweeds, whisky, porter; and the chief exports provisions. Pop. (1841) 854,118; (1851) 658,180; (1871) 517,076; (1881) 495,607; (1901) 406,611, of whom 90 per cent. are Catholics. Since 1885 the county returns seven members, the city two; Bandon, Mallow, Kinsale, and Youghal having been absorbed in the county.

Cork, a city and parliamentary borough of Ireland, capital of County Cork, and a county in itself, on the Lee, 11 miles above its mouth, and 166 SW. of Dublin by rail. Standing in the centre of a picturesque valley, it is built in part on an island, or group of islands, formerly a swamp, which the word *Cork, Corcoch,* or *Corcaig* implies; in part, on the slopes of the river-banks. Nine bridges cross the river to the islands. There are a spacious public park or racecourse of 400 acres; an elm-tree walk, the Mardyke, above a mile long, on the west of the city; and a beautiful public cemetery. The chief buildings are St Anne Shandon's Church, with a tower 170 feet high; the Protestant Cathedral, Early English in style, erected since 1865 at a cost of £100,000; Queen's College (1849), a fine Tudor-Gothic quadrangular building; and the Schools of Science and Art. The Lee is navigable to about a mile above the city, and a large sum has been expended on the improvement of the navigation. The extent of the quays is now above 4 miles, and ships of 2000 tons reach them. Cork Harbour, noted for its size and safety, is a basin of 10 sq. m., formed by the Lee's estuary. It could contain the whole British navy, and has been the main source of the rise and progress of the city. It is the port of call for the trans-atlantic steamers plying between Liverpool and New York. The estuary contains several large isles, rising abruptly and high above the water, with narrow channels between them. The entrance is by a channel two miles by one, defended by batteries. Adjoining the island of Haulbowline, on which are extensive government stores, is a large government dock, where vessels of the British fleet may be repaired. On the shores of the estuary are the towns of Passage and Queenstown, formerly Cove of Cork. The chief manufactures are leather, iron, gloves, ginghams, friezes, flour, malt liquors, and whisky; the chief exports grain, provisions, butter, live-stock, leather, and tweeds. Cork returns two

members to parliament. Pop. (1871) 78,642; (1881) 80,124; (1901) 76,122: of parl. borough (1881) 104,496; (1901) 99,693. Of these five-sixths are Catholics. Cork grew up around an abbey founded in 600 by St Finbar. Dermod Maccarthy, king of Cork or Desmond, surrendered it to Henry II. in 1172. Cromwell took it in 1649, and Marlborough in 1690. There is a statue of Father Mathew, who laboured here many years. See Miss Cusack's *History of the City and County of Cork* (Dublin, 1875).

Corleone (*Cor-le-o'neh*), a town of Sicily, 21 miles S. of Palermo. Pop. 14,441.

Corneto (*Cor-neh'to*), a picturesque, mediæval-looking town of central Italy, 12 miles N. of Civita Vecchia by rail, and 3 from the Mediterranean. Pop. 7175. It rose out of the ruins of the Etruscan city of *Tarquinii*.

Cornhill, a Northumberland village, 1½ mile ESE. of Coldstream.

Corniche. See RIVIERA.

Corning, capital of Steuben county, New York, on the Chemung River, 15 miles by rail WNW. of Elmira, with foundries, glass-works, &c. Pop. (1880) 4802; (1900) 11,061.

Corno, MONTE. See GRAN SASSO D'ITALIA.

Cornwall, a maritime county, forming the south-western extremity of England. Its extreme length is 81 miles; its extreme breadth 45 miles; and its area is 1365 sq. m., of which 63·4 per cent. is under cultivation. The surface is very irregular, and a ridge of bleak hills, interspersed with moors, stretches from the Tamar to the Land's End. Brown Billy (1368 feet) is the loftiest point. As this range is nearer the north of Cornwall than the south, the principal rivers are on the southern side, and run to the English Channel. With the exception of a few unimportant creeks, there are only two harbours on the north coast—the estuary of the Camel, on which is Padstow, and the bay of St Ives. Nearly all the north coast is formed of bold and picturesque cliffs; but at Perranzabuloe and Gwithian there are hills of blown sea-sand. The southern coast is also mostly bold and rocky, but indented with many headlands and bays. Between the Land's End (5° 41′ 31″ W.) and the Lizard Point is the deep indentation named Mount's Bay, from St Michael's Mount, with the harbour-works of Penzance. East of the Lizard is Falmouth Bay; and on the eastern boundary is another of the great havens of the kingdom, Plymouth Sound. The estuary of the Fowey also affords a small but perfectly sheltered deep-water harbour. The chief river is the Tamar, which practically divides Cornwall from Devon, rising within 3 miles of the north coast at Wooley Barrows. It is tidal, and navigable for 19 miles (total length 59) from its embouchure in Plymouth Sound. Its principal Cornish tributary is the Notter. The lower part of the estuary of the Tamar is called the Hamoaze. The Fowey is 30 miles long, and navigable for 6. The Fal is 20 miles long from its source to Falmouth Harbour. The Camel (also called the Alan) is 29 miles long, 10 being tidal. There is a tradition that a large tract of land between the Land's End and the Scilly Isles (q.v.) was submerged by the sea. This is the fabled Lyonesse. Mining has been carried on here from prehistoric times, and the county has been regarded as the Cassiterides of the Phœnicians and Greeks. It yields tin, copper, lead, iron, zinc, silver, cobalt, antimony, manganese, bismuth, tungsten, arsenic, &c.—a greater variety of minerals (some unique) than any other part of the United Kingdom. Gold has been found in alluvial tin works or 'streams,' the largest nugget over two ounces. Of late years mining has been very much reduced, and almost all the mines now existing are tin, of which Cornwall yields nearly all that is raised in the kingdom. The pilchard, herring, and mackerel fisheries are extensive and important. The climate, mild though damp, has been turned to good account in the Scilly Isles and the Penzance district, by the development of market-gardening for the supply of early vegetables and of fruit to the leading markets. Pop. (1801) 192,281; (1861) 369,390; (1901) 322,957. Cornwall contains one parliamentary borough—Falmouth and Penryn, and six county divisions. It returned 40 members prior to 1832, 14 till 1867, 12 till 1885, and now 7 in all. The bishopric of Cornwall, merged in that of Exeter since Saxon times, was restored in 1876, and the see fixed at Truro.

Cornwall remained in the hands of its Celtic inhabitants, and under the rule of the British Church till 936. The ancient Cornish language, belonging to the Cymric or Brythonic group of the Celtic tongues, was generally spoken until the reign of Elizabeth, and until 1678 was used in public worship. It lingered in the extreme west of the county till the early part of the 18th century; Dolly Pentreath (?1676–1778) of Mousehole is popularly regarded as the last who spoke it. Cornwall, which abounds in prehistoric remains, was created into a duchy in 1337 for the Black Prince. The eldest son of the reigning sovereign is Duke of Cornwall; and the revenues derived from the duchy by the Prince of Wales average £61,000 a year. See Tregellas's *Cornwall* (6th ed. 1891), and other works cited there.

Cornwall, a port of entry of Ontario, at the mouth of the Cornwall Canal, and separated by the St Lawrence from New York state, 67 miles SW. of Montreal. It has one of the principal woollen-mills in the Dominion. Pop. 7033.

Coro, a town of Venezuela, 210 miles WNW. of Caracas, near the Golfete de Coro. Pop. 8881. Its port is La Vela, 7 miles NE. by rail.

Coromandel Coast, a name used vaguely for the major part of the eastern coast of the province of Madras, on the Bay of Bengal. The name is probably a corruption of *Cholamandalam*, 'country of the Cholas,' an old Dravidian people.

Coronation Gulf, an inlet connected with the Arctic Ocean, south of Victoria Land, in 68° 30′ N. lat., and 110° W. long.

Coronea, a town of Bœotia, where in 447 B.C. the Bœotians defeated the Athenians, and in 394 Agesilaus the allied Greeks.

Corra Linn. See CLYDE.

Corran Narrows, the strait between Loch Linnhe and Lower Loch Eil.

Corrèze (*Cor-rehz'*), a French dep. formed out of the old province of Limousin, and taking its name from a river, the Corrèze, flowing 52 miles SW. to the Vezère, a tributary of the Dordogne. Area, 2265 sq. m.; population, 305,000. The surface attains in Mont Odonze 3129 feet. The dep. is divided into the three arrondissements of Tulle (the capital), Brive, and Ussel.

Corrib, LOUGH, an isleted lake of counties Galway and Mayo, the second largest in Ireland. Lying only 30 feet above sea-level, it is 25 miles long from NW. to SE., and 1 to 6 broad, with an area of 68 sq. m. From its south end, 4 miles N. of

Galway, it sends off the Galway River to Galway Bay. It receives the waters of Lough Mask, at its north end, through the Pigeon Hole and other caves, as well as those of the Clare, &c.

Corrichie, a moor on the borders of Kincardine and Aberdeen shires, 15 miles W. of Aberdeen. Here, on 28th October 1562, the Earl of Moray defeated the Catholic Earl of Huntly.

Corrie, an Arran coast-village, 5½ miles N. by E. of Brodick.

Corrientes, a province of the Argentine Republic, between the Paraná and Uruguay rivers. Area, 54,000 sq. m.; pop. 310,000.—The capital, Corrientes, 15 miles below the confluence of the Paraná and the Paraguay, takes its name from seven *currents* formed by points of rock above the city. Steamers from Buenos Ayres (832 miles) touch here almost daily. Pop. 18,000.

Corrievrekin (Gael., 'Brecan's cauldron'), a whirlpool or dangerous passage scarcely a mile broad, off the west coast of Argyllshire, in the strait between Scarba and Jura.

Corry, a town of Pennsylvania, 37 miles SE. of Erie. It has machine-shops, saw-mills, and oil-refineries. Pop. 5677.

Corryarrick, Inverness-shire, a mountain-pass 7 miles SSE. of Fort Augustus.

Corsham, a Wiltshire market-town, 4 miles SW. of Chippenham. Pop. of parish, 3931.

Cor'sica, the fourth largest island of the Mediterranean, is 114 miles long by 52 miles broad, with 300 miles of coast-line. Area, 3378 sq. m.; pop. (1872) 258,507; (1901) 295,589. Corsica is separated from the twin island of Sardinia, to the south, by the Strait of Bonifacio. It is 54 miles SW. of Leghorn and 98 S. of Genoa. Though now a dep. of France, the island belongs geographically, historically, and linguistically to Italy. The interior is a labyrinth of mountains, the highest summits being about the middle: Cinto (8878 feet); Rotondo (8607); Pagli-Orba (8283). On the west side the mountains reach to the coast, but on the east, between mountains and sea, there extend alluvial plains, edged seawards with lagoons and swamps, highly fertile but malarious, so that in summer the occupants have to escape to the mountains. In the time of the Romans these plains were densely peopled, and recently eucalyptus plantations are beginning to overcome the malaria. Corsica is watered by numerous streams, none navigable, with cascades glittering in all directions. The climate generally is highly salubrious. The soil is very fertile, and over 43 per cent. of the entire area is arable land; yet flour, wheat, and hay are imported. Corsica presents a succession of climates and vegetation zones. About one-sixth of the whole is covered with forest, but this includes in many places only confused thickets. The mouffion or wild sheep is found; also wild boars, large foxes, and small deer, but no wolves or bears. The venomous ant is peculiar to Corsica, where are also the *Mulmignata* spider and the tarantula. The minerals include copper, silver, lead, sulphide of antimony, iron, and manganese. Among the valuable stones are granite, porphyry, jasper, alabaster, and marble; and the Orezza mineral waters have a high medicinal value. The chief industries are fishing and rearing of cattle. Wines, timber, charcoal, olive-oil, and dried fruits are the principal exports. In 1888 a railway was opened from Bastia to Corte, and other lines have since been constructed. Corsica is divided into the five arrondissements of Ajaccio, Bastia, Calvi, Corte, Sartène. The capital is Ajaccio, but the most important town is Bastia. The language is a corrupt Italian. In early times known as Cyrnos, Corsica in the 8th century fell to the Saracens, in the 11th to Pisa. Thence it passed to the Genoese. The Genoese, unable to subdue the Corsicans, who had risen under General Paoli, surrendered Corsica to the French, who conquered it in 1768, since which time it has willingly united itself with France. Napoleon was '*the* Corsican.' See works by Boswell (1768), Borde (1887), Barry (1893), and Caird (1899).

Corsicana, capital of Navarre county, Texas, 53 miles SSE. of Dallas. It is an important cotton port. Pop. 9400.

Corstor'phine, a Midlothian village, 3 miles W. by S. of Edinburgh. Pop. 1500.

Cortland, capital of Courtland county, New York, 36 miles S. of Syracuse. It has important manufactures. Pop. 9020.

Coruisk (*Coroosk'*), a fresh-water loch (1¾×½ m.) in Skye, among the Cuchullin Hills.

Corto'na (Lat. *Crotona*), in Tuscany, 69 miles SE. of Florence, stands 2130 feet above sea-level, looking down on the Trasimene Lake, and is one of the oldest cities in Europe, with mighty cyclopean walls, Etruscan and Roman remains. Pop. 7000.

Coruña, La (in English, *Corunna*), a fortified seaport of Spain, midway between Capes Ortegal and Finisterre, on a peninsula in the Bay of Coruña, 263 miles NW. of Leon by rail. The harbour is commodious; and in 1888 a quarantine harbour was completed. One mile north-west of the town stands the famous Torre de Hercules, restored by Trajan, which serves as a lighthouse, and is nearly 100 feet high. The chief imports are sugar and American raw petroleum, dried cod, hides, spirits, and English coal. The industries include the manufacture of cotton, cigars, glass-wares, and canned provisions. Pop. 45,000. Coruña, which was taken from the Phœnicians by the Romans in the 1st century B.C., for Englishmen has rare historic interest. Here in 1386 John of Gaunt landed to claim the crown of Castile in right of his wife; in 1554 Philip II. embarked for England to marry Queen Mary; and in 1588 the great Spanish Armada set sail for the conquest of England. Here also fell gloriously Sir John Moore (January 16, 1809), after his memorable retreat and his defeat of Soult. He is buried in the gardens of San Carlos.

Corvo, the most northerly of the Azores (q.v.).

Corwen, a town of Merionethshire, North Wales, on the Dee, 12 miles NE. of Bala by rail. Pop. of parish, 2680.

Corygaum, a village in the presidency of Bombay, 16 miles S. of Poona, the scene of the last of the three defeats of the Peishwa of the Mahrattas (January 1, 1818).

Cos (Italian, *Stanko*), a Turkish island of the Archipelago, off the coast of Asia Minor. Measuring 23 by 5 miles, it has an area of 110 sq. m., and a pop. of 10,000, mostly Greeks. It consists mostly of fertile and well-tilled plains, partially of hilly country; and exports lemons, grain, wine, cotton, and silk. The chief town is Cos or Co, on the north-east coast. Cos was famous of old for its wine, its amphoræ, and its fine 'Coan garments.' It was the birthplace of Ptolemy Philadelphus, the painter Apelles, and the physician Hippocrates.

Coseley, a south-eastern suburb of Wolverhampton.

Cosenza (*Co-sents'a;* anc. *Consentia*), a cathedral city of Italy, 12 miles E. of the Mediterranean, and 262 SE. of Naples by rail, in a mountain-closed valley at the confluence of the Crati and the Busento. Pop. 26,686. Alaric died here 410 A.D.

Cosne (*Kone*), a town, with iron manufactures, in the French dep. of Nièvre, on the right bank of the Loire, 122 miles SSE. of Paris. Pop. 8269.

Cossimbazar' (*Kasimbázár*), near Murshidabad, was in the 17th century the chief English agency in Bengal.

Costanza. See KUSTENDJI.

Costa Rica (*Reeka*), the most southerly of the republics of Central America. It occupies the entire breadth from sea to sea between Nicaragua on the one side and Colombia on the other. Area, 21,495 miles, or about two-thirds that of Ireland; population, 321,000. The whites are mostly of pure Spanish descent. Except on the coast, the country is generally mountainous, with many volcanoes, all under 11,500 feet; on the Atlantic slope dense forests prevail, but wide savannahs are more frequent on the Pacific side. Prior to the discovery of gold in 1823, Costa Rica was a land of poverty, owing its title of 'The Rich Coast' solely to the anticipations of its first Spanish settlers; since then, foreign capital has opened up much of the country. Although rich in gold, silver, copper, and other metals, its chief industry is agriculture; but the population is very scanty, and only a twentieth part of the land is under cultivation. Besides valuable timber and dye-woods, it yields tobacco, sugar, bananas, cacao, caoutchouc, sarsaparilla, and vanilla, which, with hides, tortoise-shell, and mother-of-pearl, are largely exported. But the staple of trade is coffee, to which is principally due the reviving prosperity of 'the Coffee Republic.' There are 160 miles of railway. The chief ports are Punta Arenas and Limon; the other towns are San José, the capital, Cartago, Alajuela, and Heredia. Discovered by Columbus in 1493, and probably first settled on his fourth voyage, in 1502, Costa Rica has had much the same history, chequered by frequent revolutions, as its neighbours: it declared its independence in 1821. See works by Biolley (1889), Barrantes (Barcelona, 1892), and Villafranca (N.Y. 1895).

Côte-d'Or, a dep. in the east of France, formed of part of the old province of Burgundy. Area, 3383 sq. m.; pop. (1901) 361,626. It contains four arrondissements: Beaune, Châtillon-sur-Seine, Dijon (the capital), and Semur.

Cotentin, THE (*Co-ton'tan'*), the peninsula projecting into the English Channel between the Bay of St Michel and the Gulf of Carentan, now the northern part of the dep. of La Manche. It is 55 miles long and 25 broad. The chief town is Cherbourg; the old capital is Coutances.

Côtes-du-Nord ('northern coasts'), a French Breton dep., washed by the English Channel. Area, 2659 sq. m.; pop. (1901) 609,350. It is divided into the five arrondissements of St Brieuc, Dinan, Loudéac, Lannion, and Guingamp. The chief town is St Brieuc.

Cotes'wold, or COTSWOLD, Hills, a range running over 50 miles through Gloucestershire, from Chipping Campden in the NE., by Cheltenham and Stroud, to near Bath in the SW. It has an average height of 500 or 600 feet, and separates the Lower Severn from the Thames's sources. The highest point is Cleeve Hill, 1134 feet.

Cothele, the ancient seat of the Earl of Mount Edgcumbe, in Cornwall, on the Tamar, 6¾ miles N. of Saltash.

Cöthen. See KÖTHEN.

Cotonou, a small French settlement on the Guinea coast, formerly in Dahomey.

Cotopaxi, the loftiest active volcano in the world (19,550 feet), is in Ecuador, in the eastern chain of the Andes, and 50 miles S. of the equator. The upper part of Cotopaxi, a perfect cone of 4400 feet, is entirely covered with snow, save that the verge of the crater is a bare parapet of rock. The first eruption recorded was in 1533. Others followed in 1698, 1743, 1744, and 1768, the most terrible of all. Cotopaxi was quiet till 1851. In 1854–56, 1877, and 1880 there were again eruptions. See Whymper's *Travels among the Andes* (1892).

Cotroné, a fortified coast-town of Italy, 35 miles NE. of Catanzaro by rail. Pop. 9649.

Cotswolds. See COTESWOLDS.

Cottbus, or KOTTBUS, a town in the Prussian province of Brandenburg, on the Spree, 71 miles SE. of Berlin by rail. It manufactures woollen cloth, carpets, hats, linen, jute, leather, and tobacco. Pop. 40,000.

Cottingham, a town in the East Riding of Yorkshire, 4 miles NW. of Hull. Pop. 3780.

Coulmiers (*Koolm-yay'*), a French village, 12 miles WNW. of Orleans, the scene of a Bavarian defeat, 9th November 1870.

Coulport, Dumbartonshire, a pier on Loch Long, 4 miles N. of Cove.

Council Bluffs, a city of Iowa, capital of Pottawattamie county, 141 miles WSW. of Des Moines by rail, on a plain backed by the high bluffs from which it takes its name. The Missouri River, 3 miles to the west, is crossed by a grand railway bridge to Omaha, and five railways meet at the town, which manufactures paper, iron, carriages, and agricultural machines. Pop. (1870) 10,020; (1900) 25,802.

Coupar-Angus (*Coop'er-Ang-gus*), a Perthshire police-burgh, near the Isla's left bank, 13 miles NNE. of Perth. Within a Roman camp here is the fragment of a Cistercian abbey (1164). Linen is manufactured. Pop. 2100. See also CUPAR.

Courbevoie (*Koorb-vwah'*), a town on the left bank of the Seine, opposite the north-western suburbs of Paris. Pop. 27,597.

Courland, or KURLAND (*Koor'land*), one of the Baltic provinces of Russia. Mostly level, with many lakes and forests, it was formerly an independent duchy—properly, indeed, consisting of two duchies, Courland and Semgallen—and belonged, along with Livonia, to the Teutonic Knights. The difficulty of resisting Russia led to the acknowledgment in 1561 of Poland's sovereignty; but in 1795 Courland was finally united to Russia. Area, 10,535 sq. m.; population, 680,000, mostly Protestants. Mitau is the capital, but Libau the most flourishing town.

Courtallum (*Kúttálam*), an Indian town, 38 miles NW. of Tinnevelli, stands amongst the Ghats near the south end of the peninsula; and though only 450 feet above sea-level, serves as the sanatorium of the district. Pop. 1216.

Courtmacsherry, a fishing-village of County Cork, 10 miles S. of Bandon.

Courtrai (Flem. *Kortrijk*), a walled town of Belgium, on the Lys, 54 miles SW. of Brussels by rail, and 6 from the French frontier. It has a fine old bridge flanked with towers, a noble town-

hall (1526), belfry, and a beautiful Gothic church, founded in 1238 by Baldwin, Count of Flanders. Table damask, linen, and lace are the chief manufactures. Population, about 35,000. Here, in 1302, the citizens of Ghent and Bruges won over the French the 'Battle of the Spurs,' so named from the number of gilt spurs gathered from the dead.

Coutances (*Kooton^{g}ss*), a town in the French dep. of La Manche, 5 miles from the English Channel and 57 S. of Cherbourg by rail. It has a fine cathedral. Pop. 6145.

Coutras (*Kootrah'*), a town in the dep. of Gironde, 32 miles NE. of Bordeaux. Here, in 1587, Henry of Navarre defeated the League. Pop. 4324.

Cove, a Kincardineshire fishing-village, 4¾ miles S. by E. of Aberdeen. Pop. 462.

Cove and Kilcreggan, a Dumbartonshire police burgh, at the end of the Rosneath peninsula, 3½ miles by water NW. of Greenock. Pop. 916.

Coventry, a city, parliamentary, municipal, and county borough, and manufacturing town in the north of Warwickshire, on the Sherbourne, an affluent of the Avon, 18½ miles ESE. of Birmingham, and 94 NW. of London. It stands on a gentle eminence in a valley, with a ridge of hill on the south, and still contains some houses with timbered projecting fronts which belong to the 15th and 16th centuries. The modern buildings include a corn exchange, market-hall, baths, Free Public Library, School of Art, new grammar and other schools, many tricycle and bicycle works, the Coventry and Warwickshire Hospital, and the Coventry Provident Dispensary. Coventry is rich in benevolent and charitable institutions, which have been greatly augmented by the benefactions of the late David Spencer. In 1887 he provided a building for a technical school; in 1883 he had given £4200 for a public recreation ground; and at his death (June 9, 1888) he bequeathed £100,000 for benevolent purposes. A statue of Sir Thomas White has been erected, and a memorial of James Starley, the inventor of the modern tricycle. At a cost of many thousands of pounds the principal streets have been widened, and a steam-tramway now runs through the city. During recent years upwards of £70,000 has been expended in church restoration, and during 1887–89 all of Tennyson's 'three tall spires' were in the restorer's hands. St Michael's (1230–1395) is said to be the largest parish church in England, and is one of the noblest of the lighter Gothic structures. St Mary's Hall (14th c.), for the Guild, is one of the finest specimens of ornamental work in England, with carved oak roof, ancient tapestry, and great painted window. Coventry returns one member to parliament. The chief manufactures are ribbons, watches, bicycles and tricycles, cotton, worsted and woollen goods, and art metal works (the Albert Memorial, Hyde Park, London, being of Coventry manufacture). There are large silk-dyeing works. Pop. (1841) 30,743; (1901) 69,978.

The name Coventry has been interpreted 'Convent-town,' but as the form in Domesday is *Couentrev*, it is more likely 'town on the Couen'—*Couen* being the ancient British name of the Sherbourne, and *trev* being 'town.' In 1043 Earl Leofric and his wife, Lady Godiva, founded here a magnificent Benedictine monastery. Henry VIII. demolished the beautiful cathedral. Here occurred the famous meeting for the intended trial by battle between the Dukes of Norfolk and Hereford, immortalised in Shakespeare's *Richard II.* Two memorable parliaments were also held here in 1404 and 1459. In the 15th, 16th, and 17th centuries, Coventry was famous for woollens, broadcloths, caps, and blue thread bonnets. 'George Eliot' lived in Foleshill Road during 1841–42. See T. Sharp's *History of Coventry* (Birm. 1871).

Covilhão, a Portuguese town, 103 miles by rail NNE. of Abrantes. Pop. 15,986.

Covington, a city of Kentucky, on the Ohio, opposite Cincinnati, with which it is connected by a fine suspension bridge. It has distilleries, and manufactures of glass-ware, nails, and tobacco. Pop. (1850) 9408; (1900) 42,938.

Cowbridge, a mun. borough of Glamorganshire, on the Ddaw, 12 miles W. of Cardiff (17 by rail), with which and Llantrissant it returns one member. It has a grammar-school (1678). Pop. 1377.

Cowdenbeath, a coal-mining village of Fife, 2 miles WSW. of Lochgelly. Pop. 8249.

Cowdenknowes. See Earlston.

Cowdray House. See Midhurst.

Cowes, a watering-place in the north corner of the Isle of Wight, 1½ miles SSE. of Southampton by water, and 4 N. of Newport by rail. It consists of West and East Cowes, lying on opposite sides of the mouth of the Medina's estuary, and connected by steam-ferry. Standing on a hill-slope, West Cowes is the headquarters of the Royal Yacht Club (1815). Their club-house was originally a fort (1540). Yacht-building is the great speciality of Cowes, which has a fine promenade (1864), excellent hotels, baths, villas, &c. Slatwoods at East Cowes was Dr Arnold's birthplace, and in the vicinity are East Cowes Castle (1798), Norris Castle (1799), and Osborne House (1845). The last, built as a marine residence for Queen Victoria, is an Italian edifice, with a flag-tower 112 feet high, and beautiful grounds. Pop. of West Cowes (1851) 4786, (1901) 8654; of East Cowes (1861) 1954, (1901) 3180.

Cowie, a fishing-village near Stonehaven.

Cowlairs', a N. suburb of Glasgow, with great railway works.

Cowley, a S. suburb of Oxford, giving name to the Anglican mission order of the 'Cowley Fathers' (1865).

Cowpen, a Northumberland township, with coal-pits, at the mouth of the river Blyth, 1 mile W. by N. of Blyth. Pop. 17,982.

Cowslip Green, Hannah More's home, Somerset, 10 miles SSW. of Bristol.

Coxhoe Hall, the birthplace of Mrs Browning, 5½ miles SSE. of Durham.

Coxwold, a Yorkshire parish, 7½ miles SE. of Thirsk. Sterne was its parson.

Coyle, an Ayrshire stream, flowing 14½ miles through Kyle to the Ayr.

Cracow (Pol. *Krakov*, Ger. *Krakau*), a city of Austrian Galicia, 259 miles NE. of Vienna. It stands 672 feet above sea-level, in a wide, hill-girt plain on the left bank of the Vistula, which here becomes navigable, and is spanned by a bridge (1850) leading to Podgorze. The old walls, converted into promenades, have been superseded by a line of detached forts. On the Wawel rock rises the old castle of the Polish kings, degraded now to a barrack. The neighbouring cathedral (1320–59) is a splendid pile, containing the graves of John Sobieski, Poniatowski, and Kosciusko, with Thorwaldsen's statue of Christ. The university (1364) was reorganised and reopened in 1817, and now is attended by more than

1100 students. Cracow has important fairs, and its trade and manufactures (chemicals, tobacco, beer, agricultural implements, &c.) have greatly revived. Three miles west of the city is a grassy mound, 150 feet high, reared in 1820–23 to the memory of Kosciusko. Pop. (1869) 49,835; (1890) 74,593; (1905) about 95,000. Cracow was the Polish capital from 1320 till 1609. On the third partition of Poland (1795) it was assigned to Austria. In 1809–15 it was part of the duchy of Warsaw, and in 1815–45 a republic; but in 1846 it was re-annexed to Austria.

Cradock, a town and health-resort of Cape Colony, 2800 feet above the sea, in the upper valley of the Great Fish River, and half-way between Port Elizabeth and Colesberg. It is a centre of the wool trade. Pop. 7800.

Craigcrook, Lord Jeffrey's seat, 3¼ miles W. of Edinburgh.

Craigell'achie, (1) a Speyside village of Banffshire, 13 miles SSE. of Elgin.—(2) A Speyside height that 'stands fast' near Aviemore.

Craigendor'an, a steamboat pier, Dumbartonshire, 1 mile SE. of Helensburgh.

Craigenputtock, Carlyle's moorland home (1828–34), 15 miles WNW. of Dumfries.

Craig Gowan, a height (1437 feet) near Balmoral, with cairns to the royal family.

Craighall, New, a collier village of Midlothian, 2 miles WSW. of Musselburgh. Pop. 1650.

Craigieburn, 3 miles E. of Moffat, a wood celebrated by Burns.

Craigleith, a huge quarry 2 miles W. by N. of Edinburgh.

Craigmillar, a fine ruined castle (1427–1661), 3 miles SE. of Edinburgh.

Craignethan, a ruined castle (Scott's 'Tillietudlem') in Lanarkshire, 5½ miles WNW. of Lanark.

Craigneuk, part of Wishaw (q.v.).

Craigphadrick. See Inverness.

Crail an antique little coast-town in the 'East Neuk' of Fife, 2½ miles WSW. of Fife Ness, and 10 SE. of St Andrews. There is a fragment of a castle of David I.; and an interesting church, in which Knox preached, and of which Sharp was minister. A royal burgh since 1306, Crail with St Andrews, &c. returns an M.P. Pop. 1070.

Craiova. See Krajova.

Cramond, a village at the Almond's influx to the Firth of Forth, 5 miles WNW. of Edinburgh.

Cranborne, a Dorset town, 9 miles NNE. of Wimborne. Pop. of parish, 2824.

Cranbrook, a pleasant little market-town in the Weald of Kent, 46 miles SE. of London. It has a fine Perpendicular church, and a large trade in hops. From the 14th to the 17th century it was the centre of the broadcloth manufacture introduced by the Flemings. Pop. of parish, 3950. See Tarbutt's *Annals of Cranbrook* (1875).

Cranganore (*Kodungalûr*), a town in Cochin state, on the west coast of southern India. It stands on an opening of the Cochin backwater, 18 miles N. of Cochin town. Pop. 10,000.

Cranston, a town of Rhode Island, 4 miles by rail SW. of Providence, with calico and woollen works, &c. Pop. (1880) 5940; (1900) 13,343.

Crarae, a place with granite quarries on Loch Fyne, 9½ miles SSW. of Inveraray.

Crathie and Braemar, Aberdeenshire, the Deeside parish in which is Balmoral (q.v.).

Craven Arms, Shropshire, a junction, 20 miles S. of Shrewsbury.

Crécy-en-Ponthieu, or Cressy, a village in the French dep. of Somme, on the Maye, 12 miles N. of Abbeville. Here, on 26th August 1346, Edward III. won a great victory over the French.

Crediton, or Kirkton, a Devon town, on the Creedy, a tributary of the Exe, 7 miles NW. of Exeter. It suffered much by fire in 1743 and 1769, but its church is a fine old cruciform structure. The traditional birthplace of St Boniface, the apostle of Germany, Crediton was the seat from 910 to 1050 of a bishopric, transferred then to Exeter. Its woollen manufactures are a thing of the past. Pop. (1851) 3924; (1901) 3974.

Creedmoor, a village of Long Island.

Creetown, a Kirkcudbrightshire seaport, 4 miles NE. of Wigtown. Pop. 991.

Creil, a French manufacturing town in Oise, and 22 miles SE. of Beauvais, where metal-work and earthenware are largely produced. Pop. 11,000.

Crema (*Kray'ma*), a cathedral city of Lombardy, 27 miles NW. of Cremona by rail. Pop. 8251.

Cremo'na, a decayed city of northern Italy, on the north bank of the Po, 60 miles SE. of Milan by rail. Among its buildings are the cathedral (1107–1606), with gorgeous interior; the neighbouring octagonal Baptistery; the Palazzo Pubblico (1245); the Campo Santo; and the famous Torrazzo (1288) or belfry—the loftiest campanile in Italy, 396 feet high. It has a river traffic, and manufactures of silk, cotton, earthenware, and chemicals; in the 16th, 17th, and 18th centuries it was greatly celebrated for its violins, the most famous makers being the Amati, Straduarius, and the Guarnieri. Pop. 37,930.

Creran, an Argyllshire sea-loch, curving 8 miles to Loch Linnhe.

Cressy. See Creçy.

Creston, a town of Iowa, 115 miles W. of Ottumwa. It has machine-shops and railway-carriage works. Pop. (1870) 411; (1900) 7750.

Crete (Ital. *Candia*, Gr. *Krētē*), an autonomous Turkish island in the Mediterranean, still under Turkish suzerainty. It is 60 miles S. of Cape Malea in Greece, 110 SW. of Cape Krio in Asia Minor, 100 SSW. of Rhodes, and 300 W. of Cyprus. Its length is 156 miles; its breadth varies from 30 to as little as 7 miles; and its area is 3326 sq. m., or twice the size of Hampshire. The climate is excellent; the rainfall about 27 inches. Crete is for the most part mountainous, especially in the west, where stand the White Mountains. In the centre Mount Ida, now called Upsiloriti, attains 8055 feet. Everywhere the numerous small valleys are exceedingly fertile. The rivers are dried up in summer; but springs abound all over the island. The coast-line, deeply indented on the north, includes some good harbours, as Suda Bay on the north, and on the south Kaloi Limenes or the Fair Havens (Acts, xxvii. 8). Three neighbouring islands are Clauda or Gavdo, off the south-west coast, 15 sq. m. in area, with a lighthouse; Dia; and Grabusa. Wheat and fruit are the most important products. Oranges and lemons particularly flourish. The grapes are good, but the wine, though abundant, is very inferior. The forests have almost entirely disappeared; but on the hills the cypress flourishes, and in the plain country the olive is the most important tree. The principal exports are olive-oil, soap, carobs, wool, cheese, valonia, acorns, and fruits. Sheep are largely bred, and

the wool is exported. Sponges are found upon the coast. Pop. 320,000, mostly of Greek descent, with 30,000 Moslems. The Cretans are a turbulent race, of proverbial mendacity, bold and independent. Crete had once, according to Homer, 'a hundred cities;' there are now but three towns: Candia, pop. 21,500; Retimo, 9500; and Canea or Khania, 14,000. Crete was subdued by the Romans (67 B.C.), by the Venetians (1205), and by the Turks (1669). A series of rebellions ended in 1897 in the intervention of the powers, the expulsion of the Turkish officials, and the constitution of Crete an autonomous state under Turkish suzerainty and Prince George of Greece as commissioner. In 1905 there was a rebellion aimed at union with Greece. Since 1900 there have been great excavations at Knossos, the ancient capital. See works by Spratts (1865), Edwardes (1887), A. J. Evans (1896), Bickford Smith (1897), and Freese (1897).

Creuse (nearly *Krehz*), a river and a dep. in central France. The river flows 146 miles northwestward to the Vienne, a tributary of the Loire. —The dep., with an area of 2150 sq. m., had a pop. of (1872) 274,663; (1901) 277,831.

Creusot, Le (*Kreh-zo'*), a town in the French dep. of Saône-et-Loire, 14 miles SSE. of Autun, and 236 SSE. of Paris. It owes its importance to the huge ironworks (1837) of Schneider & Co., at which cannon are largely made. Pop. (1846) 4012; (1901) 30,175.

Crèvecœur (*Krehv-kehr'*; Fr. 'heart-breaker'), a once famous Dutch fort at the confluence of the Meuse and Dieze, 4 miles NNW. of Bois-le-Duc. It figures in history 1587–1794.—The same name is borne by French villages in Nord and in Oise.

Crevillenté (*Kray-vil-yen'teh*), a town of Spain, 20 miles WSW. of Alicante. Pop. 10,167.

Crewe, a town of Cheshire, with a great railway junction and the huge works (1843) of the London and North-Western Railway, to which it owes its present importance. It is 158 miles NW. of London, 43 SE. of Liverpool, 31 SSW. of Manchester, and 53 NW. of Birmingham. About 1840 there were only two or three houses where Crewe now stands; but since then its pop. has grown to 4491 in 1851, 17,810 in 1871, and 42,074 in 1901. Naturally Crewe is not an attractive place; still, the L. & N.W. Company have erected many handsome buildings, done much in the way of sanitation, and in 1887–88 presented the town with a beautiful park of 40 acres. Crewe was incorporated in 1877, and the borough boundary was extended in 1892. Lord Crewe's seat, Crewe Hall, by Inigo Jones, was burnt in 1866, but has been since rebuilt.

Crewkerne, a Somerset market-town, in the fertile valley of the Parret, 15 miles SE. of Taunton. It has a cruciform Perpendicular church, with a splendid west front; a grammar-school (1499), occupying new buildings; and manufactures of sailcloth, girth-web, hair-seating, &c. Pop. 4226.

Criccieth (*Krik'ki-eth*), a Carnarvonshire watering-place, one of the five Carnarvon (q.v.) boroughs, on Cardigan Bay, 4 miles W. by S. of Tremadoc. Pop. 1410.

Crichton (now *Krī-ton*; formerly *Krihh'ton*), a fine ruined castle of Midlothian, on the Tyne, 5 miles ESE. of Dalkeith. It figures in *Marmion*.

Crickhowell, a market-town of Brecknockshire, on the Usk, 13 miles SE. of Brecknock. Pop. of parish, 1246.

Cricklade, a town in Wiltshire, on the Isis or Thames, 7 miles NNW. of Swindon. Enfranchised under Edward I., it returned two members till 1885, the 'borough' since 1782 having included forty-four parishes and parts of six others, with a pop. of 51,000. Pop. in 1901 of rural district (Cricklade and Wootton Bassett) 11,357.

Crieff (*Kreeff*), a Perthshire town, on the Earn's left bank, 18 m. W. of Perth by two branch-lines opened in 1856–66. It is situated in the midst of exquisite scenery, enjoys a pure dry climate, has a large hydropathic (1867), two old market-crosses, and Morrison's Academy (1859). Of many neighbouring seats, Drummond Castle (1491), Lord Willoughby de Eresby's, is famous for its gardens. Pop. (1851) 3824; (1901) 5208.

Criffel, a Kirkcudbrightshire hill (1867 feet), 2¼ miles S. by W. of Newabbey.

Crime'a (Tartar *Krym*, anciently the *Tauric Chersonese*), a peninsula of South Russia, between the Black Sea and Sea of Azov, joined to the continent of Russia by the Isthmus of Perekop, 18½ miles long by 5½ miles broad at its narrowest part, a canal through which was undertaken in 1888. The peninsula is 200 miles from east to west, by 125 miles from north to south, with 625 miles of coast-line, and an area of about 10,000 sq. m. Along the Siwash or Putrid Sea on the north, and the Sea of Azov, the coasts are flat and open. To the west of the wide bay of Kaffa or Theodosia the south coast becomes rocky and elevated, and forms a succession of capes and small gulfs. Balaklava, and more especially Sebastopol, have fine harbours. Limestone mountains from Cape Chersonese to Baffa Bay show deep erosion, presenting the ruins of a vast tableland, sloping gently northwards into the steppe, but hanging in abrupt precipices southwards. Chatîr Dagh or Tent Mount (anc. *Mons Trapezus*, 'table mount'), is the highest summit, 5450 feet. In the hilly district about Kertch are thermal and naphtha springs, and mud volcanoes. There are some fifty small rivers and rivulets, and four hundred salt lakes. The climate is healthy, and generally mild, but in winter the steppe is exposed to cold winds, frost, and snowstorms, while the south coast is sheltered and warm. The steppe, though not fertile, yet grazes innumerable herds of cattle, and yields porphyries and various coloured marbles. The northern mountain-slopes are laid out in pastures, thickets, orchards, and gardens watered from the rivers. In the uplands are still magnificent forests of oak, beech, elm, ash, willow, &c. On the southern slopes are famous health-resorts, with Livadia and other imperial residences. Good wine is largely produced, and some exported. Though the Crimea was once famous for its corn, it has suffered greatly from drought, and much good land is now uncultivated. Good coal is mined; an extensive field was opened in 1888. The population numbers about 900,000, of whom most are Tartars, 250,000 Russians, and the rest Greeks, Jews, Bulgarians, Germans, &c. The capital is Simferopol, the old Tartar capital being Bakchiserai. For Englishmen the peninsula's chief interest is in the Crimean War (1854–55), when Britain, France, and Sardinia defeated the Russians, at a cost to the first of 20,656 lives.

See J. B. Telfer, *The Crimea and Transcaucasia* (1876), and histories of the war by Kinglake (8 vols. 1863–87) and Hamley (1891).

Crinan Canal, 9 miles long, in Argyllshire, between Loch Gilp, a branch of Loch Fyne, and Loch Crinan, in the Sound of Jura, at the head

of the peninsula of Kintyre. Constructed in 1793–1801 at a cost of £133,000, it is 24 feet broad and 10 deep, has 15 locks, and admits vessels of 200 tons.

Croaghpatrick (*Kro-patrick*), a mountain (2510 ft.) of County Mayo, 4 m. SW. of Westport. Here St Patrick is said to have begun missionary work.

Croätia and Slavonia (Hung. *Horvát-Szlavonország*), form since 1881, together with their former 'Military Frontier,' a crown-land belonging to the Hungarian section of Austria, lying between the Adriatic Sea on the SW., where Croatia has a seaboard of about 84 miles, and Hungary on the NE. Area, 16,352 sq. m.; pop. about 2,500,000. The surface of Croatia falls mainly into a wooded mountain district, attaining 5751 feet. The province belongs to the basin of the Danube, its most important rivers being the Drave and Save. In Slavonia extensive marshes are found along the main rivers. Warm mineral springs are numerous, and earthquakes, especially about Agram, are frequent. The Adriatic coast is poorly supplied with harbours. The people are Slavs. Agram is the capital.

Croisic, Le (*Krwah-seek'*), a seaport in the French dep. of Loire-Inférieure, 20 miles W. of St Nazaire by rail. Pop. 2464.

Crom'arty, a town of Ross and Cromarty, on the south shore of the Cromarty Firth, 2 miles from its entrance, and 19 NNE. of Inverness. Nothing remains of the old stronghold of the Urquharts, the most famous of whom was Rabelais' translator, Sir Thomas. Hugh Miller was a native. With Wick, &c., Cromarty returns a member to parliament. Pop. 1242.—**Cromarty Firth**, a land-locked inlet, extends 19½ miles north-eastward and eastward to the Moray Firth. It forms a noble harbour, 1 mile to 7¾ miles broad, and 5 to 35 fathoms deep; receives at its head the Conon; and narrows at its entrance to 7 furlongs, between the beetling North and South Sutors, 400 and 463 feet high. On its shores are the towns of Dingwall, Invergordon, and Cromarty.—**Crom'artyshire**, a Scottish county, 369 sq. m. in area, but consisting of ten detached portions, and scattered up and down Ross-shire, with which, under the Local Government (Scotland) Act of 1889, it is finally incorporated. It comprised the ancient sheriffdom of Cromarty, and outlying bits annexed thereto towards the close of the 17th century at the instigation of Viscount Tarbat (created Earl of Cromarty, 1703), who wished thus to hold jurisdiction over every part of his estates. See Sir W. Fraser's *Earls of Cromarty* (2 vols. 1876).

Cromdale, in Elginshire, on the right bank of the Spey, 5 miles NE. of Grantown. Here, on 1st May 1690, 800 Jacobite Highlanders were surprised and routed by a body of dragoons.

Cromer, a pleasant watering-place of Norfolk, 23 miles N. of Norwich by rail (1877). The sea has made great encroachments on the cliffs since 1350, though the town itself is now protected by a sea-wall, formed in 1877, with an esplanade and a jetty, at a cost of nearly £10,000. There are capital sands and golf-links (1887), and the church has a noble flint-work tower of 160 feet. Pop. of urban district, 3781. Lord Cromer (Sir Evelyn Baring) was born here. See W. Rye's *Cromer Past and Present* (1889).

Cromford, a town of Derbyshire, on the Derwent, 2 miles N. by E. of Wirksworth. Arkwright migrated hither in 1771. Pop. 1082.

Crompton, a northern suburb of Oldham.

Cronstadt, a strongly fortified Russian seaport, 20 miles W. of St Petersburg, on a narrow island 7 miles long, at the narrowest part of the Gulf of Finland, and over against the mouth of the Neva. Founded by Peter the Great in 1710, it is at once the greatest naval station and the most flourishing commercial port of Russia. It is the seat of the Russian Admiralty; has three harbours; and since 1884 has been connected with St Petersburg by a ship-canal 207 feet wide and 22 feet deep. Cronstadt contains a cathedral, a statue of Peter the Great, and a British seamen's hospital (1867). Pop. 61,000.

Cronstadt, in Hungary. See **Kronstadt**.

Crookhaven, a fishing-village of County Cork, 30 miles SW. of Skibbereen.

Crookston Castle, a ruined castle of Renfrewshire, 5½ miles ESE. of Paisley. Darnley's betrothal to Queen Mary is falsely placed here.

Cropredy Bridge, near Banbury, gives name to Charles I.'s defeat of Waller (29th June 1644).

Crosby, Great, a watering-place 6½ miles N. by W. of Liverpool. Pop. 7800.

Crossmaglen, an Armagh market-town, 3 miles NE. of Culloville. Pop. 774.

Crossraguel ('Cross of St Regulus'), a ruined Cluniac abbey (1244) in Ayrshire, 2 miles SW. of Maybole.

Cross River. See **Calabar**.

Crosthwaite, the parish containing Keswick (q.v.). In its churchyard is Southey's grave.

Crotona. See **Cortona**.

Crowborough, a village in East Sussex, 7 miles S. of Tunbridge Wells, 2 miles E. of Crowborough Beacon (804 feet). Pop. 3000.

Crowland, or **Croyland**, a Lincolnshire market-town, on the Welland, in the Fens, 10 miles NNE. of Peterborough. Here in 716 King Ethelwald founded a monastery, which, restored in 1113, became a mitred Benedictine abbey of singular magnificence. The north aisle of its church now serves as the parish church; the so-called 'triangular' bridge, now waterless, was built by an abbot about 1380. Pop. of parish, 2800. See Perry's *Crowland Abbey* (1867).

Crowle, a market-town of Lincolnshire, 7 miles E. by S. of Thorne. Pop. of parish, 2741.

Crown Point, a village of New York, on Lake Champlain. A British fort here was captured by Colonel Ethan Allen in 1775.

Croydon, a town in Surrey, 10½ miles S. of London Bridge, yet practically a suburb of London. It lies on the edge of the chalk and plastic clay, near the Banstead Downs, at the source of the Wandle, hence its name *Croindene* 'chalkhill') in Domesday. The archbishops of Canterbury had a palace here from the Conquest till 1757. Its Perpendicular hall (1452) and chapel (1633–63) were purchased by the Duke of Newcastle in 1887 and presented to the Sisters of the Church Extension Association. Addington Park, 3½ miles ESE., has since 1807 been the summer seat of the archbishops. Addiscombe House, at one time the residence of the first Earl of Liverpool, was converted in 1812 into the East India Military College, but was pulled down in 1863. The fine old Perpendicular parish church was destroyed by fire in January 1867, with the exception of the tower; but was rebuilt by Sir Gilbert Scott, and retains the monument of Archbishop Sheldon, with fragments of that of Archbishop Grindal. That of Archbishop Whitgift was restored in 1888 at a cost of £600. Whit-

gift's Hospital (1596) is a red brick quadrangular pile, whilst his grammar-school now occupies buildings of 1871, besides a large Whitgift middle school. Till the 18th century Croydon was famous for its 'colliers' or charcoal-burners; now its chief specialty is the manufacture of church clocks and carillons. It was made a municipal borough in 1883, a parliamentary one in 1885, and a county borough in 1888. Pop. (1851) 10,260; (1861) 20,325; (1871) 55,652; (1881) 78,953; (1891) 102,695; (1901) 133,895.

Croyland. See CROWLAND.

Crystal Palace. See SYDENHAM.

Crozet Islands, a rocky, uninhabited group to the south of the Indian Ocean, almost on a line between the Cape of Good Hope and Kerguelen's Land, in lat. 46° S., and long. 52° E.

Csaba, a town of Hungary, 7 miles S. of Bekes by rail. Pop. 37,616.

Csanad, a village in Hungary, on the Maros, 22 miles E. of Szegedin. Pop. 2977.

Csongrad, a town of Hungary, at the confluence of the Theiss and the Körös, 75 miles SE. of Pesth. Pop. 27,837.

Cuando, a name of the Chobe, a tributary of the Zambesi (q.v.).

Cuango, or KWANGO. See CONGO.

Cuba, the most westerly and largest of the West Indian islands, since 1902 an independent republic, stretches in the form of a long narrow crescent, convex on the north side, at the entrance of the Gulf of Mexico, which it divides into two channels—the north-west, 124 miles wide, and the south-west, 98 miles at its narrowest part. Cuba is 759 miles long from east to west, with a breadth varying from 27 miles to 90 miles, a coast-line of 1976 miles, and an area of 41,655 sq. m. The shores are low and in many parts beset by reefs and banks, but there are numerous excellent havens. A watershed running lengthwise through the island, rises into mountainous heights only in the south-east, where the Sierra de Maestra in the Pico de Tarquino attains 8400 feet. The mountains, containing minerals, especially copper and iron, are wooded to the summits. The limestone rocks abound in caverns, with magnificent stalactites. Mineral waters are plentiful. The rivers, running north and south, are navigable for only a few miles by small boats, but are very serviceable for irrigation. The climate, more temperate than in the other West Indian Islands, is healthy in the elevated interior, but the coasts are the haunt of fever and ague. No month of the year is free from rain, the greatest rainfall being in May, June, and July. Earthquakes are frequent in the east; and a hurricane in 1846 demolished 1872 houses and sank 216 vessels. The soil is eminently fertile, a large part still covered with virgin forest containing magnificent mahogany, cedar, &c. Among the cultivated products are sugar, tobacco, coffee, cacao, rice, maize, cotton, esculent roots, and tropical fruits. The rivers and seas are well stocked with fish, and turtles abound in the shallows and sandy places of the beach. Sugar has long been the chief product; and there are some 1600 sugar plantations, 8500 tobacco plantations, and 700 coffee plantations.

Cuba, spoken of as the 'Queen of the Antilles,' was discovered in 1492 by Columbus, and first settled by Spaniards at Baracoa in 1511. Havana, founded in 1519, was reduced to ashes by the French in 1538, and again in 1554. In 1762 the English took and held Havana for a year. In 1818 the trade of Cuba was opened to the world, and for some years the island enjoyed unexampled prosperity. During the American civil war Cuba developed its sugar industry. An insurrection against the Spanish authorities went on from 1868 to 1878, a new one broke out in 1895, and the Spanish severities in suppressing it led to the intervention of the United States and the war, disastrous to Spain, of 1898–99. After the war Cuba was occupied by the Americans till 1902, when a separate constitution was given to it as an independent republic, closely connected with the United States by a 'reciprocal commercial convention.' Pop. (1900) 1,580,000. Havana is the capital; other towns are Puerto Principe, Santiago, Nuevitas, and Cienfuegos, united by railway. See works by Gallenga (1873), Goodman, Ballou, Davis (1897), Porter (1899), and Robinson (1905).

Cubango, a river of central Southern Africa, the chief feeder of Lake Ngami.

Cuchullins, or COOLINS, a group of sublimely picturesque mountains in the south of Skye, attaining 3183 feet.

Cuckfield, a Sussex market-town, 12 miles NNW. of Lewes. Pop. 1837.

Cúcuta, SAN JOSÉ DE, a town in the Colombian dep. of Santander, on the Rio Zulia, 35 miles S. of Puerto Villamizar by rail. It was rebuilt after the earthquake of 1875. Pop. 10,000. —ROSARIO DE CÚCUTA, to the SE., has also large plantations of coffee and cacao. Pop. 6000.

Cuddalore (*Kúdalúr* or *Gudulúr*), the chief town in South Arcot, on the Coromandel or east coast of India, 16 miles S. of Pondicherry. It has a large trade by land with Madras in oils, indigo, and sugar, and exports grain by sea. Cuddalore, for 77 years British, was in 1758 taken by the French, but finally ceded to Britain in 1785. Pop. 53,000.

Cuddapah, a town 161 miles NW. by rail of Madras. Pop. 18,982.

Cuddesdon, a village of Oxfordshire, 6 miles ESE. of Oxford. Here are the palace of the bishops of Oxford, rebuilt by Bishop Fell in 1679, and a theological college (1854).

Cuenca (*Kwen-ka*), a decayed city of Spain, 85 miles ESE. of Madrid, stands 2960 feet above sea-level, at the confluence of the Jucar and Huecar. It has a very interesting cathedral (1177–1669). Pop. 10,300.—Area of province of Cuenca, 6726 sq. m.; pop. 251,000.

Cuenca, a cathedral city of Ecuador, on the Rio Paute, 190 miles SSW. of Quito, on a fertile tableland, 8469 feet above the sea. Pop. 30,000.

Cuernaváca (*Kwernavah'ka*), capital of the Mexican state Morelos, 40 miles S. of Mexico City. Near it is the famed *teocalli* of Xochicalco. Pop. 17,000.

Cuevas de Vera (*Kway'vas day Vay'ra*), a town in the Spanish province of Almeria, on the Almanzora, 70 miles WSW. of Cartagena. Pop. 20,558.

Culbin, a sandy desert on the Moray Firth, 15 sq. m. in area, about the mouth of the Findhorn. It was formed between 12th and 17th centuries, and some of its drifted sand-hills are 100 ft. high.

Culebra (*Coolay'bra*), one of the Virgin Islands.

Culenborg, or KUILENBURG, a town of Holland, on the Lek, 11 miles SSE. of Utrecht. Pop. 6798.

Culiacan', a city of Mexico, on the Rio de Culiacan, 100 miles SE. of Sinaloa. Pop. 11,000.

Cullen, a fishing-town of Banffshire, on the

Moray Firth, 67 miles NW. of Aberdeen by railway (1885). Backed by the conical Bin Hill (1050 feet), it has a harbour (1817–34), a cruciform parish church, and Cullen House, a seat of the Earl of Seafield. A royal burgh since about 1200, Cullen unites with Elgin, &c., to return one member. Pop. 4100.

Cullera (*Kool-yay'ra*), a Spanish port, near the Jucar's mouth, 25 m. SSE. of Valencia. Pop. 11,950.

Cullod'en, or Drummossie Muir, a broad flat sandstone ridge, 300 to 500 feet high, 6 miles ENE. of Inverness. Planting and culture have changed its aspect much since 16th April 1746, when it was the scene of the defeat of Prince Charles Edward by the Duke of Cumberland. Since 1881 a cairn, 20 feet high, marks the battlefield. Within 2 miles stands Culloden House, the seat of Duncan Forbes.

Cullompton, a Devon town, on the Culme, 12½ miles NE. of Exeter. Pop. of parish, 3979.

Culna. See Kalna.

Culross (*Koo'ros*), a pretty old-world village of Fife (till 1889 Perthshire detached), on the north shore of the Firth of Forth, 7 miles W. by S. of Dunfermline. With memories of SS. Serf and Kentigern, it has remains of a Cistercian abbey (1217), but has lost its manufacture of 'girdles,' its salt-works, shipping, and submarine coal-mines. A royal burgh since 1588, it unites with Stirling, &c. to return one member. Pop. 350. See Beveridge's *Culross* (1885).

Cults, a Fife parish, the birthplace of Wilkie, 4½ miles SW. of Cupar.

Culzean (*Kul-leen'*), the Ayrshire seat (1777) of the Marquis of Ailsa, 4½ miles W. of Maybole.

Cumaná, a town of Venezuela, on the Manzanares, a mile above its mouth, where the port of Puerto Sucre lies on the Gulf of Cariaco. It is the oldest European town in South America, having been founded by Columbus's son Diego as New Toledo in 1521. It was almost destroyed by earthquake in 1853. Pop. 12,051.

Cumania, a region in central Hungary divided into *Great Cumania*, east of the Theiss, and *Little Cumania*, between the Danube and the Theiss.

Cumberland, a Border county of England, washed on the W. by the Irish Sea and the Solway Firth. Eleventh in size of the English counties, it has a maximum length of 75 miles, a maximum breadth of 45, and an area of 1564 sq. m. The surface is mountainous in the south-west and east; the middle consists of hills, valleys, and elevated ridges, and the north and north-west districts, including the vale of Carlisle, are low, flat, or gently undulated. The mountains in the south-west are high, rugged, and sterile, with deep and narrow valleys, lakes, rivers, waterfalls, and woodlands. The chief mountains are Scaw Fell Pike (3210 feet), Scaw Fell (3162), Helvellyn (3118), Skiddaw (3058), Bow Fell (2960), and Cross Fell (2892). The largest lakes are Ullswater, Derwentwater, Bassenthwaite, Thirlmere, Buttermere, Wastwater, and Ennerdale. Six of the chief waterfalls are 60 to 156 feet high. The chief rivers are the Eden, the Esk, and the Derwent. Cumberland abounds in mineral wealth—silver, copper, lead, iron, plumbago, gypsum, limestone, coal, slates, marbles, marl, &c. In the mountainous parts the climate is wet and variable, especially from July to October; on the coast it is mild. The annual rainfall ranges from 50 inches to 244 at Styhead Pass (1077 feet). There are many small dairies. The estates are generally small, and farmed by the owners, or held under the lords of the manors by customary tenure. Many of the small proprietors, or 'statesmen,' have had their lands in their families for centuries. The chief towns are Carlisle, Cockermouth, Whitehaven, Workington, Maryport, Wigton, Penrith, Keswick, Egremont. Since 1885 Cumberland returns one member for each of the four divisions, North or Eskdale, Mid or Penrith, Cockermouth, and West or Egremont. Pop. (1801) 117,230; (1841) 178,038; (1901) 266,921. Near Keswick and Kirkoswald are two fine stone circles; and many Roman relics have been found. For centuries part of Cumbria or Strathclyde, the present county was finally annexed to England in 1157. Prior to the union of the crowns, it was the constant scene of war and devastation; and it suffered again in both the '15 and the '45. See Borders, Lake District; and R. S. Ferguson's *History of Cumberland* (1890).

Cumberland, a river of Kentucky and Tennessee, flowing 650 miles to the Ohio at Smithland—nearly 200 navigable for steamboats. For the Cumberland Mountains, see Kentucky.

Cumberland, (1) capital of Alleghany county, Maryland, on the Potomac, 178 miles W. by N. of Baltimore by rail. It has manufactures of brick, cement, flour, and leather. Pop. 17,729.—(2) The north-easternmost town of Rhode Island, with coal and other minerals. Pop. 8990.

Cumberland Island (so called) is a peninsula of Baffin Land, extending into Davis Strait.

Cumbernauld, a Dumbartonshire village, 16 miles NE. of Glasgow. Pop. 1120.

Cumbrae, Big or Great, an island of Buteshire, in the Firth of Clyde, 2½ miles E. of Bute at the narrowest, and 1½ mile WSW. of Largs. With the shape of a shark's tooth, it is 3¾ miles long, 2 broad, 10½ in circumference, and 5 sq. m. in area. It rises 417 feet, and consists of Old Red sandstone, with wall-like trap-dykes intersecting it. The Marquis of Bute is sole proprietor. Millport, on the south shore, 19 miles SSW. of Greenock, is a crowded resort in summer. Pop. (1801) 506; (1901) 1754, of whom 1663 were in Millport.—Little Cumbrae, 1½ mile SSW. of Millport, is barely 1 sq. m. in area. It rises 409 feet, and has a lighthouse (1826). Pop. 17.

Cumbria. See Strathclyde.

Cuminestown, an Aberdeenshire village, 6 miles ESE. of Turriff. Pop. 438.

Cumnock, Old, a town of Ayrshire, on Lugar Water, 18 miles by rail E. of Ayr. The manufacture of wooden snuff-boxes was many years since transferred to Mauchline, and mining is now the chief industry. The Covenanting 'prophet,' Peden (1626–86), lies in the churchyard. Dumfries House (Marquis of Bute) is 2 miles to the west. Pop. 3104.—New Cumnock, on the Nith, 5½ miles SE. of Old Cumnock, has 1514 inhabitants.

Cumnor, a Berkshire village, 3¾ miles WSW. of Oxford. The house in which Amy Robsart was murdered is gone.

Cunaxa, east of the Euphrates, 60 miles N. of Babylon, the battlefield (401 B.C.) where Cyrus the younger, supported by Xenophon and 13,000 Greeks, was defeated by his brother Artaxerxes Mnemon, and slain.

Cundinamarca, a central dep. of Colombia. Area, 79,810 sq. m.; pop. 567,658. The capital is Bogotá, also capital of the republic.

Cunene (*Koo-nay'nay*), a river of Portuguese South Africa, flowing 600 miles southward and westward to the sea 60 miles north of Cape Frio.

Cuneo. See CONI.

Cunninghame, the northern of the three old divisions of Ayrshire.

Cupar, or CUPAR-FIFE, the county town of Fife, on the Eden, 10 miles W. by S. of St Andrews, and 30 NNE. of Edinburgh. Brewing, tanning, &c. are carried on; and there is a large corn-market. Lord Campbell was a native. The place has been a royal burgh since at least 1363, and it unites with St Andrews, &c. to return one member. Pop. (1851) 5605; (1901) 4483. See also COUPAR-ANGUS.

Cura, CIUDAD DE, a town of Venezuela, 60 miles SW. of Carácas. Pop. 12,644.

Curaçao (*Koo-ra-sâh'o;* also spelt *Curaçoa*), the most important of the Dutch West India Islands. It lies 40 miles from the coast of Venezuela, is 36 miles long by 8 broad, and has a population of 30,000. The capital is Willemstad, on the Bay of St Anna, with 10,000 inhabitants. The chief produce is salt, but careful cultivation produces sugar, tobacco, maize, figs, cocoa, cocoa-nuts, lemons, and the oranges with which the Curaçoa liqueur is prepared in Holland. The colonial government has authority not merely over the neighbouring Windward Islands, Aruba and Bonaire, but also St Eustache, Saba, and the Dutch part of St Martin. Altogether the Dutch West Indies have a population of about 52,000. Curaçao was discovered by Spain in 1527, taken by the Dutch in 1634, by the English in 1807, and restored to Holland in 1815.

Curia Muria. See KURIA MURIA.

Curisches Haff. See KURISCHES HAFF.

Curicó, a town of Chili, near the Rio Lontué, 140 miles SSE. of Valparaiso. Pop. 15,110.

Curragh, a large undulating down in Ireland, 2 miles E. of Kildare town. It is crown property, and in it is a large camp of exercise, established in 1855. It is even better known as a racecourse.

Currie, a Midlothian village, 6 miles SW. of Edinburgh. Pop. 333.

Curzola (*Koortz'ola;* anc. *Corcyra*), a Dalmatian island of the Adriatic, 30 miles long by 5 broad. Pop. 18,934 (1938 in Curzola town in the NE.).

Cusset (*Küs-say'*), a town 2 miles NE. of Vichy (q.v.), with two mineral springs. Pop. 6125.

Custozza (*Koostotz'a*), a village 10 miles SW. of Verona, where the Italians have twice—in 1848 and 1866—been utterly defeated by the Austrians.

Cüstrin. See KÜSTRIN.

Cutch (*Kachchh*), a protected principality under the government of Bombay, stretches along the Gulf of Cutch and the Indian Ocean between Gujarat and Sind. Excluding the Rann of Cutch, it is 160 miles long from E. to W., 30 to 70 broad, and 6500 sq. m. in area. Earthquakes have occurred. The population is about 500,000. The capital is Bhûj. The *Rann* or *Runn of Cutch*—subdivided into two parts, the smaller, of nearly 2000 sq. m., on the east, and the larger, of 7000 sq. m., on the north—is a desert, being mainly caked, hard ground during the dry season, and in the rainy a sort of shallow lake. It is supposed to have been originally a permanent inlet of the ocean. The periodical disappearance of the waters leaves behind it one continuous crust of salt.

Cut Hill, a Dartmoor eminence (1971 feet).

Cuttack (*Kataka*, 'the fort'), a town of Orissa, Bengal, immediately below the bifurcation of the Mahanadi, 220 miles SW. of Calcutta. It is chiefly notable for its filigree-work in gold and silver. Pop. 53,500.

Cuxhaven (*Kooks-hâh'fen*), a German town, on the Elbe's south bank, at its mouth in the German Ocean, 72 miles NW. of Hamburg. Pop. 6490.

Cuyabá (*Koo-ya-ba'*), the capital of the Brazilian province of Matto Grosso, on the Cuyabá River, 980 miles NW. of Rio de Janeiro. Pop. 18,000.

Cuzco (*Kooz-ko*), a city of Peru, 11,440 feet above sea-level, in a valley of the Andes, 345 miles ESE. of Lima. It was the ancient capital of the Incas, and at the time of its conquest by Pizarro (1533) had 200,000 inhabitants. Now it has only some 28,000, but it is a fine city, with a cathedral (1572–1654) and a university (1598).

Cwmdû (*Koom-dü'*), a village of Glamorganshire, 6 miles NNW. of Bridgend. Pop. 6769.

Cyclades. See ARCHIPELAGO.

Cydnus, a river of Cilicia, rising on the south side of the Taurus range, and flowing past Tarsus, and a broad sand-choked lagoon, into the sea. Alexander nearly lost his life through bathing in it when overheated.

Cynon, a river of South Wales, flowing 18 miles to the Taff.

Cyprus (Gr. *Kupros*, Turk. *G'br's*, Fr. *Chypre*, Ital. *Cipro*), a Mediterranean island, 60 miles W. of Syria, and 40 S. of Asia Minor, nominally belonging to Turkey, but actually occupied and administered by Britain. Its extreme length is 140 miles, of which 40 consist of the Carpas peninsula; the extreme breadth is 60 miles; and the area is 3707 sq. m., or a little larger than Norfolk and Suffolk together. The northern of two principal ranges of mountains extends from Cape St Andreas, at the extreme east, almost as far as Cape Kormakiti. Its highest mountains (including St Hilarion, 3340 feet) are north of Nicosia. South of this range is the great Messaorian plain, once famous for its cereals. The western range occupies great part of the western and south-western districts; its highest mountain is Mount Troödos (6352 feet), one of whose peaks bears the classic name of Olympus. Larnaca and Limassol, the chief seaports, are open, shallow roadsteads. The rivers only flow after heavy rain or the melting of the snow in the hills. The towns are Nicosia (the capital), Larnaca, Limassol, Famagusta, Papho, and Kyrenia. Pop. (1901) 237,022, of whom 51,500 were Mohammedan and Turkish-speaking, the rest mostly professing the Orthodox or Greek religion, and speaking Greek. Cyprus produces wheat, barley, carobs or locust beans, cotton, silk, flax, tobacco, madder, wool, gypsum, oranges, pomegranates, sponges, gum-mastic, and immense quantities of wine.

Cyprus was once celebrated for its copper-mines, which were worked by the Phœnicians and Romans; indeed the word 'copper' is derived from the name of the island. A little is still mined. Gypsum or plaster of Paris is manufactured and exported. Salt is produced by evaporation. The climate of Cyprus has been unduly vilified. Though some parts are malarious, for people who live regular lives and take reasonable precautions, the climate is not only healthy but pleasant. The people are healthy and well grown; the men, as a rule, handsome, the women rarely so. Among wild animals the mouflon or Cyprus sheep is becoming very scarce. Mules of peculiar excellence are bred. The forests (for which Cyprus was once famous) have well-nigh disappeared, and the climate and fertility of the country have greatly suffered in consequence;

flocks of goats prevent any natural growth of trees on the mountains. Locusts, a greater scourge, are now almost exterminated.—Successively held by Phœnicians, Egyptians, Persians, and Egyptians again, till in 58 B.C. it became a Roman province, Cyprus at the division of the empire naturally belonged to the eastern half. Richard I. in 1195 gave it to Guy de Lusignan; in 1487 it fell to Venice; and in 1570 it was conquered by the Turks. Since 1878 it has been occupied by Britain, and in 1882 had a constitution granted it. Britain agreed to pay the Sultan a sum ultimately fixed at £87,800 (as excess of revenue), and £5000 for state lands, besides a large quantity of salt; but these sums are not actually paid over, but are retained as part payment for losses in connection with the Turkish guaranteed loan. See works by Cesnola (1877), A. H. Lang (1878), Hepworth Dixon (1879), Sir S. Baker (1879), Mallock (1889), Fyler (1899), and Hackett (1901).

Cyrene, a ruined city of North Africa, the capital of Cyrenaica. See BARCA.

DACCA, a city of Bengal, 150 miles NE. of Calcutta, on the north bank of the Buriganga. From 1610 to 1704 capital of Mohammedan Bengal, it was in 1905 made headquarters of the newly-constituted joint province of Eastern Bengal and Assam. The suburbs formerly extended 15 miles northward, where mosques and brick buildings are still found buried in thick jungle. In the 18th century it became widely celebrated for its delicate muslins; but after 1817 this trade declined, under the competition of Manchester piece-goods, and the aspect of the city changed with the disastrous decay of its staple industry. The general development, however, of trade throughout the presidency, and the opening of the State Railway in 1886, has brought back a share of its former prosperity. A small colony of muslin-weavers still survives, and other manufactures are coarse cotton cloth, embroidery, silver-work, shell-carving, and pottery. Dacca College (1835) has about 300 students. Pop. (1800) 200,000; (1872) 69,212; (1901) 90,542.

Dacia, the land of the ancient Daci or Getæ, including the country between the Danube, the Theiss, the Carpathians, and the Pruth.

Daer Water. See CLYDE.

Daghestan ('mountain-land'), a triangular territory of Ciscaucasia, between the Caucasus and the west coast of the Caspian Sea. Area, 11,425 sq. m.; pop. 589,705.

Dago, an island near the entrance of the Gulf of Finland, forming part of the Russian government of Esthonia. Area, 367 sq. m.; pop. 15,000.

Dagupan, an important commercial town of Luzon, Philippine Islands, in the Lingayen Gulf, connected with Manila by rail. Pop. 20,500.

Dahlak, three islands, with many smaller rocks, in the Red Sea, off Massowah.

Dahna. See ARABIA.

Dahomey, a French dependency in Africa, extending inland from the Slave Coast, bordering on Yoruba. The seaboard is confined to a district of 35 miles; and the long lagoon which, shut in from the ocean by a protecting bank of sand, affords an easy route along nearly the whole of this coast. About midway is the port of Whydah, whence a road extends inland to Abomey, a distance of 70 miles. Dense forests and dismal swamps cover nearly two-thirds of this distance, but from the Great Swamp of Agrimé vast undulating plains rise for many miles, in the direction of the Kong Mountains. The Avon and Denham lagoons receive the rivers. The soil is extremely fertile. Groves of oil-palms encircle each town, and palm-oil is made in large quantities. Cotton cloth is made, and weapons and tools are forged from native iron. The Dahoman kingdom dates from the beginning of the 18th century, and reached its zenith about 1850. Fetich-worship prevailed, taking the form of serpent-worship on the coast; and wholesale murder was one of the chief features in religious and state ceremonies, as many as 500 human victims having been sacrificed at one of the grand 'customs' which took place annually. The revenue depended largely upon the sale of slaves. The French established a footing on the coast in 1851, and gradually extended their influence till, in 1894, the whole kingdom was taken in. The colony comprises, besides the native kingdom of Dahomey, all the French possessions bounded on the north by the French Soudan, on the east by British Nigeria and Lagos, on the south by the Gulf of Guinea, and on the west by German Togo. The total area is estimated at 60,000 sq. m., and the population at 1,000,000. There are about 70 miles of coast. The capital is Porto Novo (pop. 50,000). Other centres are Abomey (15,000), the former capital of Dahomey; Allada (10,000); Agone (20,000); Grand Popo; Cotonu, a port; Whydah, a port; Nikki, and Say. In 1901 the imports (liquors, cotton, and tobacco) were valued at 15,752,650 francs, the exports (chiefly palm kernels and oil) at 10,478,900 francs. See works by Burton (1864), Skertchly (1874), Bouche (Paris, 1885), Aubley (Paris, 1894), and Lee (1900); and Ellis, *The Ewe-speaking Peoples* (1890).

Dahra, a district of Algeria, to the east of Mostaganem, and near the coast.

Dailly, an Ayrshire village, on Girvan Water, 2 miles SSW. of Maybole. Pop. 506.

Daimiel, a town of Spain, 28 miles ENE. of Ciudad Real by rail. Pop. 12,000.

Dakar, a seaport with a magnificent harbour in French Senegal, opposite the island of Goree (q.v.), capital of the settlement, and terminus of the railway towards Timbuctoo. Pop. 2000.

Czaslau (*Tchas'low*; Czech *Cáslav*), a town of Bohemia, 40 miles ESE. of Prague by rail. In its church the Hussite leader Ziska was buried; and here Frederick the Great defeated the Austrians in 1742. Pop. 8878.

Czegled (*Tseg'led*), a market-town of Hungary, 47 miles SE. of Pesth by rail. Pop. 29,549.

Czenstochau (*Tchen'sto-how*), or CZENSTOCHOWA, a town of Poland, 148 miles SW. of Warsaw by rail. A Catholic monastery (c. 1382) is visited yearly by over 50,000 pilgrims, as possessing the famous 'Black Virgin,' a murky Byzantine painting ascribed to St Luke. Pop. 45,522.

Czernowitz (*Tcher-no'vitz*), capital of the province of Bukowina, near the right bank of the Pruth, 165 miles SE. of Lemberg by rail. It has the palace of a Greek archbishop (1875); his cathedral (1864), on the model of St Isaac's at St Petersburg; an Armenian church (1875); a synagogue (1877); the 'Austria Monument' (1875); and a university (1875) with nearly 300 students. Pop. (1869) 33,884; (1900) 69,620.

Dako'ta. See NORTH and SOUTH DAKOTA.

Dalbeattie, a Kirkcudbrightshire town, near Urr Water, 15 miles SW. of Dumfries. Founded in 1780, it owed its importance to the neighbouring Craignair granite quarries (now largely exhausted). Pop. (1841) 1430; (1901) 3469.

Dalecarlia, or DALARNÉ, an old province of central Sweden, now the county of Kopparberg.

Dalgety, in 1904 chosen to be Federal Capital of the Australian Commonwealth, is in the SE. corner of New South Wales, 296 miles SW. of Sydney.

Dalhousie Castle, the seat of the Earl of Dalhousie, in Midlothian, on the South Esk, 2¼ miles S. by W. of Dalkeith.

Dalias, a Spanish mining town, 18 miles WSW. of Almeria. Pop. 6294.

Dalkeith, a town of Midlothian, 6 miles SE. of Edinburgh, on a tongue of land between the North and South Esks. There is a large corn exchange (1855); of nearly a dozen places of worship the only old one is the parish church, collegiate once, of which Norman Macleod was minister. Dalkeith Palace, a seat of the Duke of Buccleuch, is a Grecian edifice, built in 1700 by Sir John Vanbrugh for Monmouth's widowed duchess. Professor Tait was born here. Pop. (1841) 4831; (1901) 6812.

Dalkey (*Dal-kee'*), a delightfully situated coast-town, 8 miles SE. of Dublin. Pop. 3397.

Dallas, capital of Dallas county, Texas, on Trinity River, 265 miles NNW. of Houston. A flourishing place, it has flour-mills and grain-elevators, foundries, and manufactures of woollens, soap, &c. Pop. (1880) 10,358; (1900) 42,640.

Dalles. See COLUMBIA RIVER.

Dalmahoy, the Earl of Morton's Midlothian seat, 1½ mile S. by E. of Ratho. Near it are the Dalmahoy Crags (680 feet).

Dalmally, an Argyllshire village, near the NE. end of Loch Awe, 24½ miles E. of Oban.

Dalmatia, a narrow strip of Austrian territory extending along the Adriatic. Area, 4940 sq. m.; pop. (1901) 591,600. The coast is steep and rocky, and the chief towns, all on the coast, are Zara, Sebenico, Lissa, Spalato, Brazza, Ragusa, and Cattaro. The country is mountainous, Orjen, near Cattaro, attaining 6235 feet. Only one-ninth of the land is arable, mainly the coast strip. Nearly half is in pasture, and a third in wood. The numerous islands are not very fertile.

Dalmellington, an Ayrshire village, near the river Doon, 15½ miles SE. of Ayr. Near it are active collieries and ironworks. Pop. 1448.

Dalmeny, a Linlithgowshire village, near South Queensferry, with an interesting Norman church. Dalmeny Park is the seat of the Earl of Rosebery.

Dalny, the Russian name for Ta-lien-wan, a port in the Manchurian Liao-tung peninsula, 20 miles NE. of Port Arthur. One terminus of the Trans-Siberian railway, it was occupied by the Japanese in 1904. Pop. 50,000.

Dalry, (1) a town of Ayrshire, on the Garnock, 23 miles SW. of Glasgow, with neighbouring ironworks (1845). Pop. 5316.—(2) A village in the north of Kirkcudbright, 8 miles NW. of New Galloway.—(3) A place in Perthshire, near Tyndrum, the scene of a skirmish between Bruce and Macdougal of Lorn (1306).

Dalswinton, an estate on the Nith, 7 miles NNW. of Dumfries. On its little loch a miniature steamboat was launched in 1788.

Dalton-in-Furness, a town of Lancashire, 16 miles WNW. of Lancaster, communicating with the sea by a canal (3½ miles). It has extensive malting and ironworks; and the ruins of Furness Abbey (q.v.) are in the vicinity. Romney was a native. Pop. (1861) 2812; (1901) 13,020.

Daman', an outlying portion of the Punjab, extending along the right bank of the Indus, and as far back as the Suliman Mountains.

Daman', a Portuguese settlement and port in the province of Gujarat, on the Gulf of Cambay, 100 miles N. of Bombay. The settlement consists of Daman proper (22 sq. m.), and the *parganá* of Nagar Havili (60 sq. m.), with magnificent teak forests to the east. Pop. of former, 56,300; of latter, 12,650. The port stands at the mouth of the Daman-Ganga, a deep, navigable stream, with a bar at its mouth. The Portuguese have held Nagar Havili since 1780 only, but Daman has been occupied by them since 1558.

Damanhour, a town of Egypt, 38 miles ESE. of Alexandria by rail; pop. 20,353.

Daman-i-Koh ('skirts of the hills'), a hilly tract of Bengal, reserved for the Santals, &c. Area, 1366 sq. m.; pop. 353,413.

Dam'araland, or DAMALAND, in the west of South Africa, between Namaqualand and Ovampoland, extending from the Atlantic to about 19° 45′ E. long. Behind the waterless coast region (100 miles) rises a mountain district, with peaks over 8500 feet above the sea; and farther inland stretch wide prairies. The mountains are rich in minerals, especially copper. The produce of the interior consists of ivory, feathers, skins, &c. The Damaras, properly Herero, a Bantu stem, number about 80,000; they are nomads, and own large flocks and herds. The Hawkoin, or Hill Damaras, in the north-east, however, who are a much lower type, now speak Hottentot. Since 1886 Damaraland is part of German SW. Africa. The only harbour in this part of the coast is Walvisch Bay (q.v.), which is British; it was annexed to Cape Colony in 1884.

Damascus, the capital of Syria, and the largest town in Western Asia. It is called by the natives *Dimashk es-Sham*, or simply *es-Sham*, the name which is generally applied to all Syria. The city stands 1½ mile from the mouth of the gorge, through which the Barada, the *Chrysorrhoas* of the Greeks, forces its way into the plain; and is 70 miles ESE. of Beyrout on the Mediterranean, and 120 NE. of Acre, to both of which railways were opened in 1895. It is situated on the western side of a plain 500 sq. m. in area, at an elevation of 2260 feet above the sea, and immediately to the north-west of the city the Anti-Libanus rises to a height of 3840 feet. This elevated part of the mountain, called Jebel Kasyún, is crowned by the Kubbet en-Nasr ('Dome of Victory'), from whose base the best view of Damascus is obtained. The seven canals by which water is drawn off from the central Barada are called rivers, two of them the Abana and Pharpar of Scripture. The appearance of Damascus as viewed from the mountain resembles a tennis-racquet. The handle, which lies in a south-westerly direction, is the Meidân, a suburb which extends along the Mecca pilgrim-route for about a mile, and ends at the Bawabat Alla ('Gate of God'). The other part is concentrated on the rivers, and is enclosed within ancient walls and encompassed by luxuriant gardens. At the western side of the city within the walls stands the citadel. It is a large moated quadrangular structure, 300 yards long and 250 wide, with pro-

jecting towers. It was erected in 1219, and has a massive appearance, but it is a good deal dilapidated. The palace stands outside the walls west of the citadel, and 400 yards east of the citadel there towered above the city the Great Mosque, destroyed by fire in October 1893. It was erected at the beginning of the 8th century on the site of the church of St John, just as that church had been erected by Arcadius about the beginning of the 5th century on the site of a pagan temple, which probably occupied the site of the ancient *Beit Rimmon*. Damascus contains 70 other mosques, and more than 150 chapels for prayer and instruction. The tomb of Núr ed-Din is one of the ornaments of the city; the best baths are decorated with beautiful tiles and marble. The Jewish quarter lies to the south of the 'street called Straight,' which runs east and west for about a mile, with Roman gateways at either end. The Christian quarter lies north of the street called Straight in the eastern part of the city. The different industries are also carried on in separate quarters, there being bazaars for the silversmiths, the saddlers, the shoemakers, &c. Damascus is a meeting-place between the East and West; and enormous caravans of camels pass to and fro between it and Bagdad, exchanging the dates and tobacco and spices and carpets of the East for the produce of the looms and workshops of Europe. The chief exports are grain, flour, native cotton and silk manufactures, wool, apricot paste, raisins, and liquorice-root; the imports include textiles, indigo, tobacco, coffee, sugar, and leather. In 1889 gas and tramways were introduced into the city. Pop. 170,000, of whom 20,000 are Christians (32,000 before the great massacre of July 1860), 6000 Jews, and the rest Mohammedans.

Dambula, or Dambul, a vast Buddhist rock-temple in Ceylon, 40 miles N. of Kandy, containing, among a profusion of carvings, colossal figures of Buddha.

Damietta (Arab. *Dimyat*), a town of Lower Egypt, on the right bank of the chief eastern mouth of the Nile, 8 miles from its mouth in the Mediterranean. Its commerce has been much injured by the prosperity of Alexandria, but it still carries on a considerable trade in exporting rice, fish (from Lake Menzaleh), coffee, and dates; and imports charcoal, soap, and manufactured goods. It is the terminus of a branch-railway from Cairo. The cambric known as *dimity* received its name from Damietta, where it was once manufactured; the famous leather-work has also declined. A bar at the mouth of the river impedes navigation. Pop. 43,750. The existing town was erected after 1251, but, prior to that, a city of the same name (anc. *Tamiathis*) stood more to the south.

Damodar, a river of Bengal, rises in Chutia Nagpur, and flows 350 miles SE. to the Hooghly.

Damoh, a town of the Central Provinces of India, 50 miles E. of Ságar. Pop. 11,800.

Dampier, the name of several places in Australasia: (1) Dampier Archipelago, a cluster of about twenty small rocky islands off the NW. coast of Australia.—(2) Dampier Island, off the NE. coast of New Guinea, with a volcano 5250 feet high.—(3) Dampier's Land, a fertile peninsula of Western Australia, lying between King Sound and the Indian Ocean.—(4) Dampier Strait, between New Guinea and the archipelago of New Britain, forming, with Goschen Strait to the SE., the shortest route from Eastern Australia to China by some 300 miles.—(5) Dampier Strait, separating the island of Waygiou from the NW. extremity of New Guinea.

Danakil, a vaguely defined region between the southern end of the Red Sea and Abyssinia.

Danbury, a Connecticut town, 69 miles NNE. of New York. It manufactures hats and sewing-machines. Pop. (1880) 11,666; (1900) 16,540

Danebury, Hants, a famous training-ground, 3 miles WNW. of Stockbridge.

Danes' Dyke. See Flamborough Head.

Dangan Castle, a mansion in County Meath, 4 miles S. of Trim, the seat of Wellington's father.

Dángs, a hill country in Bombay Presidency, about the N. end of the Western Ghâts.

Dannemora, a Swedish town, 25 miles NE. of Upsala, a great iron-mining centre. Pop. 5000.

Dantzic. See Danzig.

Danube (Lat. *Danubius;* Ger. *Donau;* Hung. *Duna;* Slav. *Dunai*), next to the Volga the chief river of Europe, is formed by the Brege and the Brigach, rising in the Black Forest, Baden, and uniting at Donaueschingen, 2264 feet above sea-level. It has a total length of 1740 miles, and drains 315,000 sq. m. It flows first SE., and then NE. to Ulm (1519 feet). From the junction with the Iller above Ulm it is navigable for boats of 100 tons. At Ratisbon it reaches its most northerly point, and from thence its course is generally SE. Between Ulm and Passau, where it leaves Germany, it receives the Lech, Isar, and Inn, on the right, and the Altmühl and Regen on the left bank. At Passau its width is 231 yards, and its depth 16 feet. It flows E. to Presburg, receiving the Ens from the S., and the March or Morava from the N.; and it passes from Austria into Hungary through an opening called the Carpathian Gate. Near Waitzen it turns directly S., through the Hungarian plain, a vast sandy alluvial flat, in which it is continually forcing new channels and silting up old ones; receiving from the N. the Waag and the Gran, and the Drave from the W. Next the Danube turns again SE., and, increased by the waters of the Theiss and Temes from the N., sweeps past Belgrade, where it is joined by the Save, and forms the boundary between Hungary and Servia. Before touching the Roumanian frontier its width is greatly contracted and interrupted by eight rapids with rocky shoals. The most difficult passage is the shortest (1¼ mile) of the eight—the 'Iron Gate,' properly so called, below Orsova. In 1890–95 the Hungarian government undertook, at a cost of £800,000, to improve, by blasting rocks and widening the course, the navigation here. In Wallachia the Danube flows in a wide stream, constantly broadening into a lake, or overspreading its banks with swamps. It forms the northern boundary of Bulgaria as far as Silistria; and from here it turns northward, skirting the Dobruja, and flows between marshy banks to Galatz, receiving on the way the Jalomitza and the Sereth. From Galatz it flows E., and, after being joined by the Pruth from the N., SE. to the Black Sea. The delta is a vast wilderness (1000 sq. m.) cut up by channels and lagoons; the farthest mouths are 60 miles apart. Two-thirds of the Danube's volume passes through the Kilia, which, like the southern or St George branch, forms a double channel near the outlet; and so ships enter by the middle or Sulina mouth, deepened to 20 feet and straightened in 1858–1903. The steel cantilever bridge across the river (2878 metres) at Tchernavoda is one of the great railway bridges of the world. To defend

Vienna against risk of inundation, the course of the Danube skirting it was, in 1868–81, diverted into an artificial channel. Similar works have been undertaken near Pesth. The Danube has about 400 tributaries, 100 of them navigable by the fleet of the Danube Steam Navigation Company (1830). The Danube is connected with the Rhine by means of the Ludwigs-Canal (1844), and with the Elbe by means of the Moldau and Mühl, and canals. See F. D. Millet, *The Danube from the Black Forest to the Black Sea* (1892).

Danubian Principalities, a name applied to Moldavia and Wallachia; see ROUMANIA. Servia and Bulgaria are sometimes included under the name.

Danvers, a post-village of Massachusetts, 4 miles NW. of Salem. It manufactures shoes, carpets, bricks, &c., and is the seat of the state lunatic asylum. Peabody, 3 miles S., was formerly South Danvers. Pop. 8048.

Danville, (1) capital of Vermilion county, Illinois, on the Vermilion River, 132 miles S. of Chicago. It is an important railway junction, and contains railway-shops, steam-mills, foundries, and organ and chair factories. Bituminous coal is mined near by. Pop. 16,491.—(2) Capital of Montour county, Pennsylvania, on the north branch of the Susquehanna, 68 miles N. by E. of Harrisburg. It was settled in 1768, and the Pennsylvania Ironworks here is the oldest establishment in the States for the manufacture of railroad iron. There are also blast-furnaces, foundries, and rolling-mills. Pop. 7998.—(3) A town of Virginia, on the Dan River, 141 miles SW. of Richmond, with large cotton and other mills, and a great trade in tobacco. Pop. 16,305.

Danzig, or DANTZIC (Polish *Gdansk*), a great seaport and fortress, capital of West Prussia, on the left bank of the western branch of the Vistula, 284 miles NE. of Berlin, and 4 from the river's mouth in the shallow Gulf of Danzig, an inlet of the Baltic. In the 10th century its possession was disputed by Danes, Pomeranians, Prussians, Brandenburgers, Poles, and the Teutonic Knights; the last held it 1308–1454, when it became a free city under Poland. In 1793 it fell to Prussia. The city is traversed by the Motlau and Radaune, tributaries of the Vistula, the former of which admits vessels drawing 15 feet up to the *Speicherinsel*. The principal port, however, is at the mouth of the Vistula, below the sand-bars. Among the most noteworthy buildings are the large church of St Mary (1343–1502), with a noble 'Last Judgment,' probably by Memling, and a finely-carved altar of wood; the church of St Catharine (1326–30); the fine old Gothic townhall; the old exchange; and the Franciscan monastery, now a museum and school. Once a great Hanse town, Danzig is still one of the chief commercial cities of northern Europe. The manufactures include beer, spirits (Danzig *Goldwasser*), sugar, tobacco, flour, iron-wares, machinery, amber, gold and silver ornaments; and there are also an imperial dockyard and an artillery arsenal. Pop. (1880) 108,551; (1900) 140,540.

Daoudnagar. See DAUDNAGAR.

Dapsang, a mountain in the part of the Himalaya system called Karakorum, in Baltistan or Little Tibet, 28,700 feet high.

Darabgherd, or DARAB, a town of Persia, 115 miles SE. of Shiraz. Pop. 4000.

Daraganj, a suburb of Allahabad, on the right bank of the Ganges. Pop. 15,159.

Darbhangah, a town of Behar province, on the Little Baghmati River, 78 miles NE. of Patna by rail. It has large bazaars and a handsome market-place, extensive tanks, a hospital, and the maharajah's palace, with fine gardens, menagerie, and aviary. There is an active trade in oil-seeds, food-grains, timber, salt, iron, lime, &c. Pop. (1891) 73,561; (1901) 66,244.

Dardanelles (anc. *Hellespont*), a narrow channel separating Europe from Asia, and uniting the Sea of Marmora with the Archipelago. The name is derived from the ancient city of Dardanus in the Troad, on the southern shore. The strait extends 40 miles south-westward, and has a varying breadth of 1 to 4 miles. From the Sea of Marmora a strong current runs through it to the Archipelago. Both sides are strongly fortified. A treaty concluded between the five great powers and Turkey in 1841 arranged that no non-Turkish ship of war should pass the Dardanelles without the express consent of Turkey. Xerxes and Alexander crossed the Dardanelles in 480 and 334 B.C., the former to enter Europe, and the latter to enter Asia. Leander, to visit Hero, nightly swam across—a feat performed in 1810 by Lord Byron.

Dardistan, a region of Central Asia, bordering on Baltistan, the north-western portion of Cashmere, consists of lofty mountains and high-lying valleys. Its interest depends mainly on the fact that its inhabitants, the Dards, are an Aryan people, speaking a Sanskritic tongue mixed with Persian words. They are Moslems. The chief districts are Hasora, Gilghit, and Tassin; some include Chitral.

Dar-es-Salaam, a seaport of German East Africa, 45 miles S. of Zanzibar. Pop. 21,000.

Dar-fertit, a thinly-peopled territory south of Dar-Fûr, beyond the Bahr-el-Arab, and north of the Niam-Niam country. Schweinfurth was the first European to visit the region in 1870–71.

Dar-Fûr, a country of Central Africa, one of the divisions of the Sûdân or 'Land of the Blacks,' situated approximately in 10° to 16° N. lat., and in 22° to 28° E. long. It is hilly in parts, and traversed by a mountainous ridge called Marra. Towards the north it is level, sandy, and almost destitute of water. During the rainy season (June—September) it exhibits a rich vegetation. Tobacco, which is used by the natives in every form, abounds. The chief minerals are copper and iron. The wealth of the inhabitants consists principally in cattle. Dar-Fûr, long a notorious centre of the slave-trade, was annexed to Egypt in 1875; but in 1884 fell under the power of the Mahdi. Since 1900 trade with Egypt has been revived again, and is now considerable. Pop. 4,000,000, mainly zealous Moslems.

Dargai, in the Afridi hill country, near the Kohat Pass, in the NW. Frontier Province of India, was the scene of a brilliant feat of arms during the Tirah campaign in 1897.

Dariel. See CAUCASUS.

Darien, a name formerly applied to the entire isthmus of Panamá (q.v.), but now confined to the heavily-wooded hill-country lying between the Gulfs of Uraba (often called the Gulf of Darien) on the north and San Miguel on the south. William Paterson's Darien Scheme (1695–1703), to plant a Scottish colony on the Atlantic side of the Isthmus of Panamá, proved a total fiasco.

Darjeeling (*Dárjiling*), a sanitary station in the Lower Himalayas, is situated on a narrow ridge, 7167 feet above the sea. It is a very popu-

lar sanatorium (1883), with a good water-supply. The fashionable month is October, after the rains, when the clear atmosphere shows a view of unsurpassed grandeur. Pop. 14,200.

Darlaston, a Staffordshire town, 1½ mile NW. of Wednesbury, with ironworks and neighbouring coal and iron mines. Pop. 15,422.

Darling, a name applied to a river, a mountain-range, and two districts in Australia, is derived from Lieutenant-general Sir Ralph Darling (1775–1859), governor of New South Wales in 1825–31. (1) The river Darling, is formed by several head-streams, all rising in the great Dividing Range, and flows 1160 miles south-westward to the Murray at Wentworth, on the border between New South Wales and South Australia.—(2) The Darling Range, in Western Australia, runs parallel to the west coast, at a distance of 10 to 25 miles; in Mount William it attains 3000 feet.—(3) The Darling district at the SW. corner of New South Wales, scantily watered, has an area of 50,000 sq. m.—(4) The Darling Downs (6080 sq. m.) form the richest pastoral district of Queensland, in the south of the colony. It was discovered by Allan Cunningham, the botanist, in 1827.

Darlington, a town in the south of the county of Durham, on a slight elevation overlooking the Skerne near its junction with the Tees, 23 miles S. of Durham, and 45 NNW. of York. The chief industry is connected with the extensive locomotive works; there are also iron and steel works, breweries, tanneries, and wool-mills. Pop. (1821) 6551; (1851) 11,228; (1871) 27,730; (1901) 44,500, many of them connected with the Society of Friends. Darlington was incorporated in 1867, since then also returning one member to parliament. Its prosperity dates from the opening, on 27th September 1825, of the Stockton and Darlington Railway, the first passenger-line employing a locomotive-engine, which engine now stands on a pedestal outside the station. From the 11th century the town belonged to the bishops of Durham, and till 1867 a borough bailiff, appointed by the bishop, managed its affairs. St Cuthbert's collegiate church, a very fine specimen of Early English, was founded in 1160. It has a tower 180 feet high. Among the chief modern erections are the spacious new railway station (1887), a grammar-school, and a free library (1885).

Darmstadt, a town of Germany, capital of the grand-duchy of Hesse-Darmstadt, is situated on the small river Darm, 15 miles S. of Frankfort-on-Main. One of its two palaces, the old ducal palace, contains museums of painting, natural history, and archæology, and a library of 500,000 volumes; in the other, Prince Charles's palace, is Holbein's famous 'Meyer Madonna.' The handsome post-office dates from 1881, the theatre from 1871. There are manufactures of chemicals, hats, machinery, tobacco, playing-cards, carpets, and beer. Pop. (1875) 44,088; (1900) 72,380.

Darnaway, the Earl of Moray's seat, Elginshire, 3½ miles SW. of Forres.

Darnétal, a town in the French dep. of Seine-Inférieure, 2½ miles E. of Rouen. Pop. 6776.

Darnick, a Roxburghshire village, 1 mile W. of Melrose. Pop. 307.

Darnley, a Renfrewshire barony, 1½ mile E. of Barrhead.

Dartford, a thriving market-town of Kent, in the narrow valley of the Darent, 2 miles above its influx to the Thames, and 17 ESE. of London. Edward III. here founded an Augustinian nunnery (1355); St Edmund's chantry was a great place of pilgrimage; and at Dartford Wat Tyler commenced his rebellion (1381). The church, with a Norman tower, has interesting monuments—one to Sir John Spielman, Queen Elizabeth's jeweller, who in 1588 established here the first paper-mill in England. Paper is still manufactured, besides steam-engines, machinery, gunpowder, &c. Pop. (1851) 6224; (1891) 11,962; (1901) 18,644. See works by Dunkin (1844) and Bayly (1876).

Dartmoor, a great granitic upland in Devonshire, the source of nearly all the principal rivers of the county, remarkable alike for its wild and rugged scenery, its antiquities, its wide, solitary, trackless wastes, and its mineral products. It is upwards of 130,000 acres in extent, the extreme length from north to south being 25 miles, and the extreme breadth 20. The central portion is the ancient royal forest of Dartmoor, whose rights belong to the Duchy of Cornwall; this is surrounded by a belt of open country, once known as the 'Commons of Devonshire,' but portions of which have been enclosed. The attempts to cultivate Dartmoor itself have been very few, and the northern quarter for miles shows no trace of man. The valleys through which the rivers descend to the lowland country are singularly fertile, and at times full of beauty. The moor itself affords valuable mountain pasture to cattle, sheep, and large numbers of half-wild ponies. The average height of Dartmoor above the sea is upwards of 1200 feet, but its highest point, High Willhayes, is 2039 feet; and the next, Yes Tor, 2030. The hills are commonly called *tors*, and for the most part have granite crests, weathered into grotesque and picturesque shapes. Dartmoor is rich in minerals—tin, copper, iron, manganese, gold, and china-clay or kaolin, this last much the most important nowadays. Dartmoor is unrivalled in England in the extent and character of its prehistoric and rude stone antiquities. The chief centre of population is Prince Town, where is a prison, built (1806) for prisoners of war, and adapted (1855) to its present purpose of a convict prison. See works by Rowe (1856), and Page (1889).

Dartmouth, a seaport and municipal borough (till 1867 also parliamentary) of South Devon, 32 miles S. by W. of Exeter. It is built in picturesque terraces on a steep slope 300 to 400 feet high, on the right bank of the romantic estuary of the river Dart, at a short distance from the sea. The streets are narrow, and many of the houses very old, with overhanging stories, projecting gables, and wood-carvings. St Saviour's Church (c. 1372) has a richly sculptured pulpit, and a beautifully carved rood-loft. A battery, and the remains of a castle built during the reign of Henry VII., stand at the entrance to the harbour. In 1190 the Crusaders, under Cœur-de-Lion, embarked for the Holy Land at Dartmouth, which in 1643 was taken by Prince Maurice, but in 1646 retaken by Fairfax. Newcomen, the inventor of the steam-engine, was born here; Sir Humphrey Gilbert at Greenway, across the Dart; and John Davis at Sandridge. Here is a great Royal Naval School. Pop. (1861) 4444; (1901) 6580.

Darton, a township in the West Riding of Yorkshire, 3½ miles NW. of Barnsley. Pop. 7613.

Darvel, an Ayrshire police-burgh, with muslin manufacture, 9 miles E. of Kilmarnock. Pop. 3074.

Darwen, a municipal borough of Lancashire, on the river Darwen, 3½ miles S. of Blackburn,

and 9 N. of Bolton. Cotton is the staple manufacture; then come paper-making and paper-staining; and to these and other industries, with its water facilities, and the neighbouring coal-mines and stone quarries, Darwen owes its rapid growth and its well-being. It was incorporated in 1878. Among the chief buildings are the free library, the market-hall, the co-operative hall, and the public baths erected in memory of Sir Robert Peel. Pop. (1851) 7020; (1901) 38,212. See Shaw's *History of Darwen* (1891).

Darwin Sound and MOUNT DARWIN are on the SW. side of King Charles's South Land, Tierra del Fuego. The mountain rises 6800 feet.

Datchet, a village of Bucks, on the Thames, 2 miles E. of Windsor.

Datia (*Datee'a*), a native state of Bundelkhand (area, 837 sq. m.; pop. 186,440). The chief town, Datia, 125 miles SE. of Agra, has a pop. of 24,566.

Daudnagar (*Dâh-ood-nug'ur*), a wretched-looking town in the Gaya district of Bengal, on the Soane, 90 miles SW. of Patna. Pop. 9870.

Daulatabad (*Dowlatabad'*), a decayed town in the Deccan, 28 miles NW. of Hyderabad. Its fortress, a walled and moated conical rock, 600 feet high, surrendered to the Mohammedans in 1294, and has long been ungarrisoned. Pop. 1243.

Dauphiné, a former frontier province (capital, Grenoble) of south-west France, now forming the deps. Drôme, Isère, and Hautes Alpes.

Dauria, a mountainous region of south-eastern Siberia, between Lake Baikal and the river Argun, on the Chinese frontier.

Davarr Island. See CAMPBELTOWN.

Davenport, capital of Scott county, Iowa, on the Mississippi, opposite Rock Island (q.v.), 183 miles W. by S. of Chicago. It is the seat of Griswold College (1859), and manufactures flour, iron wares, woollen goods, &c. Pop. 36,872.

Daventry (pron. *Daintry*), an ancient municipal borough of Northamptonshire, at the sources of the Avon and Nene, 12 miles W. of Northampton, and 4 NW. of Weedon by a branch line opened in 1888. Charles I. spent six days here in 1645 before the battle of Naseby. Pop. 3739. Danes or Borough Hill, 1 mile E., is one of the largest Roman camps in the kingdom.

Davidson's Mains, or MUTTONHOLE, a Midlothian village, 3½ miles WNW. of Edinburgh. Pop. 919.

Davis Strait washes the western coast of Greenland, and connects Baffin Bay with the Atlantic Ocean. At its narrowest point, immediately north of the Arctic circle, it measures about 200 miles across. The navigator John Davys sailed through it in 1587.

Davōs', a small valley lying amongst the Alps of the Eastern Grisons, 16 miles SE. of Coire, and 31 SSE. of Landquart by rail. It has become famous as a health-resort in winter, especially for such as suffer from chest disease, the air being still and dry, with much bright, warm sunshine throughout the winter. Till lately mere out-of-the-way hamlets, the villages of Davos-Platz (5105 feet above sea-level) and Davos-Dörfli have hotels, villas and chalets, doctors, and daily posts. Skating and tobogganing are pastimes. See English works on the place by Wise (1881), Muddock (1884), and J. A. Symonds (1892).

Dawley, a Shropshire township, 4 miles SE. of Wellington, with mineral industries. Pop. 7996.

Dawlish, a pleasant watering-place of SE. Devon, 12 miles SE. of Exeter, and backed by the Great Haldon (818 feet). Pop. 5000.

Dawson, at the confluence of the Klondike with the Yukon, 1500 miles from its mouth, is the capital of the Yukon territory of Canada, since 1896 the centre of the Klondike gold-mining industry. Pop. 12,000.

Dax, a town in the French dep. of Landes, on the Adour, 93 miles S. by W. of Bordeaux by rail, with a 14th-century castle, now a barrack, remains of Roman walls, a cathedral, &c. Its hot sulphur-springs (77°–144° F.) were known to the Romans, who called the place *Aquæ Tarbellæ;* in the middle ages it was called *Acqs.* Pop. 9716.

Daylesford, a Worcestershire estate, 3½ miles E. of Stow-on-the-Wold, repurchased in 1788 by Warren Hastings, who died and was buried here.

Dayton, capital of Montgomery county, Ohio, on the Great Miami, at the mouth of the Mad River, 60 miles NNE. of Cincinnati by rail. The public buildings include a court-house of white marble and a large jail. Standing on the line of the Miami Canal (opened 1829), the city is the terminus of eight railroads, and the water of the Mad River is brought through its streets by an hydraulic canal, supplying abundant water-power. It manufactures railroad-cars, cotton, woollen, and iron goods, oil, flour, paper, and machinery. Pop. (1870) 30,473; (1890) 61,220; (1900) 85,333.

Dead Sea, the usual name, dating from the time of Jerome, for a most remarkable lake in the south-east of Palestine, called in the Old Testament *The Salt Sea, Sea of the Plain,* or *East Sea;* by Josephus, *Lacus Asphaltites;* and by the Arabs now, *Bahr-Lût,* 'Sea of Lot.' It is 46 miles long, 5 to 9 miles broad, and 1292 feet below the level of the Mediterranean. The depth of the greater part, the northern section, is about 1300 feet; but at the southern end the water is only from 3 to 12 feet deep. The Dead Sea is fed by the Jordan from the north, and by many other streams, but has no apparent outlet, its superfluous water being carried off by evaporation. Along the eastern and western shores there are lines of bold cliffs rising 1500 feet on the west, and 2500 on the east. The north shore, a great mud flat, is marked by the blackened trunks and branches of trees; the southern shore is low, also marshy and dreary. Lava-beds, pumice-stone, warm springs, sulphur, and volcanic slag prove the presence here of volcanic agencies at some period. The neighbourhood is frequently visited by earthquakes, and the lake still occasionally casts up to its surface large masses of asphalt. The *water* is characterised by the presence of a large quantity of magnesian and soda salts. Its specific gravity ranges from 1172 to 1227 (pure water being 1000). The proportion of saline matter is so great, that whilst sea-water contains only 3·5 per cent. of salts, the water of the Dead Sea contains upwards of 26 per cent. Rain hardly ever falls; the water is nearly as blue and clear as that of the Mediterranean; and though its taste is horribly salt and fetid, a bath in it is refreshing. Owing to the great specific gravity of the water, it is almost impossible for the bather to sink in it. According to Major Conder, 'it is now generally agreed that the Dead Sea and Jordan were formed by a great fault or crack in the earth's surface long before the creation of man, and that the district presents in our own days much the same aspect as in the days of Abraham. It is vain, therefore, to suppose that the "cities of the plain" were beneath the present sea, although this view was

held as early as the time of Josephus' (*Bible Geography*, 1884).

Deal, a municipal borough and sea-bathing place of Kent, on a bold open beach, near the south extremity of the Downs, between North and South Foreland, 89 miles by rail ESE. of London. Till 1885 it was part of the parliamentary borough of Sandwich. A fine anchorage extends 7 or 8 miles between Deal and the Goodwin Sands. Deal has mainly arisen to supply the wants of the numerous vessels in the Downs, its chief industries being connected with boat-building, sail-making, piloting, victualling, &c. The handsome iron promenade pier was erected in 1864. Pop. (1851) 7067; (1901) 10,580. Deal has been one of the Cinque Ports since the 13th century. Of the three castles built by Henry VIII. in 1539, Deal Castle is the residence of its 'captain;' Sandown Castle (where Colonel Hutchinson died), to the north of Deal, was pulled down in 1864 on account of the inroads of the sea; and, to the south, Walmer Castle is now the official residence of the Warden of the Cinque Ports. See Chapman's *Deal: Past and Present* (1891).

Dean, Forest of, a picturesque hilly tract, 34 sq. m. in extent, in the west of Gloucestershire, between the Severn and the Wye. An ancient royal forest, it was almost entirely disafforested by Charles I., on a sale to Sir John Wintour, but was re-afforested very shortly after the Restoration. The greater part still remains crown property; and about one-half is appropriated for the growth of timber for the navy. It is divided into six 'walks,' which contain woods of oak, beech, &c. There are coal and iron mines, and quarries of stone suitable for building and making grindstones, troughs, and rollers. The deer were exterminated in 1854.

Deanston. See Doune.

Death Valley, a peculiarly sterile depression in the Mohave Desert (q.v.) in California.

Debateable Land, a Border tract between the Esk and Sark, long a bone of contention between England and Scotland.

Deben, a Suffolk river, rising near Debenham, flows 30 miles SE. to the German Ocean. It is tidal and navigable from Woodbridge (8½ miles).

Debenham, a small Suffolk town, 8 miles NNE. of Needham Market. Pop. of parish, 1219.

De'breczen, a town of Hungary, in the midst of a wide plain, 130 miles E. of Pesth by rail. It is a large straggling place, indeed really a collection of villages. It has, however, a fine townhall, a large Protestant college, a theatre, &c. The inhabitants are largely dependent on agriculture; enormous herds of cattle graze on the fertile stretches of plain. There are also manufactures of soap, saltpetre, flour, sausages, hams, and tobacco-pipes. Population, 73,500, nearly all Protestants. The 'Rome of the Calvinists,' Debreczen was long the headquarters of the Reformed faith, and suffered much therefor. It took a prominent part in the revolution of 1849.

Deca'tur, capital of Macon county, Illinois, on the Sangamon River, 39 miles E. of Springfield. It has woollen, planing, and flour mills. Pop. (1880) 9547; (1900) 20,760.

Decazeville (*De-kâhz-veel'*), a town in the dep. of Aveyron, 110 miles NNE. of Toulouse by rail, with iron and coal mines near by, and great blast-furnaces and ironworks. Pop. 6684.

Deccan (from *dakshin*, 'the south'), a term applied sometimes to the whole Indian peninsula to the south of the Vindhya Mountains, which separate it from the basin of the Ganges, and sometimes restricted to that portion which is rather vaguely bounded N. by the Nerbudda, and S. by the Kistna or Krishna.

Deception Island, a volcanic island belonging to the South Shetland group in the Antarctic Ocean, directly south of Cape Horn.

Deddington, an Oxfordshire market-town, 6 miles S. of Banbury. Piers Garveston was seized in its ruined castle (1312). Pop. of parish, 1777.

Dedham, an Essex village, on the Stour, 3½ miles W. by N. of Manningtree, with a school (1571). Pop. of parish, 1485.

Dee, a Welsh and English river, issuing from Bala Lake, in Merionethshire, and flowing 90 miles NE., N., and NW. to the Irish Sea. Near Trevor it is crossed by the Ellesmere Canal, on an aqueduct 1007 feet long and 120 high; and also by the stone viaduct of the Chester and Shrewsbury Railway, of 19 arches, each 90 feet span and 150 high. At Chester, which it nearly encircles, it is 100 yards broad; thence it runs alongside marshes in an artificial tidal canal 7 miles long, which should admit ships of 600 tons, but which is rapidly silting up. Near Connah's Quay, between Chester and Flint, where its width is 160 yards, it is crossed by the great railway swing-bridge, whose first cylinder was laid by Mr Gladstone on 16th August 1887. The Dee ends in a tidal estuary 13 miles long and 3 to 6 broad, and forming at high-water a noble arm of the sea; but at low-water a dreary waste of sand and ooze (Kingsley's 'sands of Dee'), with the river flowing through it in a narrow stream. Its chief tributaries are the Treveryn, Alwen, Ceirog, Clyweddog, and Alyn. Canals connect the Dee with the rivers of central England.

Dee, a beautiful river of Aberdeen and Kincardine shires, rising at an altitude of 4060 feet among the Cairngorm Mountains, and running 87 miles eastward, till it enters the German Ocean at Aberdeen, where in 1870–72 a mile of its channel was diverted for harbour improvements. It makes a descent of 2084 feet during the first 2⅔ miles of its course; at the Linn of Dee, 18 miles lower down, tumbles through a chasm 300 yards long, and at one point scarcely 4 feet wide; thereafter flows by Castleton of Braemar, Balmoral Castle, and Ballater; since 1864 has supplied Aberdeen with water; and is still a good salmon river, though not what it once was.—The *Kirkcudbrightshire Dee* issues from Loch Dee (750 feet above sea-level), and flows 38 miles south-eastward and southward, past Threave Castle and Kirkcudbright, to Kirkcudbright Bay. Midway it is joined by the Water of Ken, 28 miles long, a stream of greater volume than its own. It, too, affords fine fishing.

Deel, a river of Cork and Limerick, flowing 28 miles to the Shannon.

Deepdene. See Dorking.

Deeping, Market, a market-town of Lincolnshire, on the Welland, 7¾ miles SSE. of Bourn. Pop. of parish, 979.

Deer, Old, a village of Buchan, Aberdeenshire, 36 miles N. of Aberdeen. Here, about 580 A.D., St Columba and Drostan, his nephew, established a monastery, which William Comyn, Earl of Buchan, refounded about 1219 for Cistercian monks. The larger village of New Deer, to the W., has 736 inhabitants.

Deés, a town of Transylvania, on the Szamos, 37 miles NNE. of Klausenburg by rail. Pop. 9191.

Deggendorf, a town of Lower Bavaria, on the Danube, 39 miles NW. of Passau, with a church visited by thousands of pilgrims. Pop. 7000.

Dehra, headquarters of the Dehra Dun district of the Meerut division of Agra province, in a mountain valley 2300 feet above the sea, with a great imperial school of forestry. Pop. 29,000. See also DERAJAT.

Deil's Dyke, or PICTS' DYKE, an ancient fortification of Galloway, extending from Loch Ryan to the upper part of the Solway Firth.

Deir-el-kamar ('convent of the moon'), a town of Syria, formerly the capital of the Druses, 13 miles SSE. of Beyrout. Pop. 8000.

Delagoa Bay, a Portuguese possession, is a large inlet of the Indian Ocean on the south-east coast of Africa. Stretching for 70 miles between 26° 20′ and 25° 30′ S. lat., it is 25 miles wide, and for size and accommodation is the finest natural harbour in South Africa, although landing facilities are still very primitive. There are several islands and shoals in the bay, but its navigation is safe and easy, and the anchorage commodious and well sheltered. The settlement of Lourenço Marques and surrounding country have been notoriously unhealthy; but in 1887 the swamps behind the town were filled in, and other improvements have since been carried out. The rivers Maputa, Tembe, and Umbelosi (joining to form the English River), and the Komati, fall into Delagoa Bay. The first two are navigable for some distance for small craft. In 1887 a company was formed in London to work a concession from the Portuguese government for ninety years, for the construction of a railway (293 miles) from Delagoa Bay to Pretoria in the Transvaal. The line was partly opened in 1888. See Rose Montiero, *Delagoa Bay* (1892).

Delaware, one of the Atlantic States of the American Union, forms a part of a peninsula lying between the lower reaches of the Susquehanna and Chesapeake Bay on the west, and the Delaware River and Bay and Atlantic Ocean on the east. With an area of 1960 sq. m., or little more than that of Northumberland, it is the smallest of all the states, except Rhode Island. Save in a small hilly section in the north, nearly all the surface is low and level, and in the extreme south there is much swampy land; while the most southern two-fifths of the area is in great part a sandy region. The coast-region has many salt-marshes; farther inland is a considerable body of extremely rich alluvial soil. The western border is generally well wooded, and in some places flat and marshy. The rivers are mostly small, but many are navigable. In the north kaolin and iron ore are found, and bog ore or limonite occurs in other parts. The state is well provided with railroad facilities, and is crossed by a canal connecting the Delaware and Chesapeake bays. The northern section has large and varied manufacturing interests. Peaches and the various small fruits, as well as market-garden products, are leading articles of export; the principal cereal crops are maize, wheat, and oats. Pop. (1870) 125,015; (1900) 184,735. The principal towns are Wilmington, New Castle, Dover (the state capital), and Smyrna. Delaware's first permanent white settlements were made by Swedes and Finns in 1638; Dutch and Swedes contended for this region, till in 1655 it passed under Dutch sway. After the transfer of New Amsterdam (now New York) to the English in 1664, Delaware became English also. Delaware, a slave-state until 1861–65, took no part in the secession movement.

Delaware, the capital of Delaware county, Ohio, on the Whetstone River, 24 miles by rail N. of Columbus. It has foundries, flour and woollen mills, &c., chalybeate and sulphur springs, and a Wesleyan University (1842). President Hayes was a native. Pop. 7950.

Delfshaven (*Delfshâh'ven*), a Dutch town, incorporated with Rotterdam in 1886, so as to become a western section of the city.

Delft, an ancient town of South Holland, on the Schie, 8 miles NW. of Rotterdam. Its town-hall (1618) is a picturesque and richly adorned edifice. The New Church (1476) contains a monument to William the Silent, who was assassinated here, 10th July 1584, as also the tomb of Grotius, and the burial-vaults of the present royal family. The Old Church contains the tomb of the naturalist Leeuwenhoek, and of the great admiral Tromp. Delft has also a state arsenal, an East Indian college, and a polytechnic. There are some manufactures of fine carpets, casks, baskets; but Delft has quite lost its high reputation for delf-ware, so famous from the 16th to the 18th century. Pop. (1876) 23,804; (1901) 31,878.

Delhi (*Del'lee*), the chief commercial and industrial centre of the Punjab, on the right bank of the Jumna, 113 miles NNW. of Agra, and 954 NW. of Calcutta. It is the terminus of the East Indian and Rajputana railways, the former crossing the Jumna by a fine iron bridge. Delhi is walled on three sides, has ten gates, and stands on high ground, the famous palace of Shah Jehan, now the Fort, looking out over the river and a wide stretch of wooded and cultivated country. To the north, about a mile distant, rises the historic 'ridge,' crowned with memorials of the Mutiny, and commanding a fine view of the city, the domes and minarets of which overtop the encircling groves. The palace buildings comprise the cathedral-like entrance hall, the audience hall, and several lesser pavilions, covering in all an area of 1600 feet by 3200, exclusive of gateways. The beautiful inlaid work and carving of these buildings are the admiration of the world, and the *diwan-i-khas* is worthy of its famous inscription: 'If there is a heaven on earth, it is this—it is this!' In the heart of the city stands the Jama Masjid ('great mosque'), one of the largest and finest structures of the kind in India, which also owes its origin to Shah Jehan. Among the notable monuments in the neighbourhood are the imperial tombs, including that of Hamayun, second of the Mogul dynasty; the old Kala Masjid, or black mosque; and the 13th century Kutab Minar, 10 miles to the south, which is 238 feet high, and tapers gracefully from a diameter of 47 feet at the base to 9 feet at the summit. Modern Delhi is noted for its broad main streets, the chief being the Chandni Chauk, or Silver Street, with its high clock-tower, and the institute and museum. Delhi has a large trade in wheat and other produce, and its bazaars are noted for gold and silver work, precious stones, shawls, and costly fabrics. Across the river is the ruined fort of Salimgarh. Pop. (1891) 192,570; (1901) 208,385.

Delhi was the capital of the Afghan or Pathan, and afterwards of the Mogul, empire. It was taken by Lord Lake in 1803, and has ever since been under British rule, except when it was held by the mutineers in 1857. The march of the mutineers from Meerut; the terrible 11th of May; the explosion of the powder-magazine by

Willoughby and his heroic band; the assault, when the city was won (September 20) gate by gate and quarter by quarter—a success saddened by the death of the gallant Nicholson; the subsequent daring capture of the king of Delhi by Hodson; and the capture and shooting of his sons by the same officer, are memorable events. A memorial to Willoughby was erected by government in 1888. In 1877 Delhi was the scene of the famous Durbar at which the Queen was proclaimed Empress of India.

Delitzsch (*Day'leetch*), a town of Prussian Saxony, on the Lobber, 12 m. N. of Leipzig. Pop. 8342.

Dellys (*Del-leess'*), a port of Algeria, 50 miles E. of Algiers. Pop. 3578.

Delos (also anciently *Asteria, Ortygia*), an island in the Grecian Archipelago, the smallest (little more than 1 sq. m.) of the Cyclades, between the islands Rhenea and Mykonus. The town of Delos, which stood at the foot of Mount Cynthus, a granite crag 347 feet high, is now a mass of ruins. Still, however, the remains of the great temple of Apollo (whom Leto gave birth to here), and of his colossal statue, may be distinctly traced. Since 1877 extensive excavations have been prosecuted for the French Archæological Institute.

Delphi, an ancient Greek town in Phocis, celebrated chiefly for its famous oracle of Apollo, 8 miles N. of the northern shore of the Gulf of Lepanto, at the southern base of Parnassus. The modern town of Kastri now occupies the site, in the neighbourhood of the source of the still flowing Castalian spring.

Delvino, a town of Albania, 45 miles WNW. of Janina, with a strong castle. Pop. 6000.

Demavend, Mount, an extinct volcano of Persia, forming the loftiest peak (18,600 feet) of the Elburz chain, which separates the low shores of the Caspian from the high Persian tableland.

Dembea, Lake. See Tzana.

Demerara (*Dem-y-rah'ra*), a county of British Guiana (q.v.), takes its name from the Demerara River, which rises in the Maccari Mountains, in about 4° 40′ N. lat., and after a northerly course of 200 miles, enters the Atlantic at Georgetown. The mouth is 1½ mile wide, but is obstructed by a bar at low tides.

Demir-Hissar ('iron-castle'), a town of European Turkey, on a tributary of the Struma, 45 miles NE. of Saloniki. Pop. 8000.

Demmin, an ancient town of Prussia, on the Peene, 29 miles S. of Stralsund. Pop. 12,546.

Demotica, a town of European Turkey, on a tributary of the Maritza, 31 miles S. of Adrianople by rail. Pop. 12,000.

Denain (*Deh-nan$^{g'}$*), a town in the French dep. of Nord, near the Scheldt and Selle rivers, 20 miles NNE. of Cambrai by rail. It lies in the centre of an extensive coalfield, and has manufactures of iron, beet-root sugar, and brandy. An obelisk marks the scene of Marshal Villars's victory over the allies under Prince Eugene, 27th July 1712. Pop. 23,500.

Denbigh (*Den'by*), a municipal borough, county town of Denbighshire, near the middle of the Vale of Clwyd, 30 miles W. of Chester by rail. Its imposing ruined castle, which was rebuilt in 1284, and in which Charles I. took refuge (1645), was dismantled by the parliamentarians. Denbigh manufactures shoes and leather, but is residential more than commercial. With Ruthin, Holt, and Wrexham, it returns one member. A lunatic asylum for North Wales was erected in 1848, and in 1860 a noble institution for twenty-five orphan girls, and as many day pupils, from money left in 1540 by one Thomas Howell. Pop. 6500.

Denbighshire, a county of North Wales, on the Irish Sea, and between the Dee and the Conway. With 8 miles of coast, it is 41 miles long, 17 broad on an average, and 603 sq. m. in area. The surface is partly rugged and mountainous, with some beautiful and fertile vales, as that of Clwyd, 20 miles by 7. The highest mountain is Cader Fronwen, 2563 feet; and many others exceed 1500 feet. There occur coal, iron, slates, flags, millstones, limestone, lead, and copper. The chief rivers are the Dee, Conway, Elwy, and Clwyd. The Rhaiadr waterfall is 200 feet high in two parts. Llangollen vale is famed for romantic beauty and verdure, amid hills of savage grandeur. About two-thirds of Denbighshire is under cultivation; its corn, cheese, butter, and live-stock are greatly esteemed. It is also well timbered. Salmon are caught in the rivers. The towns are Denbigh, Wrexham, Ruthin, Holt, Llangollen, Llanrwst, Abergele, and Ruabon. Pop. (1801) 60,299; (1841) 88,478; (1901) 129,935. Denbighshire returns two members.

Denby, with Cumberworth, a township of Yorkshire, 8 miles W. of Barnsley. Pop. 3500.

Den'derah (Gr. *Tentyra;* Coptic *Tentore*, probably from *Tèi-n-Athor*, 'abode of Athor'), a village of Upper Egypt, once a populous town, near the Nile's left bank, in 26° 13′ N. lat., 32° 40′ E. long. Its temple, one of the finest and best-preserved structures of the kind in Egypt, dates from the period of Cleopatra and the earlier Roman emperors. It measures 220 by 50 feet.

Dendermonde (*Dendermon'deh;* Fr. *Termonde*), a town of Belgium, at the confluence of the Dender and the Scheldt, 18 miles E. of Ghent by rail. The fortifications, destroyed in 1784, were restored in 1822. Pop. 10,200.

Den Fenella, a romantic ravine in Kincardineshire, near Laurencekirk.

Denholm (*Den'num*), a Roxburghshire village, on the Teviot, 5 miles NE. of Hawick, with the birthplace of the poet Leyden. Pop. 875.

Denia, a port of the Spanish province of Alicante, near Cape St Martin. Pop. 11,613.

Deniliquin, the principal place in the Riverine district of New South Wales, 488 miles SW. of Sydney. Pop. 4300.

Denison, a city of northern Texas, 3 miles S. of the Red River, and 73 by rail N. of Dallas, with manufactures of cotton, flour, ice, artificial stone, &c. Pop. (1880) 3975; (1900) 11,807.

Denmark (Dan. *Danmark*), the smallest of the three Scandinavian kingdoms, consists of the peninsula of Jutland and a group of islands in the Baltic, and is bounded by the Skager-Rak, the Cattegat, the Sound, the Baltic, the Little Belt, Sleswick, and the North Sea. The sale of the West Indies to the United States in 1902 was refused by the Landsthing.

	Area in sq. m.	Pop. in 1901.
Copenhagen	7·7	378,235
Islands in Baltic	5,024	1,007,513
Peninsula of Jutland	9,743	1,063,792
Faroe Islands	514	15,230
Total of Denmark Proper	15,289	2,464,770
Iceland	39,756	78,470
Greenland	46,740	11,895
W. Indies (SS. Croix, Thomas, John)	118	30,527
Total of Dependencies	86,614	120,892

The area of Denmark Proper—Jutland, and the islands of Zealand, Fünen, Laaland, Falster, &c. —with that of the Färoe Islands added, and the population are somewhat greater than half those of Scotland. The population, with the Färoe Islands, was in 1870, 1,794,723; in 1880, 1,980,259; in 1890, 2,185,235. Aarhuus, Odense, and Aalborg are, besides the capital Copenhagen (Kjöbenhavn), towns with over 30,000 inhabitants.

Except in Bornholm (q.v.), the surface of Denmark is very similar in every part of the kingdom, and is uniformly low, its highest point (in south-east Jutland) being only 564 feet above sea-level. The coast is generally flat, skirted by sand-dunes and shallow lagoons, especially along the west side. Both the continental portion and the islands are penetrated deeply by numerous fjords, the largest being Limfjord, which intersects Jutland, and has insulated the northern extremity of the peninsula since 1825, when it broke through the narrow isthmus which had separated it from the North Sea. There are several canals. The centre and west of Jutland is nearly bare of wood, but in the other parts of the peninsula the forests, especially of beech, cover about 215,000 acres, and in the islands over 291,000 acres. Peat, which is got in abundance from the bogs, brown coal or lignite, and seaweed are the chief fuel. The climate is milder, and the air more humid, than in the more southern but continental Germany; it is not unhealthy, except in the low-lying islands, such as Laaland, where the short and sudden heat of the summer occasions fevers.

The soils of Jutland are generally light, but those in the south-east part and in the islands are stronger; about 80 per cent. of the area of Denmark is productive, and of the remainder about one-sixth is in peat-bogs. Nearly half the population is engaged in agriculture; the land for the most part is parcelled out into small holdings. A third of the whole kingdom is arable, while over two-fifths is in meadow, pasture, or fallow land. The raising of cattle is taking more and more the place of arable farming in Denmark. Dairy produce has largely developed, and the export of butter greatly increased, owing to improved methods and the co-operative dairy system. Machinery, porcelain and delf wares, and bricks are leading manufactures; beet-root sugar refineries are increasing, and the distilleries, though declining, are still numerous; there are ironworks, over eighty tobacco-factories, and several paper-mills; and there are many large steam corn-mills. Though the peasants still continue to manufacture much of what they require within their own homes, linens and woollens, as well as wooden shoes, are now increasingly made in factories. The principal articles of export are cattle, sheep, swine, butter, hams, hides, wool, grain, fish, eggs, meat, and wooden goods. Among the imports are textile fabrics, cereals, and flour, manufactures of metal and timber, coal, oil, salt, coffee, sugar, and tobacco. About two-thirds of the export trade is carried on in native vessels. The total value of the imports in 1890–1902 ranged from £17,057,000 in 1890 to £31,374,100 in 1902, and of the exports in the same period from £12,990,000 in 1890 to £24,918,800 in 1902. The bulk of the foreign trade is with Germany, Great Britain, and Norway and Sweden; the imports from Germany exceed those from Britain by about a third, whereas the exports to Britain are double of those to Germany. In 1905 there were 1900 miles of railway, and 3700 miles of telegraph.

Elementary education is compulsory for children between the ages of seven and fourteen. Copenhagen University has 1300 students. The established religion is Lutheran, to which the king must belong; but complete toleration is enjoyed in every part of the kingdom. Only 1 per cent. of the population (including about 4000 Jews) belong to other forms of faith. The government of Denmark is a constitutional monarchy, the king being assisted by a cabinet of seven ministers. The national assembly or Rigsdag consists of the Folkething and Landsthing —the former partly nominated by the king, partly elected by the large taxpayers, the latter in the proportion of one to every 16,000 of the population, elected for three years by practically universal suffrage. The total revenue for the financial year 1904–5 was £4,248,112, and the expenditure £4,321,690. In the same year the net national debt was £13,596,900. The decimal system was introduced in 1875, the unit being the *krone*, or crown, of 100 *öre;* the average rate of exchange is 18 *kroner* to the pound sterling. The Danish army at peace strength is 824 officers and about 9000 men; the war strength is 1448 officers and about 60,000 men. All the able-bodied men who have reached the age of twenty-two are liable to serve eight years in the regular army and reserve. The navy comprises 9 armoured vessels, 6 cruisers and gun-vessels, 7 gunboats, and 34 first and second class torpedo-boats, manned by 266 officers and 1137 men.

The early history of Denmark is lost in the twilight of the saga-period, with its Vikings and their valiant deeds. The Danes coming from the islands occupied the lands deserted by the Jutes and Angles who had in the 5th century migrated to England. The Danish monarchy was founded in 936 by Gorm the Old, whose son became a Christian. Waldemar I. (1157–82) ruled Norway also, and conquered Mecklenburg and Pomerania; under his son Waldemar II. further conquests were made in German and Wendish lands, so that the Baltic became a Danish sea. By the treaty of Calmar in 1397, Norway, Sweden, and Denmark, already under one monarch, Margaret, were formally united into one state. In 1448 the Danes elected as king Christian of Oldenburg, a descendant of their royal family, who was also Duke of Sleswick and Holstein; and his line continued on the throne till 1863. Sweden became independent in 1523. Lutheranism was introduced into Denmark in 1527. In 1815 Denmark had to cede Norway to Sweden; and in 1848 the Germanic peoples of 'the duchies,' Sleswick and Holstein, rebelled against Denmark. For the time the Danes succeeded in retaining the duchies, but the controversy, renewed in 1863, led to the defeat of the Danes by Austria and Prussia (1864), followed by the incorporation of the duchies in the Germanic Confederation, and, after the Austro-Prussian war of 1866, in Prussia.

See books about Denmark by Miss Otté (1882), by various specialists (1891), and by Miss Thomas (1902); Miss Bröchner's *Danish Life in Town and Country* (1903); and histories of Scandinavia by Dunham (1835), Sinding (1858), Crichton and Wheaton (1872), Otté (1875), Nisbet Bain (1905).

Dennewitz (*Den'neh-veetz*), a village 42 miles SSW. of Berlin. Here, on 6th September 1813, the Prussians defeated the French, Saxons, and Poles.

Denny, a mining town of Stirlingshire, 5¼ miles WNW. of Falkirk, on the Carron, opposite Dunipace, with which since 1876 it forms a police burgh. Pop. 5161.

Dennystown, a suburb of Dumbarton.

Dent du Midi (*Don' dü Mi-dee'*), a conspicuous Alpine peak of Valais which abuts on the valley of the Rhone, 12 miles S. of the east end of the Lake of Geneva; height 10,450 feet.

Denton, a Lancashire town, 3½ miles NNE. of Stockport. Pop. (1901) 14,934.

D'Entrecasteaux Islands (*Don' tr-cas-to'*), since 1884 part of British New Guinea, lie north of the south-eastern extremity of New Guinea. With an area of 1083 sq. m., they comprise three chief islands, and are named after the French admiral and explorer, Bruni D'Entrecasteaux (1739–93), who visited them in 1792. His name is also preserved in D'Entrecasteaux Point on the south-west coast of Western Australia; and in D'Entrecasteaux Channel, separating the south of Tasmania from Brunė Island.

Denver, the capital of Colorado, on the South Platte River, 922 miles W. of St Louis. It lies on a level plain, 5196 feet above the sea, beyond which rise the snow-capped peaks and deep blue shoulders of the Rocky Mountains. Denver was founded on a barren waste, dry and treeless, in 1858, and in 1870 the population was 4759; in 1880, 35,629; in 1900, 133,860. In thirty years the mining-camp had been transformed into the 'Queen City of the Plains,' with stately buildings of brick and yellow stone, and wide, shaded streets, provided with the electric light, and with horse, cable, and electric tram-cars; and it has become the meeting-point of a great network of railways. It has an abundant water-supply, many of the houses are heated by steam, supplied by a company; and through the resident portion streams of water course past the unpaved footways. The clear invigorating air and dry climate of Denver are famous; the mean annual temperature is 48° F., and the rainfall 17 inches. Among the chief buildings are the city-hall, a handsome court-house and post-office, high school (1887), Episcopal cathedral, the state capitol (commenced in 1886, and measuring 383 by 313 feet), and the university. Denver is the centre of a great agricultural and mining district, and has a large trade in cattle, hides, wool, and tallow. It is chiefly, however, to its position as the centre of a great mining region that Denver owes its marvellous progress; the discovery, in 1878, of the fabulous wealth of the Leadville Hills attracted capital and emigration from all parts of the continent. It has a United States assaying mint, and is an important ore market.

Deoband', a town in the United Provinces, 15 miles N. of Muzaffarnagar. Pop. 20,500.

Deodar', a petty native state in the Palanpur Superintendency, Bombay Presidency. Area, 440 sq. m.; pop. 25,061.

Deori (*De-o-ree'*), a town in Nagpur district, 40 miles S. of Sagar. Pop. 8000.

Deptford, a town of Kent and Surrey, on the south bank of the Thames, 4½ miles below London Bridge, now one of the metropolitan boroughs. In 1885 it was constituted a parliamentary borough, returning one member. In its royal dockyard, dating from Henry VIII.'s reign, Queen Elizabeth knighted Drake when he returned from his voyage round the world. It was closed in 1869, when part of its site was fitted up by the London corporation as a foreign cattle-market. The Royal Victualling Yard is also here. Deptford was long famous for horticulture, but the gardens have mostly been built over or used for railway purposes. There is little shipbuilding now, but the General Steam Navigation Company employ a great many men here, and there are large and famous marine engineering establishments. In 1888–89 the Electric Lighting Company erected buildings here for supplying London with light. Peter the Great worked here as a shipwright. Lord Howard of Effingham, John Evelyn, Admiral Benbow, and Grinling Gibbons lived here; and Marlowe the dramatist was killed here, and is buried in St Nicholas churchyard. Deptford is divided from Greenwich by the Ravensbourne, and over the creek there is a bridge where formerly the *depe ford* crossed the river. Pop. (1851) 27,896; (1881) 76,732; (1901) 110,398.

Derajat', the fluvial portion of Daman, a strip of territory between the Suliman Mountains and the Indus, was mostly incorporated in 1901 with the North-west Frontier Province.—Dera Ismail Khan, capital of a transferred district, is 4½ miles W. of the Indus. Pop. 35,000.—Dera Ghazi Khan is, though 2 miles W. of the Indus, still attached to the Punjab. Pop. 28,000.

Derayeh, a town of Arabia, 450 miles NE. of Mecca, was the capital of the Wahabis, and had a pop. of 60,000 prior to 1819, when it was nearly destroyed by Ibrahim Pasha. Pop. 1500.

Derbend' ('gateway'), a port and capital of the Russian district of Daghestan, on the west shore of the Caspian, 140 miles NW. of Baku. The upper city forms the citadel, and contains the splendid palace of the ancient khans, now the seat of the Russian governor. Pop. 14,750.

Derby (often *Dar'by*), a parl., munic., and county borough, the capital of Derbyshire, on the Derwent, 92 miles SE. of Liverpool and 129 NNW. of London. The Roman station of *Derventio* was at Little Chester, a northern suburb. Derby was a royal borough in Edward the Confessor's time, but was first placed under a mayor in 1638. It has returned two members since 1295. The tower of All Saints (1509–27) is a grand example of Perpendicular architecture, 175 feet high, exclusive of the pinnacles; the Roman Catholic church of St Mary (1835) is a good specimen of Pugin's work. Other buildings are the town-hall (1866); the free library and museum and art gallery, all gifted, like a recreation ground, by Mr M. T. Bass, from 1848 to 1883 M.P. for Derby; the grammar-school, a modern erection, but founded in 1162; and the infirmary, whose foundation-stone was laid by Queen Victoria in May 1891. The choicely-planted arboretum (16 acres), near the central railway station, was the gift (1840) of Mr Joseph Strutt. Derby is the headquarters of the Midland Railway Company; their vast establishments employ over 5000 men. Its manufactures are silk, cotton, elastic web, lace, hosiery, iron, lead, shot, spar, porcelain, marble, colours, and chemicals. Silk, one of its staple manufactures, was begun here first in England by John Lombe in 1719. Porcelain was manufactured here from 1756 till 1814; and the Derby Crown Porcelain Company has recently revived this beautiful industry with much success. Richardson, the novelist, 'Wright of Derby,' the painter, and Herbert Spencer, were natives; and Derby is identified with the 'Stoniton' of George Eliot's *Adam Bede*. Pop. (1841) 32,741; (1901) 105,785.

Derbyshire, an inland county of England, lying between Yorkshire and Leicestershire, Nottinghamshire and Staffordshire. Its length is 56 miles; its greatest breadth, 34 miles; and its area, 1029 sq. m., or 658,624 acres. Pop. (1801) 161,567; (1841) 272,202; (1901) 620,196. The surface is much diversified, the south being

mostly flat, the east of an undulating character, but the north exceptionally hilly and rugged. The high land here, called the Peak (which is the name of a district and not of any particular point or mountain), is the southern termination of the Pennine chain, and forms the watershed between the Trent and the Mersey. The chief summits are Kinder Scout (2082 feet), Axe Edge (1810), and Blakelow Stones, Mam Tor, and Lord's Seat (all about 1700). North Derbyshire is justly celebrated for its picturesque scenery, which chiefly centres in the valleys of the Derwent and Wye. Matlock and Buxton, with warm mineral springs, are the two chief places of resort. The other towns are the four municipal boroughs of Derby, Chesterfield, Glossop, and Ilkeston, and Ashbourne, Bakewell, Belper, and Wirksworth. Since 1885 Derbyshire returns nine members to parliament; two for the borough of Derby, and seven for the county, who sit respectively for Chesterfield, High Peak, Mid Derbyshire, Ilkeston, North-eastern Derbyshire, Southern, and Western. Besides important coal-mining, chiefly in the eastern division, Derbyshire is singularly wealthy in a diversity of minerals and metals—iron, lead, zinc, manganese, copper, gypsum, pipeclay and chert for potteries, marble, fluor-spar, and alabaster. The chief manufactures are cotton, silk, elastic web, worsted, metallic goods, porcelain and pottery, and spar ornaments. Though more a manufacturing and mining than an agricultural county, Derbyshire is not undistinguished for its pastoral and corn-growing properties, and, in the south, for its dairies. Of the total area, 78 per cent. is under crops of all kinds, bare fallow, and grass. There is much permanent pasture and large sheep-walks in the Peak district. Ecclesiastically Derbyshire is, since 1884, an archdeaconry of the diocese of Southwell, and is divided into 140 parishes. There are ruined abbeys at Dale and Beauchief, and peculiarly fine churches at Melbourne, Ashbourne, and Tideswell. The Saxon crypt of Repton, and the churchyard crosses of Eyam, Bakewell, Hope, &c., are the oldest ecclesiastical remains. Of feudal and domestic buildings may be named the castles of Castleton, Bolsover, and Duffield, the manor-house of South Winfield (ruin), Haddon Hall, and Hardwick Hall. Chatsworth (q.v.) is unrivalled. Arbelow, near Youlgreave, is the most important 'stone circle' in England next to Stonehenge. Derbyshire's chief historic association is the retreat in 1745 of Prince Charles Edward, Derby being the turning-point in his enterprise. Natives have been Flamsteed, Chantrey, and Brindley. See works by the Rev. J. C. Cox (5 vols. 1876-91), Pendleton (1886), and J. T. (1892).

Dereham, East, a pleasant, thriving market-town of Norfolk, 17 miles (by rail 22) WNW. of Norwich. Here, in 650, St Withberga founded a nunnery. It was burned by the Danes, but refounded; and its cruciform church remains, with a detached belfry (the 'New Clocker'), St Withberga's well, and Cowper's grave. Bonner was a vicar; Dr Wollaston and Borrow were natives. Dereham manufactures agricultural implements. Pop. (1851) 3372; (1901) 5545.

Derg, Lough, the largest lake expansion of the river Shannon, between Tipperary and Galway and Clare, is 24 miles long, 2 wide on an average, and 80 feet deep.—Another Lough Derg, in the south of Donegal county, measuring 3 miles by 2½, has many small isles, and wild dreary shores. Saint's Isle contains the remains of a priory; Station Island, the reputed entrance to St Patrick's Purgatory, was long the most celebrated place of pilgrimage in Ireland.

Derry. See Londonderry.

Derwent, (1) a river of Derbyshire, flowing 60 miles, past Derby, to the Trent, near Sawley.—(2) A river of Northumberland and Durham, flowing 30 miles to the Tyne, near Gateshead.—(3) A river of Yorkshire, flowing 57 miles to the Ouse at Barmby-on-the-Marsh.

Derwent, the principal river of Tasmania, issues from Lake St Clair, in the centre of the island; and winds 130 miles SE. to Storm Bay at Hobart, its estuary being 4 miles wide.

Derwentwater, a sheet of water, stretching south from Keswick, the most beautiful of the Cumberland lakes. Lying 238 feet above sea-level, and engirt by steep wooded crags and hills, it is 3 miles long by 1 broad, and 72 feet deep. Near its foot rise Castle Hill (529 feet) and Friar's Crag, commanding exquisite views; whilst at its head are the Lodore Falls and Borrowdale. This lake is an enlargement of the Derwent River, which traverses it in its course towards the Irish Sea at Workington. It has several wooded isles, besides a remarkable floating isle.

Desertas, three rocky Atlantic islets, SE. of Madeira, visited by fishermen and herdsmen.

Deseret. See Utah.

Desirade (*Day-zee-râhd'*), a French West Indian island, 4 miles E. of Guadeloupe. Area, 10 sq. m.; pop. 1598, who fish and cultivate cotton.

Des Moines (*Deh-Moin'*), capital of Iowa, on Des Moines River, at the mouth of Raccoon River, 174 miles W. of Davenport by rail. The river, rising in the SW. part of Minnesota, flows 550 miles generally SE. to the Mississippi. Founded in 1846, the city has a fine state-house ($3,000,000), a marble post-office and court-house, a Baptist university, a state library of over 22,500 volumes, and a public park, with fine groves of forest trees. There are foundries and planing and flouring mills, besides manufactories of machinery, engines, boilers, railway cars, &c. Pop. (1870) 12,035; (1880) 22,408; (1900) 62,140.

Desmond, a former district of Munster, comprising the counties of Cork and Kerry.

Desna, a navigable river of Russia, rising in Smolensk province, and flowing 550 miles SE. and SW. to the Dnieper, almost opposite Kiev. It receives the Seim and the Snov.

Despoblado (Span., 'desert'), a treeless, uninhabited plateau, nearly 10,000 feet above the sea, on the Bolivian and Argentine frontier, to the north-east of Antofagasta.

Despoto Dagh. See Rhodope.

Dessau (*Des'sow*), a town of Germany, capital of the duchy of Anhalt, on the Mulde's left bank, near its junction with the Elbe, 70 miles SW. of Berlin. Its principal building is the fine ducal palace (1748). Pop. 52,000.

Desterro, an important port of Brazil, on the N. coast of the island of Santa Catharina, 240 miles NE. of Porto Alegre. Pop. 30,700.

Detmold, capital of the German principality of Lippe, on the Werre, 47 miles SW. of Hanover by rail. It has an old castle, a modern palace, and manufactures of tobacco, cards, and carved work. On a hill 2 miles off is Bandel's colossal statue of Arminius (1875). Pop. 12,250.

Detroit, the chief commercial city and port of entry of Michigan, on the Detroit River, 125 miles by water, and 178 by land, NW. of Cleve-

land, Ohio, and 284 ENE. of Chicago. Detroit is substantially built upon rising ground, its streets are broad, well paved, and shaded with trees; it is well supplied with the best of water; and its fire, police, and school departments are excellent. The principal manufactures include iron products, machinery, railroad cars, flour, malt liquors, cigars, leather, boots and shoes, &c. The public buildings embrace a Catholic cathedral, a city-hall erected at a cost of $600,000, a Board of Trade building, a United States marine hospital, &c. Detroit is among the oldest places in the United States. It came into possession of the French in 1610, was transferred to the British in 1763, and in 1796 passed to the United States. It was incorporated as a city in 1824. Pop. (1870) 79,577; (1880) 116,340; (1900) 285,704.

Detroit River, so called, on whose north-western bank stands Detroit City, is the strait through which the waters of Lake St Clair and of the great upper lakes of the St Lawrence system flow into Lake Erie, and thence to the Atlantic. It is 20 miles in length, and at Detroit forms an excellent harbour.

Dettingen (*Det'ting-en*), a village of Bavaria, 10 miles NW. of Aschaffenburg by rail. Here, on 27th June 1743, George II. of England, commanding English, Hanoverians, and Austrians, defeated the larger French army under the Duc de Noailles.—There is another Dettingen (pop. 3519) in Würtemberg, 10 miles E. of Reutlingen.

Deutschbrod (*Doitch-brod*), a town in Bohemia, 15 miles from the Moravian frontier. Here in 1422 the Hussite general Ziska defeated the Emperor Sigismund. Pop. 6436.

Deutz (*Doitz*). See COLOGNE.

Deux-ponts (*Duh-pon^g'*). See ZWEIBRÜCKEN.

Deux-Sèvres (*Duh-Sehvr'*). See SÈVRES.

Dev'enter, an old Hanse town of Holland, on the Yssel, 11 miles NNW. of Zutphen by rail. It has a cathedral, a fine town-house, and manufactures of iron, carpets, and gingerbread. Here Thomas à Kempis and Erasmus were educated. Pop. 26,100.

Dev'eron, a beautiful salmon river, rising near the Buck of Cabrach, at an altitude of 1847 feet, and winding 62 miles north-eastward to the Moray Firth at Banff.

Devil's Bridge, Cardiganshire, 12 miles E. by S. of Aberystwith, a double bridge over a ravine, the lower one built in the 11th or 12th c., the upper (30 feet in span, and 114 high) in 1753.

Devil's Ditch, a great earthwork of Cambridgeshire, running 7 miles south-eastward from Reach to Wood-Ditton.

Devil's Dyke, a kind of natural amphitheatre in the Downs, 5½ miles NW. of Brighton.

Devizes, a municipal borough of Wiltshire, near the Kennet and Avon Canal, 50 miles WSW. of Reading, and 20 ESE. of Bath. The old name *Divisæ* or *Ad Divisas* marked the ancient boundary between the English and Celts; but as a town, Devizes owes its origin to a splendid castle built here by Bishop Roger of Salisbury about 1132. It was stormed by Cromwell in 1645, and now is represented by mere fragments. There are two churches with much interesting Norman work; a market-cross (1814), commemorating God's judgment on a perjuress in 1753; a fountain with a statue of Sothern Estcourt (1879); a good museum; and a large corn exchange (1857). From Henry VIII.'s time till about 1820 Devizes was a great cloth mart; now its chief manufactures are tobacco, agricultural implements, and other machinery. It returned two members till 1867, then one till 1885. Pop. 6600. See *A History of Devizes* (1859).

Devon, a Scottish stream winding 34 miles from the Ochils to the Forth near Alloa.

Devonport (before 1824 called PLYMOUTH DOCK), a parliamentary, municipal, and county borough, maritime town, and naval arsenal, of Devonshire, on the estuary of the Tamar (which is 4 miles long by ½ mile broad, and called the Hamoaze), 2 miles WNW. of Plymouth. It stands on high ground, and is separated from its growing suburbs of Stoke and Morice Town by the glacis of its fortifications, once important, but now dismantled. Devonport owes its existence to the dockyard established here by William III. in 1689, and is one of the chief naval arsenals in Britain. The government establishments stretch for nearly 4 miles along the Hamoaze. The original dockyard, extended from time to time until it contained six building-slips, was supplemented in 1844 by the formation at Morice Town of the Keyham Steam Yard and Factory, which communicates with the dockyard and gun-wharf (designed by Vanbrugh) by a tunnel. Farther up the river are an engineers' college, seamen's barracks, magazines, and powder-works; and the Hamoaze itself contains many men-of-war. The official residences of the admiral of the port and of the lieutenant-governor of the western district are at Mount Wise, which is fortified. Here also are the chief barracks of the troops which garrison the 'three towns' of Plymouth, Devonport, and Stonehouse. The military hospital is on Stonehouse Creek. Pop. of municipal borough (1841) 33,820; (1901) 70,437; of parliamentary borough, which includes East Stonehouse, and returns two members, 78,059.

Devonshire, a maritime county of south-west England between the Bristol and the English Channel. Its greatest length is 70 miles; its greatest breadth, 65; its coast-line, about 150; and its area, 2586 sq. m., of which about three-fourths are under cultivation. The north coast is the boldest, with several hills over 1000 feet. Its chief indentation is Bideford Bay, 18 miles broad and 8 deep, into which fall the Taw and the Torridge. The south coast is also lined with cliffs, chief among them being Bolt Head and Start Point. Tor Bay is 3 by 3½ miles; and Plymouth Sound, the combined estuary of the Tamar and Plym, is one of the finest harbours in the kingdom. Devonshire is hilly, the most elevated parts being the table-lands of Dartmoor in the south-west, Exmoor in the north-west, running into Somerset, and Blackdown in the east. These are mainly open moor-lands. Dartmoor is very rocky; the lower hills grassy. High Willhayse, on Dartmoor (2039 feet), is the highest point. Copper, tin, lead, iron, and manganese occur in commercial quantities, with ores of several other metals; china, terra-cotta, potter's, and pipe clays; granites, marbles, anthracite, lignite, gypsum, and other earthy minerals. The Tamar, 59 miles, is the longest of numerous rivers, and divides Devon from Cornwall; the Exe, 54 miles, rises in Somerset. The other rivers are the Dart, Teign, Taw, Torridge, and Plym (all rising in Dartmoor), Exe, and Tamar. The red deer still run wild on Exmoor. The climate, especially in the south, is mild and humid, and not liable to great extremes. Hence, several of the coast-towns have become famous as health-resorts—notably Torquay and Ilfracombe. Myrtles and

aloes commonly flourish in the open air; and in specially favoured spots oranges and lemons, with a little protection, will thrive and fruit. The county is most fertile, especially in the South Hams, and on the 'red land' of the Vale of Exeter. The pastures are very rich, and dairy-farming and cattle-breeding are prominent in its agriculture. The red Devon cattle are one of the leading breeds; and the sheep and ponies of Dartmoor and Exmoor have more than a local reputation. 'Clotted cream' is a special product. There are extensive orchards, from which great quantities of cider are made. The fisheries are extensive and valuable. Though in the main agricultural, Devon has a varied industrial character. Mining and quarrying and clay-working are of considerable importance; and the manufactures include serges, lace, gloves; extensive potteries; manure, chemical, and soap works; paper-mills, breweries, and distilleries. The chief towns are Exeter, Plymouth, Devonport, Torquay, Tiverton, Barnstaple, Stonehouse, Tavistock, Teignmouth, Newton, Dartmouth, and Brixham. Pop. (1801) 340,308; (1841) 532,959; (1901) 661,314. Under the Reform Act of 1885 Exeter returns one member, Plymouth and Devonport two each, and the rest of the county is divided into eight single-member constituencies. No county save Middlesex has given birth to so many great men—Raleigh, Drake, Hawkins, John Davis, Sir Humphrey Gilbert, Sir Richard Grenville, Monk, Marlborough, Bishop Jewell, Gay, St Boniface, Newcomen, Wolcott, Sir Joshua Reynolds, Coleridge, Kingsley, John Ford, among them. See works by Worth (1886) and Page (1893).

Dewas', a protectorate of Central India, held conjointly by two Rajput chiefs. Area, 289 sq. m.; pop. 172,073. The capital, Dewas, 20 miles NE. of Indore, has a pop. of 12,921.

Dewsbury, a manufacturing town and municipal and parliamentary borough in the West Riding of Yorkshire, at the base of a hill, on the Calder's left bank, 32 miles SW. of York, and 8 SSW. of Leeds. The Calder navigation connects the town with Liverpool and Hull. Dewsbury has a chamber of commerce (1861), an infirmary (1883), a new town-hall (1888), new county courts, and a grammar-school (St Augustine's). Along with Batley (q.v.) it is the centre of the shoddy trade. Blankets, carpets, yarns, and iron are also largely manufactured. Dewsbury obtained a municipal charter in 1872. Pop. of mun. borough (1861) 18,148; (1901) 28,060; of parl. borough, which, formed in 1867, includes Batley and Soothill, and returns one member, 72,986.

Dhar, a town of Central India, the capital of a protected state, 33 miles W. of Mhov. Pop. 15,000. Area of state, 1740 sq. m.; pop. 169,474.

Dharmsala, a hill-station in the Punjab, 110 miles NE. of Lahore. Pop. 5522.

Dharwar, a town in the southern Mahratta country, Bombay presidency, separated by the river Tungabhadra from Madras. Pop. 32,841.

Dholka, a town of Bombay presidency, 22 miles SW. of Ahmadabad. Pop. 18,716.

Dholpore, a native state of Rajputana, Central India, on the north bank of the Chumbul, with an area of 1156 sq. m., and a pop. of 279,890. Capital, Dholpore, on the Chumbul, 34 miles S. of Agra by rail. Two religious fairs are held every year at Machkund, a lake 3 miles to the west, with 114 temples on its banks.

Dhuheartach, an Argyllshire islet, 15½ miles SW. of Iona, with a lighthouse (1867–72).

Dhwalagiri (*Dwalagir'ree*, *g* hard), once supposed to be the highest peak of the Himalayas, but really at most only the third (26,826 feet). It is in Nepal, in 29° N. lat. and 82° 30′ E. long.

Diablerets (*De-ab'ler-ay'*), a four-peaked mountain (10,651 feet) of the Bernese Alps, Switzerland, on the frontiers of Bern and Valais. There were terrible landslips here in 1714 and 1749.

Diamantina (*Dee-a-man-tee'na*), an episcopal town in the Brazilian province of Minas Geraes; centre of a rich diamond district. Pop. 13,000.

Diamond Harbour, a port on the Hooghly, 38 miles SSW. of Calcutta by rail, 41 by river.

Diarbek'ir (anc. *Amida*), a decayed town of Asiatic Turkey, on the right bank of the Tigris, 390 miles NW. of Bagdad. It is walled, and commanded by a citadel built on a high basalt rock, against which the flat-roofed houses rise above each other in terraces. Pop. 40,000.

Didcot, the junction for Oxford, 53 miles W. by N. of London.

Diedenhofen. See THIONVILLE.

Diego Garcia (*De-ay'go*), a low coral island of the Indian Ocean, a dependency of Mauritius, in 7° S. lat. and 72°–73° E. long., extends 30 miles in a horseshoe shape, embracing between its extremities three minor islets (the Chagos Islands). It is convenient for coaling. Pop. 700.

Diego Suarez, a fine bay at the north end of Madagascar, ceded to France by treaty in 1885.

Dieppe (*De-epp'*, or *Dyepp'*), a seaport in the French dep. of Seine-Inférieure, on the English Channel, 40 miles N. of Rouen by rail. It is situated among chalk-cliffs, at the mouth of the river Arques, and is regularly built. It has a castle (1433, now occupied as barracks), a fine Gothic church of the 13th century, a handsome bathing establishment and casino, and a harbour which admits vessels of 600 tons. It manufactures clocks, lace, and tobacco; and its carved articles of horn, bone, and ivory have long been famous. There are also shipbuilding yards, distilleries, and important fisheries. Dieppe's prosperity attained its zenith between the middle of the 14th century and the end of the 17th; many expeditions sailed hence for the west coast of Africa and Canada. But a terrible bombardment by the English and Dutch destroyed all but two or three buildings in 1694; the town never recovered its importance, and even before the rise of Havre had already sunk to a secondary port. Nevertheless, steamers ply regularly to Newhaven. Pop. 23,250.

Diest (*Deest*), a Belgian town, on the Demer, 37 miles SE. of Antwerp. Pop. 7599.

Digby, a seaport of Nova Scotia, on St Mary's Bay, reputed for its cured pilchards. Pop. 1951.

Digne (*Deeñ*), a cathedral city in the French dep. of Basses-Alpes, on the Bléonne, 70 miles NE. of Marseilles. Pop. 6584.

Dihong. See BRAHMAPUTRA.

Dijon (*Dee-zhong'*), chief town in dep. of Côte-d'Or, lies, spread out on a fertile plain, at the foot of Mont Afrique (1916 feet), at the junction of the Ouche and Suzon, and on the Canal de Bourgogne, 196 miles SE. of Paris by rail. Its importance as a railway centre has rendered it of consequence in the inner line of French defences towards the east, and strong forts now crown the neighbouring hills. Of the mediæval defences, the Gothic castle built by Louis XI. still remains, employed as a gendarmerie barrack; formerly it was a state-prison. Among the public buildings

are the massive Gothic cathedral, dating from the 13th century, with a wooden spire (1742) 301 feet high; the churches of Notre Dame (1252–1334) and St Michel (1529); a handsome theatre; the palais de justice; and the former palace of the Dukes of Burgundy, which, commenced in 1366, is now the town-hall, and contains a rich museum and a library. The manufactures include beer, brandy, woollen cloth, blankets, mustard, candles, and pottery, and there is a noteworthy trade in flowers and agricultural produce; but Dijon's chief commercial importance is as the centre of the Upper Burgundy wine trade. Pop. (1872) 40,116; (1901) 65,320. The *Dibia* of the Romans, Dijon in 1007 was united to the duchy of Burgundy, of which it became the capital. On Charles the Bold's death (1477) it came to France. In October 1870 it capitulated to the Germans. Charles the Bold, Crébillon, Bossuet, and Rameau were natives, and close by is the birthplace of St Bernard, of whom there is a statue by Jouffroy (1847).

Dillingen (*Dil'ling-en*), a Bavarian town, on the Danube, 51 miles WSW. of Ingolstadt. In the castle the bishops of Augsburg formerly resided, and here they founded a university (1554–1804), from 1564 an active Jesuit centre. Pop. 5860.

Dilman', a town of Northern Persia, 75 miles W. of Tabriz. Pop. 6000.

Dilston, the ruined seat of the Jacobite Earl of Derwentwater, in Northumberland, 2½ miles E. by S. of Hexham.

Dinájpur, a town in Rajshahi division (Kuch Behar), Eastern Bengal, on the Purnabhaba, 221 miles N. of Calcutta by rail. Pop. 12,560.

Dinan (*Deen-on^{g}'*), an old town in the French dep. of Côtes-du-Nord, on the Rance, 30 m. NW. of Rennes, and 14 S. of St Malo. Its situation, on the summit of a steep granite hill, with the Rance flowing through a valley 250 feet below, is highly romantic. The valley is crossed by a fine granite bridge of ten arches. The town is still partly surrounded by its ivy-covered walls; and the old castle of the Dukes of Brittany is now in part used as a prison. A fine Romanesque church contains the heart of Du Guesclin. Many English reside here. Pop. 8788. Four miles off lies the village of Corseult, on an old Roman site, where many antiquities have been found.

Dinant (*Deen-on^{g}'*), a town of Belgium, occupying a narrow site between the Meuse and a limestone hill, 17 miles S. of Namur by rail. On the cliff above stands the citadel (1530). There are manufactures of cotton, paper, leather, iron, gingerbread, &c., with black marble quarries; the copper wares (*Dinanderie*), belong to the past. Pop. 8773.

Dinapore (*Dánápur*), military headquarters of the district of Patna in Bengal, on the Ganges, 12 miles W. of Patna. Pop. 35,000.

Dinard, the most fashionable watering-place in Brittany, on the Rance estuary opposite St Malo (q.v.) and St Servan. Pop. 6000.

Dina'ric Alps, the mountains connecting the Julian Alps with the Balkan system; the main range, stretching SE., separates Dalmatia from Bosnia and Herzegovina. The highest summits are Orjen (6225) and Dinara (5940).

Dinas Mowddwy (*Din'as Mowth'ee*), a market-town of Merionethshire, 10 miles E. by S. of Dolgelly. Pop. of Mallwyd urban district, 885.

Din'digal, a town in the presidency of Madras, 40 miles NNW. of Madura by rail. Pop. 25,182.

Dingle, a seaport on the north side of Dingle Bay, in County Kerry, Ireland, 27 miles SW. of Tralee. Pop. 1964.

Dingwall (Scand., 'court hill'), the county town of Ross-shire, near the head of the Cromarty Firth, and at the entrance to the valley of Strathpeffer, 13½ miles NW. of Inverness (by rail 18½). A royal burgh since 1226, it unites with Wick, &c. to return one member. Pop. 2500.

Dinkelsbühl, an ancient walled town of Bavaria, 19 miles NNW. of Nördlingen. Pop. 4657.

Diomede Islands, a group of three small islands in Behring Strait, forming, as it were, stepping-stones between Asia and America.

Dirk-Hartog Island, measuring 40 miles by 10, lies off the west coast of Australia. With Peron Peninsula to the south, it encloses the Freycinet Inlet, and, with two smaller islands to the north, forms the breastwork of Shark's Bay.

Dirleton, a Haddingtonshire village, with a fine ruined castle, 2½ miles WSW. of North Berwick. Pop. 313.

Dirschau (*Deer'show*), a town of Prussia, 20 miles SSE. of Danzig, on the Vistula, here crossed by a railway viaduct (1857) 911 yards long. Polish from 1466 till 1772, it now has great railway works and sugar-factories. Pop. 13,146.

Disco, an island on the west coast of Greenland, in 70° N. lat. It is 90 miles long and 3000 feet high, and has good coal. The harbour of Godhavn is on the south coast.

Dismal Swamp, measuring 30 miles from north to south by 10 in breadth, lies chiefly in Virginia, but partly in North Carolina, and in the centre has Lake Drummond, 6 miles broad. It formerly was a frequent hiding-place of runaway slaves. Its dense growth of cypress and cedar has been greatly thinned, and part of the region has been reclaimed. It is intersected by a canal connecting Chesapeake Bay and Albemarle Sound.

Diss, a market-town of Norfolk, on a rising-ground above a mere of 5 acres, 19 miles SSW. of Norwich. Skelton was rector here. Pop. 3763.

District of Columbia, a district of the United States, containing Washington (q.v.) and Georgetown, is bounded west by the Potomac, and elsewhere by Maryland. Area, 60 sq. m.; pop. (1890) 230,392. Till 1871 the district remained an unorganised territory, under congress; but in that year a territorial government was organised, and in 1878 congress placed the whole control of it under three commissioners, appointed by the president and approved by the senate.

Ditmarsh, or DITHMARSCHEN, the western district of Holstein, low-lying and fertile, between the Eider and the Elbe, with an area of 531 miles.

Diu, a seaport situated at the eastern extremity of a Portuguese island (7 × 2 miles) of the same name, off the south coast of Kathiawar, 180 miles NW. of Bombay. Once a city of 50,000 souls, it has sunk in importance till now the whole island has but 14,636 inhabitants, mostly fishermen. Some magnificent buildings still attest its ancient splendour, such as the Jesuit College (1601), now a cathedral. The place has been Portuguese since 1535, and stood a famous siege in 1545.

Dixon Entrance, a strait on the west coast of North America, separating Queen Charlotte Islands from the Prince of Wales Archipelago, and so dividing British territory from Alaska.

Dizful, a town of Persia, on the river Diz, 190 miles W. of Ispahan. Pop. 35,000. The ruins of *Susa* lie 14 miles SSW.

Djiboutil (*Jee-boo'til*). See Obock.

Dmitrov, a town of Russia, on a tributary of the Volga, 42 miles N. of Moscow. Pop. 9206.

Dnieper (*D'nee'pr;* anc. *Borysthenes*), a river rising near the Volga and Western Dwina, in the N. of the Russian province of Smolensk, and flowing 1330 miles southward past Kieff, Ekaterinoslav, and Alexandrovsk to the Black Sea. Its embouchure (increased by the waters of the Bug) forms a gulf nearly 50 miles long, and 1 to 6 miles broad. Its principal affluents are the Desna and Soj from the east, and the Pripet, Beresina, and Druz from the west. At Dorogobush the stream becomes navigable, but below Kieff and at other points traffic is interrupted. The produce of the southern provinces is usually conveyed down the river to ports on the Black Sea, but many vessels pass annually from the Dnieper to the Baltic by the Brest-Litovsk canal (50 miles) and other water-ways. The stream is permanently bridged at Kieff only. At Smolensk, its waters are frozen from November to April; at Kieff, only from January to the end of March; and at Kherson it is frequently open all the year.

Dniester (*D'nees'tr*), a muddy river of Russia, rises in the Carpathian Mountains, in Austrian Galicia, and flows 650 miles SSE., separating Bessarabia from Podolia and Cherson, and entering the Black Sea by a shallow shore lake, 18 miles long and 5 broad.

Do'ab (Sanskrit, 'two rivers;' cf. Punjab), a term used in India for the country between any two rivers, but specially between the Jumna and the Ganges—a space extending from Allahabad to the base of the Himalayas, a distance of upwards of 500 miles, with an average breadth of 55 miles. It is the granary of Upper India.

Dobcross, a town of Yorkshire, 6½ miles NE. of Ashton-under-Lyne. Pop. 2990.

Döbeln, a town of Saxony, on an island formed by the Mulde, 40 miles SE. of Leipzig by rail, with foundries. Pop. 17,972.

Do'beran, a bathing-resort of Mecklenburg-Schwerin, 2½ miles from the Baltic, and 25 NE. of Wismar. It has a ducal palace (1232), is connected by rail (4 miles) with a sea-bathing establishment, and has a chalybeate spring. Pop. 4905.

Dobrudja (also spelt *Dobruja, Dobrudscha, Dobrogea*), the south-eastern portion of Roumania, between the lower Danube and the Black Sea, transferred to Roumania by the Berlin Congress of 1878. The north-east of this region is occupied by marshes and the Danube's delta; the rest mostly a treeless steppe. The climate is malarious. Area, 6102 sq. m.; pop. 200,000.

Dodworth, a Yorkshire township, 2¾ miles W. by S. of Barnesley. Pop. 3100.

Doesborgh (*Does'borhh;* anc. *Drususburg*), a Dutch fortified town, at the confluence of the Old and New Yssel, noted for its mustard. Pop. 4484.

Doggerbank, an extensive flat sandbank in the German Ocean, between England and Denmark, 100 miles off the Yorkshire coast. It is 170 miles long by 65 broad, with a depth of from 8 to 16 fathoms. Its fisheries are most valuable. In October 1904 a Russian fleet on its way to the China seas fired on English trawlers off the Doggerbank, creating the 'Doggerbank incident.'

Dogs, Isle of, or **Millwall**, a low-lying peninsula on the Thames' left bank, formed by a sudden bend of the river opposite Greenwich.

Dol, an antique walled town in the French dep. of Ille-et-Vilaine, 10 miles SE. of St Malo. Its former cathedral is a granite building of the 13th century. To the north is the isolated Mont Dol (213 feet). Pop. 3902.

Dôle (anc. *Dola Sequanorum*), a town in the French dep. of Jura, the capital formerly of Franche-Comté, on the Doubs, 29 miles SE. of Dijon. It has a Gothic cathedral. Pasteur was born here. Pop. 12,973.

Dolgelly (*Dolgeth'ly;* 'dale of hazels'), capital of Merioneth, Wales, on the Wnion, 62 miles SW. of Chester by rail. It lies at the foot of Cader Idris, and in summer is frequented by tourists. It manufactures coarse woollens and flannels; its Welsh tweed is in great repute. Pop. 2437.

Dollar, a town of Clackmannanshire, at the foot of the Ochils, and near the Devon's right bank, 6 miles NE. of Alloa. Its academy, a domed Grecian edifice (1818–67), founded under the will of Captain John M'Nab (1732–1802), a Dollar herdboy and London shipowner, gives higher and secondary education to 800 pupils of both sexes. A mile north are the noble ruins of Castle Campbell, crowning an almost insulated knoll, with King's Seat (2111 feet) rising behind. It belonged to the Argylls from 1465 till 1805, in 1556 sheltered John Knox, and in 1645 was burned by Montrose. Pop. 1607.

Dollart, The, a gulf of the German Ocean, at the mouth of the Ems, between Hanover and Holland. It is 8 miles long by 7 broad, and was formed by inundations of the sea (1277–1362).

Dolnja Tuzla (*Doln'ya Tooz'la*), a town of Bosnia, 52 miles (by rail 154) NNE. of Sarajevo. Pop. 7189.

Dolomite Mountains, a region of jagged outlines and isolated peaks, in the south-east of Tyrol and in the Carinthian Alp masses—Dolomite being a kind of limestone.

Domin'ica (Fr. *Dominique*), the largest and most southerly British island in the Leeward group of the Lesser Antilles, midway between the French islands of Martinique and Guadeloupe. Area, 291 sq. m.; population, 30,000, mostly negroes, with a few Caribs and whites, and two-thirds speaking a French patois. Dominica is of volcanic origin, with many hot and sulphureous springs. In 1880 there was a great eruption of volcanic ash from the 'Boiling Lake' at the southern extremity of the island. The temperature is cool and even chilly in the mountains, but sultry on the coast; rain falls nearly every month, and the annual rainfall is 83 inches. Nearly one-half of the surface consists of wooded mountains and deep ravines, and at one point the surface attains 6234 feet. Agriculture is confined to a narrow coast strip. The principal product is sugar, but fruit, coffee, cocoa, and timber also are exported, and the fisheries are valuable. The capital is Roseau, a port on the west coast, with a pop. of 4500. The majority of the inhabitants are Roman Catholics. Dominica was discovered by Columbus, on his second voyage, on Sunday (whence its name 'the Lord's Day'), 3d November 1493. In 1648 it was declared by the treaty of Aix-la-Chapelle a neutral island; but in 1759 it was captured by England, and in 1763 ceded by France, who, however, held it again in 1778–83, and in 1802-14, when it was finally restored to Britain.

Dominican Republic, or **Santo** (commonly **San**) **Domingo**, a state formed of the eastern portion of Hayti (q.v.). Area, 20,587 sq. m., or over two-thirds of the whole island; population, 617,000, mostly negroes or mulattoes. The state religion is Roman Catholic; the prevailing dia-

lect is Spanish. Civilisation has not reached a high level; but of late years the country has made considerable progress under the impulse of American enterprise. Large sugar plantations and factories have been developed in the south and west; the culture of tobacco, coffee, and cocoa has been greatly increased; and the export of mahogany, dye-woods, and guano has been revived. Gold, silver, quicksilver, iron, and coal have been found; and there is a railway of 72 miles. The president is chosen for four years, and the legislative power is a congress of twenty-two deputies. The capital is San Domingo.—This portion of the island remained Spanish when the western part was ceded to France in 1697, and was united with the neighbouring state in 1795–1808 and 1822–43. In 1843 it assumed a separate standing as the Dominican Republic, reconstituted in 1865, after having reverted to Spain (1861–63). See works by Keim (Philadelphia, 1871) and Hazard (New York, 1873).

Dominion. See CANADA.

Domo d'Os'sola, a cathedral city of Piedmont, at the foot of the Simplon, near the Toce's right bank, 56 miles by rail N. of Novara. Pop. 2300.

Domremy-la-Pucelle, Joan of Arc's birthplace, a village in the French dep. of Vosges, on the Meuse, 8 miles N. of Neufchâteau.

Don, a river of the West Riding of Yorkshire, rising in the Penistone moors on the borders of Derbyshire and Cheshire, and running 70 miles SE. and NE. past Sheffield, Rotherham, Doncaster, and Thorne, to the Ouse at Goole.

Don, a salmon-river of Aberdeenshire, rising close to the Banffshire boundary in a peat-moss 1980 feet above sea-level, and winding 82 miles eastward to the German Ocean, 1 mile NE. of Old Aberdeen, and not far below the 'Auld Brig o' Balgownie' (*c.* 1320), commemorated in Byron's *Don Juan.* Its chief affluent is the Ury.

Don (anc. *Tanais*), a river of Russia, having its source in a small lake in the government of Tula, and flowing 1125 miles southward through the governments of Tula, Riazan, Tambov, Voronej, and the country of the Don Cossacks, till it enters the Sea of Azov by several mouths, of which the Aksai is the most considerable. Among its affluents are the Voronej, Donetz, Khoper, and Medvieditza. The Don is navigable for large boats below Voronej, and in its upper course is connected by canal and railway with the Volga. Its waters abound in fish.

Donabyú, a town of Burma, on the Irawadi, 35 miles S. of Henzada. Pop. 3273.

Dona Francisca, a German colony in the Brazilian province of Santa Catharina, 14 miles from its port, São Francisco. Area, 97 sq. m.; pop. 18,000. Chief town, Joinville (pop. 2000).

Donaghadee (*Donahadee'*), a seaport of County Down, 19 miles E. of Belfast and 21½ SW. of Portpatrick in Scotland. Pop. 2886.

Donauwörth (*Dō-now-vert'*), a decayed town of Bavaria, at the confluence of Wörnitz and Danube, 25 miles NNW. of Augsburg by rail. Pop. 3857. Marlborough carried the intrenched camp of the French and Bavarians near here in 1704; and here in 1805 the French defeated the Austrians.

Don Benito, a town of Spain, near the Guadiana, 69 miles E. of Badajoz by rail. Pop. 15,172.

Doncaster, a municipal borough in the West Riding of Yorkshire, and an important railway junction, on the right bank of the Don, 33 miles S. of York, and 156 NNW. of London. Fine old elms line the broad and level road from the town to the racecourse. Doncaster is well built, and the High Street is a mile long. The parish church was rebuilt by Sir G. G. Scott, after destruction by fire, in 1853–58, at a cost of £43,128. Its noble tower is 170 feet high. The water-works, constructed in 1880, were opened at a cost of £180,000. The town has manufactures of iron, brass, sacking, linen, and agricultural machines. The locomotive and carriage works of the Great Northern Railway are at Doncaster. The agricultural trade is large, and there is a corn-market. Pop. (1851) 12,042; (1881) 21,130; (1901) 28,932. Doncaster was the ancient *Danum,* and lay on the Roman road from York to Lincoln. It was the *Dona Castre* of the Saxons. The Saxon Northumbrian kings had a palace here. Doncaster was burned by lightning in 759, and frequently ravaged by the Danes. It has long been famous for its annual races, begun in 1703, and held a mile south-east of the town in the second week of September. Colonel St Leger, in 1776, founded stakes which have been yearly run for by the best horses in England. See Tomlinson's *History of Doncaster* (1887).

Dondra Head. See CEYLON.

Donegal (*Don-eh-gawl'*; 'fort of the stranger'), a seaport in the south of Donegal county, at the Eske's mouth, on a shallow creek of Donegal Bay (a valuable fishing-ground, especially for herrings), 157 miles NW. of Dublin. It has ruins of a castle and of a Franciscan monastery (1474), and near it is a chalybeate spa. Pop. 1213.

Donegal, a maritime county of Ulster, washed by the Atlantic on the north and west. Its greatest length is 84 miles, its greatest breadth, 41; area, 1870 sq. m. The bold and rugged coast-line (166 miles long) is indented by many deep bays and loughs, and fringed with numerous islands. The surface generally is mountainous, moory, and boggy, with many small lakes and rivers; here is excellent fishing. The highest hill, Erigal, rises 2462 feet, and several others exceed 2000 feet. The largest stream is the Foyle, running 16 miles north-east into Lough Foyle. Lough Derg is the largest lake. Beautiful granites, unsurpassed freestone, and white marble are utilised. The climate in most parts is moist, raw, and boisterous. There are manufactures of woollens, worsted stockings, worked muslins, and kelp, and extensive fisheries. Pop. (1841) 296,448; (1901) 173,625—76 per cent. Catholics. Donegal sends four members to parliament. The towns are small, the chief being Lifford, the county town, Ballyshannon, Letterkenny, Rathmelton, and Donegal. Till 1612, when James I. planted Ulster with English and Scotch settlers, the south part of Donegal was called Tyrconnel, and belonged to the O'Donnels. Donegal has many ruins and traces of forts, religious houses, and castles, and of the palace of the North Irish kings on a hill near Lough Swilly. Near Derry is the coronation-stone of the ancient Irish kings. Tory Isle, towards the entrance to Lough Swilly, contains the remains of seven churches, two stone crosses, and a round tower.

Doneraile, a market-town of County Cork, on the Awbeg, 5 miles SE. of Buttevant. Pop. 790.

Dongarpur (*Dúngarpur*), a town of Rajputana, Central India, 340 miles N. of Bombay. It is the capital of a protected state, with an area of 1440 sq. m., and a pop. of 180,000.

Don'gola, NEW, or ORDÉ, a town of Nubia, on the Nile's left bank, above the third cataract, and 750 miles S. of Cairo, with a citadel, and a pop.

of 10,000. In the operations against the Mahdí, in 1884–85, the town was employed by the British as a base; in March 1886 the British forces were withdrawn, and Dongola, with all Nubia, fell into the possession of the Sudanese.—Old Dongola is a ruined town on the Nile's right bank, 75 miles SSE. of New Dongola. The capital of the kingdom of Dongola, it was destroyed by the Mamelukes in 1820.

Donnybrook, a former village and parish, now mostly embraced in the borough of Dublin, till 1855 celebrated for a fair notorious for fighting, which was chartered by King John.

Doon, an Ayrshire river, made classic by Burns, issues from Loch Enoch, and runs north-west, through Loch Doon, a gloomy sheet of water, 6 miles long by ¾ mile wide, past Dalmellington, Burns's Monument, and Alloway Kirk, and falls into the Firth of Clyde 2 miles S. of Ayr. Its whole length is 30 miles.

Dor, or Mont Dore (erroneously Mont d'Or), a chain of the Auvergne Mountains in the French dep. of Puy-de-Dôme. Puy-de-Sancy is the highest peak of Central France (6190 feet).

Dorak-el-Atek, a town of Persia, on the Jerrahi, 55 miles E. of Basra. Pop. 8000.

Dor'chester, a municipal borough, the county town of Dorsetshire, on the Frome, 8 miles N. of Weymouth, and 110 by rail (by road 119) WSW. of London. Till 1867 it returned two members to parliament, till 1885 one. It carries on a trade in ale and beer, cattle, cereals, and butter; and has a free grammar-school (founded 1579), a county museum, a guildhall (1848), a corn exchange (1867), and a bronze statue (1889) of the Dorset poet, the Rev. W. Barnes. Pop. (1841) 3249; (1901) 9458. Dorchester was the Roman *Durnovaria* or *Durinum*, a walled town with a fosse, and a chief Roman British station. Part of the wall, 6 feet thick, still remains. Near Dorchester are the remains of the most perfect Roman amphitheatre in England, 218 by 163 feet, and 30 feet deep, the seats cut in the chalk for 13,000 spectators; as also a Roman camp, and a large British station with three earthen ramparts, 1½ mile in circuit, and pierced by intricate passages, and enclosing barrows. The inner rampart is 60 feet high. It is supposed that this great camp, one of the largest in the kingdom, was the *Dunium* of Ptolemy and the origin of Dorchester. In 1645 Cromwell made the town his headquarters, and in 1685 Judge Jeffreys held his 'bloody assize' here, and sentenced 292 rebels to death.

Dorchester, an Oxfordshire village, 9 miles SE. of Oxford, was the seat of the Mercian bishops from the 7th century till 1073, when the see was transferred to Lincoln. Its Augustinian abbey church (mainly 13th century) is lavishly ornamented. Pop. of parish, 852. See J. H. Parker's *History of Dorchester* (1882).

Dorchester, formerly a separate town of Massachusetts, 4 miles S. of Boston, was in 1869 annexed to that city.

Dordogne (*Dor-doñ'*), a dep. in the SW. of France, formed of the ancient Guiennese district of Périgord, with small portions of Agenais, Limousin, and Angoumois. Area, 3530 sq. m.; pop. (1861) 501,687; (1901) 448,545. It derives its name from the river Dordogne, which, after a course of 305 miles (185 navigable), unites with the Garonne to form the large estuary of the Gironde. Dordogne has five arrondissements—Bergerac, Nontron, Périgueux (the capital), Ribérac, and Sarlat.

Dordrecht. See Dort.

Dorking, a pleasant old-fashioned market-town of Surrey, stands in a picturesque valley near the base of Box Hill (590 feet), 24 miles SSW. of London. Its new church, with a spire 210 feet high, is a memorial to Bishop Wilberforce, who met his death riding over the Downs near Dorking (1873). Deepdene, the lovely seat of 'Anastasius' Hope, where Beaconsfield wrote *Coningsby*, is close by. Since 1904 there is a bishop-suffragan. Pop. 7800.

Dornbirn, an Austrian town in the Vorarlberg, 7 miles S. of Bregenz. Pop. 13,100.

Dornoch (*Dor'nohh*), county town of Sutherland, 40 miles NNE. of Inverness, stands near the entrance to Dornoch Firth, which, running 22 miles inland, separates Sutherland from Ross-shire. It has splendid golf-links, handsome county buildings, and the former cathedral of the see of Caithness (1245), which, burned in 1570, was rebuilt for the parish church in 1837. The last witch burned in Scotland suffered at Dornoch in 1722. It was made a royal burgh in 1628, and with Wick, &c. returns one member. Pop. 614.

Dorogoi (*Dorohoi*), a town of Roumania, in the extreme north of Moldavia, on the Shishja, 70 miles NW. of Jassy. Pop. 14,000.

Dorp, a manufacturing place in Rhenish Prussia, on the Wupper, now forming part of the town of Solingen.

Dor'pat (or Derpt, Russian *Jurjev*), a town in the Russian province of Livonia, on the Embach, here crossed by a fine granite bridge, 165 miles (247 by rail) SW. of St Petersburg. The Domberg Hill was formerly occupied by the citadel, cathedral, and bishop's palace, on whose site now rise an observatory, the university library, schools of anatomy, &c., with tasteful gardens; and close by are the other university buildings and the town-house. The university, founded in 1632 by Gustavus Adolphus, was re-established by Alexander I. in 1802, and since 1887 has been thoroughly Russianised. It has five faculties, above 70 teachers, and about 2000 students. There is a notable botanical garden. Dorpat was a Hanse town in the 14th and 15th centuries, and until 1704 was alternately captured by Swedes, Poles, and (finally) Russians. It possesses large printing establishments, breweries, and manufactories of cigars, tiles, and pianofortes. Pop. 42,500—80 per cent. German.

Dor'setshire, or Dorset, a county on the English Channel, between Hampshire and Devonshire. Its greatest length is 58 miles; its greatest breadth, 40; and its area, 998 sq. m., or 627,265 acres, of which a third is arable, a ninth waste, and the rest pasture. The coast-line is 75 miles long, with fine cliffs and headlands. St Alban's Head (354 feet high) and Golden Cap (619 feet high) are among the highest coast points between Dover and Land's End. About midway in the coast-line is the so-called Isle of Portland, connected with the mainland by the remarkable Chesil Bank (q.v.). Chalk downs run along the south coast, and through the middle of the county nearly from east to west. The highest point is Pillesden Pen (934 feet). The chief rivers are the Stour and the Frome. The chief mineral productions are the celebrated Purbeck and Portland building-stones, and white china and pipe clays. At Swanage is found the celebrated Purbeck marble, seen in many English cathedrals. The climate is mild. The chalk hills or downs are covered with short fine pasture, on which numbers

of Southdown sheep are fed. The soil is chiefly sand, gravel, clay, and chalk. Pop. (1841) 175,054; (1871) 195,537; (1881) 190,979; (1901) 202,962. The county has sent four members to parliament since 1885, when Dorchester, Bridport, Poole, Weymouth and Melcombe Regis, Shaftesbury, and Wareham, formerly sending up ten members, ceased to be separate constituencies. Dorsetshire has ancient British and Roman remains, as stone circles, cromlechs, barrows, camps, an amphitheatre, three Roman stations, and a chambered long barrow, known as Gray Mare and Colts, near Gorwell. There are some remains of 40 abbacies, priories, hospitals, &c. The ruins of Corfe Castle (q.v.) are among the grandest in England. The scenery of Dorsetshire has been rendered familiar to many outside the county by the works of Barnes and Hardy. See works by Hutchins (2 vols. 1774; 3d ed. 4 vols. 1861–73), Worth (2d ed. 1889), Mayo (1885), and Moule (1894).

Dort, or DORDRECHT, a Dutch town on an island formed by the Maas, 10 miles SE. of Rotterdam by rail. An inundation in 1421, which destroyed over 70 villages and drowned 100,000 people, separated its site from the mainland. Founded in 1013, it is one of the oldest, as it once was the richest of the trading towns of Holland. Among its chief buildings are a Gothic cathedral (1363) and a fine town-hall (1339). The largest East-Indiamen, and gigantic wood-rafts which come down the Rhine from the Black Forest and Switzerland, are accommodated in its roomy harbour. Close by are shipyards, corn and saw mills, and manufactories of oil, sugar, ironwares, and machinery. Pop. (1874) 25,577; (1901) 38,800. Here in 1572, the revolted States of Holland held their first assembly; and here in 1618–19 sat the Protestant Synod of Dort, which condemned the doctrines of Arminius. The brothers De Witt, Cuyp, and Ary Scheffer were natives; of the last there is a statue (1862).

Dortmund (*Dort'moont*), chief town of Westphalia, in the fertile Hellweg plain, near the Emscher, 74 miles NNE. of Cologne by rail. It is the mining headquarters of Westphalia, and an important railway centre; and it has iron and steel works, and manufactures of mining material, nail-making and other machines, safes, thread, bricks, timber, and flour, besides over 30 breweries, most of the beer being exported. Figuring from the 8th century as *Therotmanni*, or *Dorpmunde*, it became a free Hanse town, but was ceded to Prussia in 1815 at the congress of Vienna. An aged linden marks the site of the famous free court of the Vehmgericht; but since the walls were removed in 1863, the general aspect of the town has become quite modern. Pop. (1846) 8732; (1900) 142,418.

Douarnenez (*Doo-ar-nĕ-nay'*), a French port of Finistère, on the Bay of Douarnenez, 8 miles NW. of Quimper by rail. It is important for the sardine-fishery, and has a pop. of 12,250.

Douay (Fr. *Doo-ay'*, by English Catholics *Dow'-ay;* the Roman *Duacum*), a town in the French dep. of Nord, on the river Scarpe, 20 m. S. of Lille by rail. A great military town, it is strongly fortified, contains an important arsenal, a cannon-foundry, and a school of artillery. The principal buildings are the hôtel-de-ville, the public library, containing 100,000 volumes and 3000 MSS., the museum, hospital, and artillery barracks. The manufactures include lace, cotton, oil, soap, and iron machinery. Pop. (1872) 21,703; (1901) 29,172. During the middle ages Douay was a constant bone of contention between the Flemish counts and the French rulers. It became the seat of a university (1562), of a great English Catholic college (1568), and of a Scotch Catholic college (1594), which came to an end at the French Revolution, Douay having passed with the rest of Flanders under the dominion of Spain, but been taken by Louis XIV. in 1667.

Doubs (*Doob*), a dep. of France, on the E. frontier, adjoining Switzerland and Alsace. Area, 2010 sq. m.; population, 296,000. It is traversed by the river Doubs (total length, 270 miles), a tributary of the Saône. Doubs is divided into the four arrondissements of Besançon (the capital), Baume-les-Dames, Montbéliard, and Pontarlier.

Douglas, the capital of the Isle of Man, a seaport and favourite watering-place, is so called from its being situated near the junction of two streams—the *Dhoo* (black) and *Glass* (gray). It lies on a picturesque bay, on the east side of the island, 75 miles NW. of Liverpool, 46 W. of Barrow, and 94 NE. of Dublin. The old town, on the south-western edge of the bay, presents with its narrow tortuous streets a vivid contrast to the handsome modern terraces and villas which occupy the rising ground beyond, and the ground facing the north of the bay. It possesses an excellent landing pier; another pier and breakwater, constructed of concrete cement blocks, was opened in 1879; the new street and charming promenade following the line of the bay is one of its most agreeable features. Conspicuous in the centre of the crescent of the bay stands Castle Mona, built by the fourth Duke of Athole, but now converted into a first-class hotel and winter gardens. The Tower of Refuge, a picturesque object, occupies a dangerous rock in the southern area of the bay, called Conister, and was erected in 1833 for the safety of shipwrecked mariners. The foundation-stone of an Eiffel tower was laid in 1890, and the Douglas Head Marine Drive opened in 1891. Pop. (1851) 9880; (1901) 19,125.

Douglas, a decayed town of Lanarkshire, on Douglas Water, 11 miles SSW. of Lanark. Of the old kirk of St Bride, the burial-place of the Douglases till 1761, only the choir and a spire remain. Modern Douglas Castle (Earl of Home), ¾ mile NNE., is a poor successor to Scott's 'Castle Dangerous,' now represented by little more than a tower. Pop. 1218.

Douglas, a small town of County Cork, Ireland, 4 miles SE. of Cork. Pop. 764.

Doune (*Doon*), a village of Perthshire, on the Teith, 9 miles NW. of Stirling by rail. Pop. 930. Doune Castle, built by Murdoch, Duke of Albany, in the early part of the 15th century, is now a magnificent ruin. It is described in Scott's *Waverley*, and was reduced to ruins by Hawley's dragoons in 1746. A mile to the west is Deanston (pop. 723), with its cotton-mills, long managed by the philanthropist, James Smith (1789–1850), the promoter of 'deep draining and thorough ploughing.'

Douro (*Dooro;* Span. form *Duero*), a large river of Spain and Portugal, rises in the Pico de Urbion (7369 feet), in Old Castile, 30 miles NW. of Soria. Thence it winds 490 miles SE., W., SW., and W. to the Atlantic below Oporto. It is navigable to Torre de Moncorvo, 90 miles.

Dove, a river rising 4 miles SW. of Buxton, and flowing 45 miles S. and SE. along the borders of Derby and Stafford shires to the Trent, at Newton Solney. It was the favourite fishing stream of Izaak Walton, who lived here with Charles Cotton; and it is still beloved of anglers.—DOVEDALE is a romantic glen, forming the course of

this 'princess of rivers' for 3 miles, between Thorpe Mill and Mill Dale, below Alstonfield.

Dover, a Cinque Port and parliamentary and municipal borough of Kent, 77½ miles by rail ESE. of London. It is not only a charmingly situated watering-place, but, being the nearest point of the English coast to France, is a seaport of growing importance. Great harbour extensions, costing over £5,000,000, were in progress in 1898–1908. The National Harbour will cover 685 acres, the Commercial Harbour 75. Dover, see of a bishop-suffragan since 1898, is the seat of the packet service for Calais and Ostend. The fortifications comprise Dover Castle, on the chalk-cliffs, 375 feet above the level of the sea; Fort Burgoyne on the north side of the town, Archcliffe Fort to the west, and the batteries on the Western Heights, where large barracks are situated. There are also remains of a Roman pharos or lighthouse, and of a Romano-British church, which has been restored. Dover has a new town-hall (1883), a museum, a hospital, a new promenade pier (1893), 900 ft. long, &c. It is chiefly dependent on its shipping trade and its attraction as a watering-place, but shipbuilding and sail and rope making are carried on, and there are also flour and paper mills. Since 1885 it returns but one member. Pop. (1841) 17,795; (1901) 41,782. The name (Roman *Portus Duris*; Norman *Dovere*) is from the Celtic 'Dour,' the name of the small river which runs through the town. Fortified by William the Conqueror, during whose reign it was nearly burned down, noted as the place of King John's submission to the pope, besieged by the French, held during the Civil War by the parliamentarians, threatened by the first Napoleon, and celebrated as the headquarters of the Lord Wardens of the Cinque Ports, Dover holds a distinguished place in English history. Three submarine cables connect it with the Continent, and here is the entrance to the proposed Channel Tunnel.

Dover, (1) the capital of Delaware, U.S., on Jones's Creek, 48 miles S. of Wilmington by rail. Pop. 3811.—(2) The oldest town of New Hampshire, founded in 1623, on the Cocheco River, 68 miles N. by E. of Boston by rail, with large cotton-mills and print-works, and manufactures of boots and shoes, woollens, and iron. Pop. 13,790.

Dover, Strait of (Fr. *Pas de Calais*), the channel between England and France, connecting the English Channel and the North Sea, whose tides meet here. It is 18 to 25 miles broad, and 6 to 29 fathoms deep. See Channel (English).

Dovercourt, a watering-place forming a southern extension of Harwich (q.v.). Pop. 2720.

Doveron. See Deveron.

Dovrefjeld (*Dov'reh-fyeld*), part of the mountainous plateau of Norway, connecting the Kiölen Mountains with the Jotun Fjelde. The average elevation ranges from 2650 to 3600 feet; the highest point is Snehætten (7566).

Dowlais. See Merthyr-Tydvil.

Dowlatabad. See Daulatabad.

Down, a maritime county of Ireland, in the south-east of the province of Ulster, 50 miles long (NE. to SW.) and 35 broad. Area, 612,399 acres; pop. (1841) 368,143; (1881) 272,107; (1901) 205,889 (80,024 Presbyterians, 64,467 Catholics, and 47,130 Episcopalians). The coast-line of 67 miles, or 139 counting inlets and islets, is indented by Belfast Lough, Strangford Lough, Dundrum and Carlingford Bays. The Mourne Mountains cover 90 sq. m. in the south, and rise in Slieve Donard to 2796 feet. The other parts are mostly undulating and hilly, with plains and fine meadows along the rivers. The chief rivers are the Upper Bann and the Lagan. The Newry Canal admits vessels of 50 tons, and with the Ulster Canal opens communication through almost all Ulster. Nearly one-half of the entire area is under crop, mostly oats, potatoes, turnips, wheat, flax, and barley. The chief manufacture is linen, especially the finer fabrics. Down contains 70 parishes, and since 1885 sends four members to parliament, besides one for Newry borough. Other towns are Downpatrick, Newtownards, Banbridge, Lisburn, Holywood, and Donaghadee. On the top of Slieve Croob (1755 feet) are twenty-three stone cairns.

Down, a village of Kent, 16 miles SSE. of London, residence from 1842 of Charles Darwin.

Downham Market, a town of Norfolk, on the Ouse, in a flat fen country, 11 miles S. by W. of Lynn. Pop. 2637.

Downpatrick, or simply Down, the capital of County Down, near the influx of the Quoyle into the south-west end of Lough Strangford, 27 miles SE. of Belfast. It takes name from St Patrick, and is the seat of the diocese of Down, united with Dromore in 1842. It returned a member till 1885. Pop. (1861) 4317; (1901) 2993.

Downs (Fr. *dunes*, from Celtic *dun*, 'a hill'), a term applied, like *denes* in Norfolk, to hillocks of sand thrown up by the sea or the wind along the sea-coast. It is also a general name for any undulating tract of upland too light for cultivation, and covered with short grass. It is specially applied to two broad ridges of undulating hills south of the Thames, beginning in the middle of Hampshire, and running eastward, the North Downs through the middle of Surrey and Kent to Dover (about 120 miles), and the South Downs through the south-east of Hampshire and near the Sussex coast to Beachy Head (about 80 miles). Between them lies the valley of the Weald. The highest point of the North Downs is Inkpen Beacon (1011 feet); and of the South Downs, Butser Hill (888). These uplands are covered with fine short pasture, which, from its aromatic quality, forms excellent feeding-ground for the famous Southdown sheep.

Downs, The, a roadstead off the east coast of Kent, opposite Ramsgate and Deal, between North and South Foreland, and protected externally by the Goodwin Sands (q.v.). This large natural harbour of refuge is 8 miles by 6, with an anchorage of 4 to 12 fathoms. It is unsafe only in south winds. The obstinate but indecisive sea-fight of the Downs was fought with the Dutch in June 1666.

Downton, a Wiltshire town, on the Avon, here split into three branches, 6 miles SSE. of Salisbury. It has an Early English market-cross, a cruciform church, an agricultural college (1880), and a singular earthwork (the Moot); whilst 2 miles north is Trafalgar House, presented in 1814 by the nation to Lord Nelson's brother and successor. Pop. of parish, 3430.

Drachenfels ('Dragon's Rock'), a peak (1056 feet) of the Siebengebirge, on the Rhine's right bank, 8 miles SE. of Bonn. It commands a glorious prospect, and may be gained by a mountain railway (1883).

Draguignan (*Dra-geen-yon*^{g}), capital of the dep. of Var, and at the base of the wooded Malmont (2151 feet), 51 m. by rail NE. of Toulon. Pop. 8904.

Drakenberge (*Dràh'ken-ber-geh*, *g* hard; in Dutch, the 'Dragon Mountains'), the range

in the east of South Africa, between Cape Colony and the Vaal River. From 29° S. lat. the three chains which form the southern portion unite and extend north-eastward in one mass, its highest points the Mont aux Sources and Catkin Peak (10,360 feet). The range is crossed by Van Reenen (5415) and De Beers (5635) passes.

Drammen, a seaport of Norway, 33 miles SW. of Christiania by rail, on the Dramselv, which here discharges its waters through the Dramsfiord into the Gulf of Christiania, and which is crossed here by three bridges, one of them 345 yards long. There are sawmills and chicory factories. Pop. 24,100.

Drave (Ger. *Drau*), a river of Austria, rising in the Tyrol, at an altitude of 5477 feet, and flowing 447 miles ESE., through or along the borders of Styria, Croatia, Slavonia, and Hungary, till, 10 miles below Essek, it falls into the Danube. At first a mountain-torrent, from Villach downwards (379 miles) it is navigable.

Drayton, West, a Middlesex parish, with a racecourse, 3 miles S. of Uxbridge. Pop. 1118.

Drayton-in-Hales. See Market-Drayton.

Dren'the, a frontier province of the Netherlands, bordering on Hanover; area, 1030 sq. m.; pop. 158,000.

Dresden, the capital of Saxony, is situated in a charming valley on the Elbe, 116 miles SE. of Berlin, and 62 ESE. of Leipzig. The Altstadt and Friedrichstadt on the left bank of the Elbe, and the Neustadt and Antonstadt on the right or northern bank, are united by the Augustus Bridge (1727–29), and the Albert Bridge (1875–77), and by the Marienbrücke, which is at once a railway and a carriage bridge. The Brühl Terrace (1738), on the Elbe's south bank, is a charming promenade. The museum (1847–54) contains collections of engravings (400,000 examples) and drawings, besides the famous picture-gallery. The last, which owes its origin chiefly to Augustus III. of Saxony, who purchased the Modena gallery in 1745, contains about 2400 paintings, mainly by Italian and Flemish masters. The gem of the collection is Raphael's 'Sistine Madonna;' other masterpieces being Titian's 'Tribute Money,' and Correggio's 'Magdalene' and 'La Notte.' Adjoining the museum is the Zwinger, a remarkable rococo building of 1711–22, designed as the vestibule of an elaborate palace, and containing valuable collections of casts, zoology, mineralogy, &c. The Johanneum, erected as royal stables at the end of the 16th century, now accommodates the historical museum, founded in 1833, the gallery of arms, and the priceless collection of porcelain. The Augusteum, or collection of antiquities, chiefly Roman objects of the Imperial times, and the Royal Public Library, are deposited in the Japanese Palace, built in 1715 in the Neustadt. The library contains nearly 350,000 volumes, 20,000 maps, and 4000 MSS. The 'Green Vault' in the royal palace contains a valuable collection of precious stones, pearls, and curios, and articles in gold, silver, ivory, &c. The list of art treasures in Dresden may be closed with the collection of antiques (chiefly ecclesiastical), and the gallery of casts of the works of the sculptor Rietschel, both in the 'Lustschloss' (1680), in the Grossen Garten, a handsome public park, 350 acres in extent. Other buildings not yet mentioned are the royal palace, a large and rambling edifice, begun in 1534; the prince's palace (1718); the Brühl Palace (1737); the town-house (1741–45); and the magnificent new theatre (1871–78). Of the churches, the finest are the Frauenkirche (1726–34), with a lofty dome and lantern 320 feet high; the Roman Catholic church (1737–56), in an elaborate baroque style, adorned on the exterior with sixty-four statues; the Sophienkirche (1351–57), restored and provided with towers in 1865–69; and the Kreuzkirche (1764–85). The Synagogue (1838–40) is also noteworthy. The most important industries are the manufactures of gold and silver articles, artificial flowers, machinery, chemicals, paper-hangings, artists' canvas and colours, chocolate, &c.; and straw-plaiting, brewing, and market-gardening. The so-called 'Dresden china' is manufactured not at Dresden but at Meissen. Pop. (1871) 177,087; (1900) 395,349.

Dresden is of early Slavonic origin. Henry the Illustrious made it his capital in 1270, and after the division of the Saxon lands in 1485 it became the seat of the Albertine line, and its prosperity gradually increased. It suffered severely during the Seven Years' War; and again in 1813, when the Allies were repulsed by Napoleon, but, after he had left, forced the city to capitulate. During the revolution of 1849, also, very great damage was inflicted upon the town, which was occupied by the Prussians in 1866 during their war with Austria.

Dreux (nearly *Dreh*; anc. *Durocassis*), a town in the dep. of Eure-et-Loir, on the Blaise, 27 miles NNW. of Chartres by rail. It lies at the foot of a hill crowned with the ruins of the castle of the Counts of Dreux; from among them rises a beautiful chapel, erected by the mother of Louis-Philippe in 1816, to which were removed in 1876 the remains of him and other members of the House of Orleans who had died in exile. Pop. 8920. In 1562 the Constable Montmorency defeated the Huguenots here, and took the Prince of Condé prisoner.

Driffield, Great, the chief town in the Wolds, East Riding of Yorkshire, 11 miles N. of Beverley by rail, is connected with Hull, 19 miles S., by a canal. It manufactures flour, linseed-cake, and artificial manures. Pop. 5703.

Drighlington, a township in the West Riding of Yorkshire, 5 miles SE. of Bradford, with worsted-spinning and coal-mining. Pop. 4322.

Drogheda (*Drōh'he-da*), a seaport of Louth, built mostly on the Boyne's north bank, 4 miles from its mouth, 32 N. of Dublin by rail. The Boyne is crossed here by a railway viaduct 95 feet high. There are linen and cotton manufactures, ironworks, tanneries, breweries, and salt-works, and a considerable export trade, chiefly with Liverpool (140 miles distant). Vessels of 500 tons reach the quay, and barges of 50 tons ply 19 miles up the Boyne to Navan. Pop. (1851) 16,845; (1901) 12,765, almost all Catholics. Till 1885 Drogheda returned one member. From the 14th to the 17th centuries, Drogheda (or *Tredah*) was the chief military station in Leinster. In 1649 Cromwell stormed the town and massacred the garrison; in 1690 Drogheda surrendered to William III. See D'Alton's *History of Drogheda* (2 vols. 1844).

Drohobycz (*Dro'ho-bitch*), a town of Austria, in Galicia, 50 miles SW. of Lemberg, with salt-works, paraffin-factories, and dyeworks. Pop. 19,714.

Droitwich (*Droit'itch*), a municipal borough in Worcestershire, on the Salwarpe, 6 miles NNE. of Worcester. Originally British, and probably the Roman *Salinæ*, it was called Wych from the salt-springs, to which Droit was afterwards prefixed, expressing a legal right to them. Its brine-springs yield over 100,000 tons of salt a year; and the saline baths are visited annually by

thousands. Droitwich returned one member till 1885. Pop. 4201. See Bainbrigg's *Droitwich Salt Springs* (1873).

Drôme, a dep. of France, on the east bank of the Rhone. Area, 2508 sq. m.; pop. (1866) 324,231; (1901) 294,704. It is divided into the four arrondissements of Valence (the capital), Montélimar, Die, and Nyons.

Dromore, a town, with linen manufactures, in County Down, on the Lagan, 17 miles SW. of Belfast. It is still the seat of a Catholic diocese, but its Episcopal one was in 1842 united with Down. Jeremy Taylor was Bishop of Dromore, and lies buried here in his cathedral. Pop. 2309.

Dronfield, a town of Derbyshire, 6 miles NNW. of Chesterfield. It has large edge-tool factories and neighbouring collieries. Pop. 3838.

Drontheim. See TRONDHJEM.

Droylsden, Lancashire, a suburb of Manchester, 3½ miles E. of it, with railway station. Pop. 11,000.

Drumclog, a moorland tract in west Lanarkshire, 6 miles SE. of Strathaven. Here, 2½ miles E. of Loudon Hill, Claverhouse was defeated on the 1st June 1679 by 200 Covenanters.

Drumlan'rig Castle, a seat (1689) of the Duke of Buccleuch (till 1810 Queensberry), in Upper Nithsdale, 17 miles NW. of Dumfries. See a work by Ramage (1876).

Drummond Castle. See CRIEFF.

Drummond Island, the most westerly of the Manitoulin chain, in Lake Huron, belongs to Chippewa county, Michigan. It measures 20 miles by 10.

Drumore, a Wigtownshire seaport, 17½ miles S. by E. of Stranraer. Pop. 459.

Dryburgh, a beautiful ruined Premonstratensian abbey, in Berwickshire, 5 miles ESE. of Melrose, on the Tweed, here crossed by a suspension bridge. It contains the dust of Sir Walter Scott and his son-in-law Lockhart. Founded in 1150 by David I., it was more or less destroyed by the English in 1322, 1385, 1544, and 1545. See Spottiswoode's *Liber de Dryburgh* (Bannatyne Club, 1847).

Dryfe Water, a Dumfriesshire stream flowing 18½ miles to the Annan, near Lockerbie.

Dryhope, a ruined peel-tower in Selkirkshire, ¾ mile N. of St Mary's Loch. It was the birthplace of the 'Flower of Yarrow.'

Dubitza, a fortified town of Bosnia, on the Unna, 10 miles from its confluence with the Save. Pop. 3000.

Dublin, a maritime county in the province of Leinster. Area, 354 sq. m., six-sevenths being in cultivation, and one-fortieth in wood. The coast, much indented with creeks and bays, is 70 miles long, and off it lie several islands. Dublin Bay, one of the finest in the kingdom, is 6 miles broad, with a sweep of 16 miles, and has precipitous hills, 500 feet high, both at the north and south ends. The surface inland is mostly a rich level plain, with slight undulations, but rising in the south in a hill-range, its highest point Kippure, 2473 feet. North of this range the only prominent eminence is the Hill of Howth, 563 feet. The chief river is the Liffey, running through Dublin city into Dublin Bay. There are copper and lead mines near the Scalp; granite and limestone are much quarried. There are many mineral springs, the most important at Lucan. In the north and west are grazing and meadow farms, and around Dublin city, villas, dairy-farms, and nursery-gardens. Dublin is the best cultivated county in Ireland. Along the coast there are important fisheries. The towns are Dublin and Kingstown. Pop. (1841) 372,775; (1901) 448,206 —78 per cent. are Catholics. Dublin sends eight members to parliament—two for the county, four for the city, and two for the university.

Dublin (Irish *Dubh-linn*, 'black pool;' the *Eblana* of Ptolemy), the capital of Ireland, stands on the river Liffey, where it falls into Dublin Bay, in 53° 20′ 38″ N. lat., and 6° 17′ 30″ W. long. It is 64 miles W. of Holyhead, 138 W. of Liverpool, 223 SSW. of Glasgow, and 245 NW. of Bristol. Some of Dublin is built on land reclaimed from the sea, and the ground is generally flat. The river, running from west to east, divides the city into two almost equal portions. The fashionable quarter is to the south-east of the city; the principal shops are in the centre of the town; and there are many good private houses in the suburbs. The city is surrounded by a 'Circular Road' of nearly 9 miles in length. The most important street is Sackville Street, which is 700 yards long and 40 broad; at its north end stands the Rotunda, with Rutland Square; in its centre the beautiful Ionic portico of the General Post-office, and Nelson's Monument (134 feet high); while on the south it is terminated by O'Connell Bridge, and a wedge-like block of houses formed by the converging sides of Westmoreland and D'Olier Streets. A peculiar feature of Dublin is its squares, which are very numerous, spacious, and well kept. St Stephen's Green, the largest, laid out with great taste as a People's Park by the Guinness family, occupies an area of nearly 20 acres, and is about a mile in circuit. Somewhat smaller, but more fashionable, are Merrion Square (13 acres), and Fitzwilliam Square. The large park and quadrangles of Trinity College occupy more than 40 acres. Leinster House, once the town mansion of the Dukes of Leinster, now the home of the Royal Dublin Society, has been added to by the erection of a National Art Gallery and a Museum of Natural History. New buildings for a Science and Art Museum and a National Library were opened in 1890, having cost over £100,000. Among the other public edifices may be mentioned the Bank of Ireland (formerly the Houses of Parliament), Trinity College, the Custom-house, and the Four Courts, which, from the boldness of their design, and the massiveness of their proportions, have a very imposing effect. The Castle (the Lord Lieutenant's official residence) has no pretensions to architectural beauty. The Chapel is interesting, and contains some fine carved work of Grinling Gibbons. Dublin is remarkable in possessing two Protestant cathedrals. St Patrick's, founded in 1190, was restored in 1865 by the munificence of Sir Benjamin Lee Guinness; and Christ Church, dating from 1038, but not raised to cathedral rank till 1541, is a smaller but more beautiful edifice, also restored in 1878 by Mr Henry Roe. There are monuments of William III. in College Green (once a *green*, but now a paved street); of Nelson, the Duke of Wellington, Goldsmith, Burke, Grattan, O'Connell, &c.

Within the limits of the Circular Road, the Liffey is crossed by twelve bridges (four of iron), and throughout the whole extent of the city the banks of the river are faced with granite walls and parapets. On each side of these 'quays,' 2½ miles long, there is a roadway, with houses and shops. The quay proper extends eastward from the Butt Bridge. Near the Custom-house, a

strikingly handsome classic building of native granite, are large docks in communication with the Royal and Grand Canals; the former connecting Dublin with the North Shannon and the west of Ireland, the latter with the southerly portion of the same river and the sea. A large basin, the 'Spencer Dock,' was opened in 1873; and the harbour has been much improved by the completion of two large breakwaters, the North and South 'Walls.' There is a bar at the mouth of the harbour, but even there the least depth at low tide is about 11 feet. The chief manufacture is porter, of which nearly half a million hogsheads are annually exported, 'Guinness' being, of course, the most important. Next in order is whisky, and then poplin. The municipal affairs are under the control of a town council, which consists of a lord mayor, fifteen aldermen, and forty-five councillors. The city sends four members to parliament, the university two. Pop. (1688) 64,500; (1804) 167,899; (1841) 232,726; (1881) 249,602; (1901) 290,638.

The university of Dublin, with a single college (Trinity), was founded in 1591, and has a teaching-staff of more than 80, and over 1000 students. Among its former *alumni* have been Berkeley, Brady, Lord Cairns, Congreve, Curran, Farquhar, Goldsmith, Sir W. Hamilton, Lever, Magee, Moore, Swift, Tate, Toplady, and Ussher. There is also a Roman Catholic university (since 1854). The Royal University of Ireland, which superseded in 1880 the Queen's University, is not a teaching body, but resembles the university of London; it has its seat here. For the humbler classes much has been done by the National Board, by the Church Education Society, Roman Catholic brotherhoods and sisterhoods such as the Christian Brothers, and other agencies. There are two botanic gardens — one at Glasnevin, belonging to the Royal Dublin Society, and one at Ballsbridge, connected with the university. The environs of Dublin are especially beautiful. Rathmines, a southern suburb, has become a large township, and, together with Monkstown, Kingstown, and Killiney, is the favourite residence of the wealthier part of the mercantile community. Glasnevin, on the north, has memories of Swift, Addison, Steele, Tickell, Thomas Parnell, and Thomas Sheridan; its cemetery, opened in 1832, is classic ground, and contains the ashes of Curran, O'Connell (under a round tower 150 feet high), and C. S. Parnell. The Phœnix Park is a magnificent area of nearly 2000 acres, finely timbered. Dublin, as a whole, with its fine bay—often compared to the Bay of Naples—its splendid park, massive public buildings, wide streets, spacious squares, regular quays, and beautiful environs, is one of the handsomest capitals in Europe.

The ancient history of Dublin is mainly legend, but we know that in the 9th century the Danes took the place, and it was in their hands for the most part until the English Conquest. Henry II. held his court there in 1171; the English residents were almost extirpated in the rising of 'Black Monday' in 1207. In 1689 James II. held a parliament in Dublin, and the town was immediately afterwards occupied by William III.

See histories of the city, by J. Warburton (2 vols. 1818) and J. T. Gilbert (3 vols. 1854–59); of the university, by W. Taylor (1845), D. C. Heron (1847), Stubbs (1889), and Mahaffy (1903); also *The Book of Trinity College* (1892).

Dubovka, a town in the Russian province of Saratov, on the Volga. Pop. 13,300.

Dubuque (*Doo-būke'*), a city of Iowa, on right bank of the Mississippi, built partly on bluffs rising 200 feet above the river, which is here crossed by an iron railway bridge, 198 miles WNW. of Chicago. It has an Episcopal and a Roman Catholic cathedral, a city-hall, a custom-house of marble, and a German Presbyterian seminary. It is a seat of manufactures, and has a large river and railway trade. Julien Dubuque, a French trader, engaged in lead-mining here as early as 1788; but the first permanent settlement was made in 1833. Pop. (1870) 18,434; (1900) 36,297.

Ducato, Cape (*Doo-kâh'to*), an abrupt headland at the south-west extremity of Leukas or Santa Maura, one of the Ionian Islands.

Duddingston, a Midlothian village, 2½ miles SE. of Edinburgh. Pop. 330. Duddingston Loch measures 580 by 267 yards.

Duddon, a river of Cumberland and Lancashire, flowing 20 miles to the Irish Sea near Broughton-in-Furness. Wordsworth's sonnets have made it famous.

Dudley, a parliamentary, municipal, and county borough in a detached part of Worcestershire and the south of Staffordshire, 26 miles NNE. of Worcester, and 8½ WNW. of Birmingham. Situated in the heart of the 'Black Country,' it is a thriving town with coal-mining, busy brass and iron foundries, glass and brick works, besides tanning and brewing. One of the largest single iron industries is nail-making. A chief ornament of the place is the Renaissance drinking-fountain, erected in 1867 by the late Earl of Dudley, a statue of whom was erected in 1888. On a hill to the north-east are the beautiful ruins of an old castle, said to have been founded in the 8th century by Dodo, a Saxon prince, and the keep of which dates from the 13th century. It was burned in 1750. Near it are remains of a Cluniac priory (1161). The vicinity yields abundant limestone, which is wrought out of caverns, and brought to the kilns through a tunnel 1¾ mile long, carried through the basalt of the Castle Hill. Pop. of parliamentary borough (1851) 87,962; (1901) 96,988, of whom 48,733 were in the municipal. Dudley has returned one member since 1832, the parliamentary boundary being extended in 1867; the municipal borough dates from 1865. See a work by Twamley (1867).

Duff House. See BANFF.

Duffield, a town of Derbyshire, on the Derwent, 4 miles N. of Derby. Pop. of parish, 1960.

Dufftown, a police-burgh of Banffshire, 65 miles NW. of Aberdeen. Pop. 1869.

Duisburg (*Doo'is-boorg*), a town of Rhenish Prussia, 16 m. N. of Düsseldorf by rail, in a fertile district between the Ruhr and Rhine, with both of which it is connected by a canal. Its manufactures include tobacco, soda, sulphuric acid, soap, candles, starch, and sugar; and in and near it are great ironworks and coal-mines. Pop. (1816) 4508; (1900) 92,730 (nearly half Protestants).

Dukeries. See WORKSOP.

Dukinfield, a Cheshire sub-district, mostly within Stalybridge parliamentary borough.

Dulcigno (*Dool-cheen'yo*; Serb *Ultschin*), a port of Montenegro, 20 miles SW. of Scutari, and till 1880 a Turkish town. Pop. 5000.

Duluth (*Doo-looth'*), a city of Minnesota, the capital of St Louis county, at the west end of Lake Superior, 156 miles NNE. of St Paul. It has one of the finest harbours in the United States, protected by a natural breakwater known

as Minnesota Point, which is 7 miles long and about 750 feet broad; and great improvements have been effected in the matters of dredging, the construction of piers, and the extension of deep-water navigation to the falls of the St Louis River, 15 miles from the lake. The ship-canal (depth about 23 feet) through Minnesota Point forms the chief entrance way between Lake Superior and the harbour. Duluth contains a custom-house, United States land office, large steam sawmills, a steam-forge, stock-yards, &c. Advantageously situated at the head of navigation of the great chain of lakes, and with immense deposits of iron, granite, and freestone in the immediate vicinity, it has rapidly increased in population and in wealth. Grain, flour, iron ore, and lumber are the main exports. Pop. (1880) 3483; (1890) 33,115; (1900) 52,970.

Dulverton, a town of Somerset, on the Barle, 12 miles NNW. of Tiverton. Pop. 1265.

Dulwich (*Dul'litch*), a suburb of London, in the north-east of Surrey, 4½ miles S. of St Paul's Cathedral, and a little to the west of Sydenham. It consists chiefly of villa residences, and is noted for its college and picture-gallery. The college was founded in 1619 by Edward Alleyn, the actor, and comprises almshouses, upper and lower schools, a chapel, &c., the upper school transferred in 1870 to new buildings, erected at a cost of nearly £100,000. The picture-gallery was bequeathed by the painter Sir Peter Francis Bourgeois (1756–1811). Dulwich was in 1885 included in Camberwell parliamentary borough. Pop. 97,320. See works by Hovenden (1873), Blanch (1877), Galer (1891), and W. Young (1891).

Dumbarton, or DUNBARTON, the county town of Dumbartonshire, lies mainly on the left bank of the Leven, a little above its influx to the Clyde, and 15 miles WNW. of Glasgow. Its chief public building is the Burgh Hall and Academy, a French-Gothic pile of 1866, restored since the fire of 1883; and there are a pier on the Clyde (1875), and a public park of 32 acres (1885), gifted to the town at a cost of £20,000. Dumbarton ranks merely as a sub-port; but its shipbuilding, with the subsidiary industries, has attained important dimensions since the opening of the great shipyards of Messrs M'Millan (1834) and Messrs Denny (1844). Between the town and the Clyde rises the Rock of Dumbarton (280 feet), a double-peaked, basaltic eminence, which is crowned by the castle, a building of no great strength now or architectural merit, but one of the four Scottish fortresses that must be maintained in terms of the Treaty of Union. Dumbarton was made a free royal burgh in 1222, and unites with the other four Kilmarnock burghs to return one member to parliament. Pop. (1851) 5445; (1901) 19,985. The capital of the Britons of Strathclyde, Dumbarton was termed by them *Alclwith* ('height on the Clyde'), by the Gaels *Dunbreatan* ('fort of the Britons'); and the history of its Rock extends over more than a thousand years, from its capture by Picts and Northumbrians (756), by Vikings (870), to Wallace's captivity here (1305), the child Queen Mary's residence (1548), and its daring surprise by Crawford of Jordanhill (1571).

Dumbartonshire, a Scottish county, 25 miles long and 1¼ to 15½ miles broad, with an area of 270 sq. m., of which 30 belong to a detached south-eastern portion. Loch Lomond (22 by 5 miles) lies on the eastern boundary, and sends off the Leven 7 miles to the Clyde; the southern is washed by the Clyde's broadening estuary; and the western, for 17 miles by its offshoot, Loch Long, which forms with the Gare Loch (7 miles by 7 furlongs) the wooded Rosneath peninsula. The surface, almost everywhere hilly or mountainous, culminates in Ben Vorlich (3092 feet); and the scenery, with its sea-lochs, lake, woods, and glens, is lovely as that of few regions in Scotland. Coal is mined in the detached portion, which nowhere exceeds 480 feet above sea-level. The climate is mild and humid. Barely a fourth of the entire area is in tillage; but many sheep and cattle are reared. Colquhoun of Luss is much the largest proprietor. Rosneath Castle is a seat of the Duke of Argyll. Since 1728 bleach and print fields, dyeing and cotton works, have multiplied in the Vale of Leven; shipbuilding is an important industry. The chief towns are Dumbarton, Helensburgh, Kirkintilloch (in the detached portion), Alexandria, Renton, and Bonhill. Dumbartonshire returns one member. Anciently part of the Levenach or Lennox, it retains some vestiges of Antoninus' Wall, and has memories of St Patrick, Bruce, Rob Roy, Smollett, and Henry Bell. Pop. (1801) 20,710; (1881) 75,333; (1901) 113,865. See works by J. Irving (1860–79) and Sir W. Fraser (1860–74).

Dumdum (*Dam Damá*), a Bengal municipality, 4½ miles NE. of Calcutta. Here in 1857 was the first open manifestation by the sepoys against the greased cartridges. Pop. 18,000.

Dumfries', the county town of Dumfriesshire, the 'Queen of the South,' stands on the Nith's left bank, and is connected with its Kirkcudbrightshire suburb of Maxwelltown by three bridges, of which the middle one was founded about 1280 by Devorgilla Baliol. By rail it is 90 miles S. by W. of Edinburgh, and 33 WNW. of Carlisle. Corbelly Hill, in Maxwelltown, on which are a Catholic convent (1882) and an observatory, commands a splendid view of the surrounding hills, the Solway Firth, and the Cumberland mountains. Dumfries itself is scattered somewhat irregularly over a gentle elevation. It is built of red sandstone, and among its chief edifices are the Scottish baronial county buildings (1866); the new post-office (1888); the Mid Steeple (1707); Greyfriars' Church (rebuilt 1867), with a spire of 164 feet; the Academy (1802); and, in St Michael's churchyard, the mausoleum (1815) of Robert Burns, whose small house still stands, and a statue of whom was erected in 1882. The Crichton Institution (1835-70) is a lunatic asylum; rather nearer is the infirmary (1871). The manufacture of tweeds, introduced in 1847, is the leading industry. Hosiery ranks next; and there is a busy trade in pork and live-stock. The opening, however, of the railways in 1850–69 has greatly diminished the river traffic, though large sums had been spent in improving the 14 miles of the Nith's channel between the town and the Solway. Dumfries was made a royal burgh by David I., and it unites with Annan, Kirkcudbright, Lochmaben, and Sanquhar in returning one member. Pop. (1851) 13,166; (1901) 17,079. For the town's memories of Bruce and Burns, of Border wars, and of both the '15 and the '45, see W. M'Dowall's *History of Dumfries* (2d ed. 1873).

Dumfriesshire, a Scottish Border county, bounded SE. by Cumberland, and S. for 21 miles by the Solway Firth. Its greatest length, from east to west, is 47 miles; its breadth varies between 13 and 32 miles; and its area is 1103 sq. m. From Clydesdale and Tweeddale it is shut off by a sinuous rim of high green rounded moun-

tains—Lowther Hill (2377 feet), Queensberry (2285), Hartfell (2651), White Coomb (2695), and Ettrick Pen (2269). Thence, though broken by Cairnkinna (1813 feet), Birrenswark (920), and some lesser eminences, the surface has a general southward slope to the dead level of Lochar Moss, a peat bog, 10 by 3 miles, now largely reclaimed. Three beautiful rivers, the Nith, Annan, and Esk, all run to the Solway; and all but the first belong wholly to Dumfriesshire. At Moffat are mineral springs. Besides seven lakes round Lochmaben, there is 'dark Loch Skene' (¾ by ¼ mile; 1680 feet above sea-level), which has its outlet by a waterfall, the Grey Mare's Tail. The Enterkin Pass has been rendered famous by Defoe and Dr John Brown. The minerals include coal (at Sanquhar and Canonbie), limestone, antimony, and (at Wanlockhead) lead, silver, gold. The climate is mild. Only 32 per cent. of the entire area is arable, the uplands being pastoral or waste. Sheep, cattle, and pigs are largely reared; and there are valuable salmon-fisheries. The county returns one member to parliament. Towns and villages are Dumfries, Annan, Lochmaben, Sanquhar, Moffat, Lockerbie, Langholm, Ecclefechan, Thornhill, and Gretna Green. Among the numerous antiquities are the Roman station at Birrenswark, the Ruthwell Cross, Lincluden convent, and the castles of Lochmaben and Caerlaverock. Among its worthies are Bruce, Allan Cunningham, Thomas Carlyle, and by residence, Robert Burns. Pop. (1801) 54,597; (1881) 76,140; (1901) 72,571.

Düna. See Dwina.

Dünaburg (*Dünaboorg*), a fortified town of Western Russia, the capital formerly of Polish Livonia, on the Düna, in the government of Vitebsk, 127 miles SE. of Riga by rail. Pop. 69,633.

Dunbar, a town on the rocky coast of Haddingtonshire, backed by the Lammermuirs, 29 miles E. of Edinburgh by rail. Little remains of its sea-built castle, the stronghold from 1072 to 1435 of Gospatric and his descendants, the Earls of Dunbar and March. In 1339 'Black Agnes' held it for six weeks against the English; but it was dismantled in 1568, the year after Queen Mary's abduction hither by Bothwell. Dunbar was the scene, too, of Cromwell's great victory over Leslie, 3d September 1650. Fishing is the principal industry, and the new Victoria Harbour was formed in 1844. Dunbar was created a royal burgh by David II., and till 1885 it united with Haddington, &c. to return one member. Pop. 3581.

Dunbarton. See Dumbarton.

Dunblane, a town of Perthshire, on the left bank of Allan Water, 5 miles N. of Stirling by rail. Founded by St Blane, a 7th-century bishop, its church was rebuilt in 1141 by David I. as a cathedral; but except for the Romanesque four lower stages of the steeple (128 feet), that cathedral is now a First Pointed edifice of a hundred years later—its glory the west window, than which Mr Ruskin knew 'nothing so perfect in its simplicity.' The choir was restored in 1873; the ruinous nave in 1893. In 1661 the saintly Robert Leighton chose Dunblane as the poorest and smallest of Scotland's sees; his path near the river still bears the name of the Bishop's Walk, and the library which he bequeathed to his diocese is still preserved in the town. There are also an antique bridge, a mineral spring, and a fine hydropathic (1876); 2½ miles to the east is the battlefield of Sheriffmuir. Pop. 2516.

Duncannon, a coast-village of County Wexford, 9 miles SE. of Waterford.

Duncansbay Head, a promontory, 210 feet high, forming the north-east extremity of Caithness, 18 miles N. by E. of Wick.

Dundalk (*Dun-dawk'*), a thriving seaport, the capital of County Louth, on Dundalk Bay, 55 miles N. of Dublin. It has salt-works, a distillery, an iron-foundry, flax-spinning, tanning, and shipbuilding. The harbour has been much improved. Pop. (1871) 11,327; (1901) 13,076. Dundalk sent one member to parliament till 1885. It was taken by Edward Bruce (1315), Cromwell (1649), and Schomberg (1689).

Dundas', (1) a baronial castle, dating from the 11th to the 15th century, on the south bank of the Firth of Forth, near South Queensferry, the seat from about 1124 till 1875 of the Dundas family. —(2) A town of Wentworth county, Ontario, at the head of Burlington Bay, at the west of Lake Ontario, with mills and manufactories. Pop. 3709.—(3) An island of British Columbia, 40 miles NE. of Queen Charlotte Island.—(4) A group of nearly 500 coral islets (also called Juba Islands), off the east coast of Africa, in about 1° S. lat., with only one safe harbour.—(5) A strait, 18 miles wide, in North Australia, separating Melville Island from Coburg Peninsula.

Dundee (Lat. *Taodunum*, 'hill or fort on the Tay'), a 'city' (since 1889) of Forfarshire, on the left bank of the estuary of the Tay, here 2 miles broad, 10 miles from the sea, and 50 NNE. of Edinburgh. It stands mostly on the slope between Dundee Law (571 feet high) and Balgay Hill and the Tay. Its most striking architectural features are the Roman Ionic town-hall (1734), by the 'Elder Adam,' with a spire 140 feet high; the Albert Institute, free library, &c. (1865–89), in 15th-century Gothic, from designs by Sir Gilbert Scott; the Royal Exchange (1856), in the Flemish pointed style of the 15th century; the Eastern Club House; the Kinnaird Hall, holding 2000 people; the infirmary; the Justiciary and Sheriff Court Buildings; the Town's Churches, with the old steeple (156 feet). Dundee University College, instituted by Miss Baxter for the education of both sexes in science, literature, and fine art, was opened in 1883, and incorporated with St Andrews University in 1889. Dundee has several public parks, one of which, the gift of Sir David Baxter, on a beautiful slope to the east, is 37 acres in extent; another of 60 acres, to the west, occupies the hill of Balgay. Dundee is the chief seat in Great Britain of the manufacture of coarse linen fabrics (Osnaburgs, sheetings, ducks, dowlas, drills, canvas, and cordage). Manufactures of jute are also carried on here on an immense scale. Dundee besides is famous for its manufacture of marmalade and other confectionery; and it is the centre of the whale and seal fishing trade of Great Britain. Shipbuilding (both wood and iron) and machine-making are carried on. Besides the tidal harbour, Dundee has magnificent wet-docks, two graving-docks, and a slip for large vessels. The docks have been erected at a cost of upwards of £700,000; and the tonnage of vessels entering the port exceeds in some years half a million. The direct railway communication of Dundee with the south, established in 1878 by the Tay Bridge, was interrupted on 28th December 1879, when a great part of the bridge and a passenger-train passing over it were thrown into the river. A new and more substantial bridge was built, 20 yards higher up the river, at a somewhat lower elevation, and was opened for traffic in 1887. It is 3593 yards long, and has a clear height above high-water mark of

77 feet. Pop. (1841) 63,732; (1901) 161,173. Dundee returns two members. Since 1892 its chief magistrate is styled Lord Provost. Edward I. was here twice. Wallace is said to have taken the castle in 1297, and Bruce demolished it in 1313. The Duke of Lancaster burned Dundee in 1385, and the Marquis of Montrose pillaged it in 1645. On the refusal of Dundee to submit to Cromwell, General Monk, in 1651, sacked and burned it, massacring 1000 citizens and soldiers, and filling 60 vessels with booty, which were totally wrecked on their voyage to England. Dundee was one of the first Scotch towns to adopt the Reformation. Wishart the martyr preached here during the plague of 1544.

See works by Thomson (1847), Beatts (1873–82), Maclaren (1874), Norrie (1876), Hay (1880), Millar (1887), Maxwell (1884–92), and Lamb (1895).

Dundon'ald, a village of Ayrshire, 5½ miles SW. of Kilmarnock. Its castle, now a ruin, was the death-place of Robert II., and gives the title of Earl to the Cochrane family.

Dundrennan, a ruined Cistercian abbey (1142), 5 miles ESE. of Kirkcudbright.

Dundrum Bay, an inlet of the Irish Sea, in County Down, 5 miles S. of Downpatrick. It is 13 miles wide at the entrance, and only 5 miles long, forming a long curve into the shore.

Dunedin (*Dun-ee'din*), capital of the provincial district of Otago, and the chief commercial city in New Zealand, at the head of Otago Harbour, on the east side of South Island, towards its southern extremity. It is 190 miles by sea from Lyttelton, and 150 from Invercargill (139 by rail). Since its foundation by members of the Free Church of Scotland in 1848, the city has rapidly increased in importance, chiefly after the discovery in 1861 of extensive gold-fields in the neighbourhood. It is the seat of an Anglican and a Roman Catholic bishop. There are many fine churches and buildings, one of the finest the new Bank of New Zealand (1882). Other edifices are the post-office, hospital, government buildings, mechanics' institute, lunatic asylum, &c.; and there are also the Botanical Gardens, the grounds of the Acclimatisation Society, a carriage-drive through the reserve called the Town Belt, which encircles the city, and a fine racecourse, near Ocean Beach, 2 miles distant. The high school and the university are flourishing institutions. Woollens are manufactured. Since the opening and deepening of the new Victoria Channel from Port Chalmers, large steamers can approach the wharf. The city was to have been named New Edinburgh, but by a happy suggestion of Dr William Chambers of Edinburgh, its name was changed to Dunedin, the Celtic designation of the Scottish capital. Pop. (1871) 14,857; (1901) 24,879, or, with suburbs, 52,390.

Dunfanaghy, a Donegal seaport, 40 miles NW. of Strabane. Pop. 460.

Dunferm'line, a 'city' of Fife, 16 miles NW. of Edinburgh, and 20 E. by S. of Stirling. It stands on a long swelling ridge, 3 miles from and 300 feet above the Forth, and, backed by the Cleish Hills (1240 feet), presents a striking aspect from the south. It is a place of hoar antiquity, from 1057 till 1650 a frequent residence of Scotland's kings, and for more than two centuries their place of sepulture. Malcolm Canmore here founded in 1072 a priory, which David I. remodelled in 1124 as a Benedictine abbey. The nave alone of its church, Romanesque to Third Pointed in style, was spared at the Reformation, and now forms a stately vestibule to the New Abbey Church (1818–21), in building which Robert Bruce's grave was discovered. There are ruins of the 'frater-house' or refectory, of the 'pended tower,' and of the royal palace (*c.* 1540); but of Malcolm's Tower only a shapeless fragment is left, and the 'Queen's House' (1600) was wholly demolished in 1797. Nor otherwise is there anything older than the great fire of 1624; indeed, the churches and the public buildings are almost all of quite recent erection. There are the Gothic corporation buildings (1876–79); the county building (1807–50); St Margaret's Hall (1878), with a fine organ; the Carnegie Public Library (1881); the Carnegie Baths (1877); and the handsome new high school (1886). The staple industry is damask linen-weaving, which, dating from 1716, now in some years turns out goods to the value of a million sterling. Bleaching, iron-founding, &c. are also carried on. Dunfermline was made a royal burgh in 1588, and unites with the other four Stirling burghs to return one member to parliament. In 1902–3 Mr Carnegie made over £500,000 to be held in trust for behoof of the town. Pop. (1801) 5484; (1881) 17,085; (1901) 25,250. For Dunfermline's worthies, St Margaret, Robert Henrysoun, Charles I., Ralph Erskine, Sir Noel Paton, and Mr Andrew Carnegie, and for its many memories, of kings, Scottish and English, of Cromwellian victory and Jacobite skirmish, reference may be made to works by Chalmers (1844–59), Henderson (1879), and Beveridge (1888).

Dungannon, a municipal borough in County Tyrone, 40 miles W. of Belfast by rail. It manufactures linen and coarse earthenware; and near it are large lime-quarries and collieries. Till 1885 it returned one member. Dungannon was the chief seat of the O'Neils till 1607. Its castle was destroyed in 1641. Pop. 3694.

Dungarpur. See DONGARPUR.

Dungarvan, a Waterford seaport, 141 miles SW. of Dublin. Pop. (1861) 8614; (1901) 4850, chiefly engaged in fishing. It has remains of an Augustinian abbey, founded in the 7th c. by St Garvan, and of walls erected by King John, who also built the castle, now used as barracks. Till 1885 it returned one member. Dungarvan Bay is 3 miles long and 3 wide, and 1 to 5 fathoms deep.

Dungeness, a headland on the south coast of Kent, 10½ miles SE. of Rye, with a lighthouse.

Dungiven, a Londonderry market-town, on the Roe, 9 miles S. of Limavady. Pop. 630.

Dunipace. See DENNY.

Dunkeld', a town of Perthshire, 16 miles NNW. of Perth. It lies in a deep romantic hollow, on the great east pass (of Birnam, q.v.) to the Highlands, on the left bank of the Tay, here spanned by Telford's handsome bridge (1805–9). A Culdee church was founded here about 815; and in 1107 Alexander I. revived the bishopric, one of whose holders was Gawin Douglas (1474–1522), translator of Virgil's *Æneid*. The Cameronians successfully held the place against 5000 Highlanders, 21st August 1689. The cathedral was built between 1318 and 1501, and comprises nave, choir (now the parish church), chapter-house, and tower, with the Wolf of Badenoch's monument (1394). The Duke of Athole's beautiful grounds include the cathedral; Craigvinean and Craig-y-Barns; 50 miles of walks, and 30 miles of drives; falls of the Bran (upper one 80 feet); and 20 sq. m. of larchwood. Pop. (1831) 1471; (1901) 586.

Dunkery Beacon. See EXMOOR.

Dunkirk, or DUNKERQUE, the most northerly

seaport of France, on the Strait of Dover, in the dep. of Nord, 189 miles N. of Paris by rail, and 67 W. of Ghent. It is a very strong place, as well from recent fortification works, as from the ease with which the surrounding country can all be laid under water. As a seaport, both naval and mercantile, it is also a place of much consequence; and great harbour-works have been carried out under the law of 1879, which authorised an expenditure of £2,000,000. The town itself is well built and cleanly, Flemish rather than French; its principal features, the Gothic church of St Eloi, the fine detached belfry (196 feet), and the statue of Jean Barth. Dunkirk has manufactures of linen, leather, cotton, soap, beet-root sugar, &c.; also metal-foundries, salt-refineries, great shipbuilding-yards, and cod and herring fisheries. Since becoming a free port in 1826, it has also carried on a good trade in wine and liqueurs. Pop. (1872) 34,342; (1901) 40,329. Dunkirk is said to owe its origin to the church built by St Eloi in the 7th century, in the midst of the dreary sand-hills or dunes, and hence its name, 'Church of the Dunes.' It was burned by the English in 1388, taken by Cromwell in 1658, but sold to Louis XIV. by Charles II. for 5,000,000 francs in 1662.

Dunkirk, a port of New York, on Lake Erie, 40 miles SW. of Buffalo by rail, with a good harbour and a busy lake traffic. Pop. 11,620.

Dunlavin, a Wicklow market-town, 26 miles SSW. of Dublin. Pop. 480.

Dunlop', an Ayrshire village, 8 miles NNW. of Kilmarnock. Its cheese since 1855 is almost superseded by the Cheddar process. Pop. 474.

Dunluce, a ruined castle on the Antrim coast, 3½ miles E. of Portrush.

Dunmanway, a town of County Cork, Ireland, 30 miles SW. of Cork. Pop. 1775.

Dunmore, a Stirlingshire village, 8 miles ESE. of Stirling. Near it are the seat of the Earl of Dunmore, and a pottery.

Dunmore, a coal-mining town of Pennsylvania, 2 miles by rail ENE. of Scranton. Pop. 12,590.

Dunmow, Great, a market-town of Essex, on the Chelmer, 39 miles NNE. of London.—At Little Dunmow, 2 miles ESE., are remains of a stately Augustinian priory, founded in 1104. The Dunmow Flitch of Bacon was a prize instituted in 1244 by Robert Fitzwalter, as a prize for contented married couples after a year's probation.

Dunmurry, a town of County Antrim, Ireland, 5 miles SW. of Belfast. Pop. 1105.

Dunnet Head, in Caithness (q.v.).

Dunnottar Castle, the ruined seat of the Keiths, Earls Marischal of Scotland, on the Kincardineshire coast, 1½ mile S. of Stonehaven. It crowns a sea-washed rock 160 feet high, sheltered the Scottish regalia in 1651, and in 1685 was the prison of 167 Covenanters.

Dunoon, an Argyllshire watering-place, extending, with Hunter's Quay and Kirn, 3 miles along the west shore of the Firth of Clyde, and 7 miles W. of Greenock. The seat of a castle of the Stewarts, in 1563 it received a visit from Queen Mary, and in 1643 was the place where thirty-six Lamonts were cruelly hanged by the Campbells. But the present well-built town has wholly arisen since 1822—with its steamboat-piers, its esplanade, its half-dozen churches, its numerous handsome villas, and the Convalescent Homes (1869). Pop. (1841) 1296; (1901) 6779—a number sometimes doubled by summer visitors.

Dunrobin Castle, the Duke of Sutherland's seat, on the Sutherland coast, 2 miles NE. of Golspie. It was built between 1098 and 1851.

Duns, a police-burgh of Berwickshire, 44 miles ESE. of Edinburgh (by rail 56), since 1853 has divided with Greenlaw the rank of county town. Thomas Boston was a native; and on round turf-clad Duns Law, which rises 700 feet above the sea, and 280 above the town, the Covenanters encamped in 1639. Pop. 2298.

Dunsin'ane, one of the Sidlaw Hills in Perthshire, 1012 feet high, 8½ miles NE. of Perth. On its top are remains of a prehistoric fortress—'Macbeth's Castle.'

Dunsink, a hill 4 miles NW. of Dublin, the site of the observatory of Trinity College.

Dun'stable, a town of Bedfordshire, at the east base of the Chiltern chalk-hills or Dunstable Downs, 36 miles NW. of London by rail. An old-fashioned, brick-built place, with two main streets crossing at right angles, it has the fine church, partly Norman, of an Augustinian priory, which in 1110 was the scene of the earliest miracle play on record, so that Dunstable claims to be the birthplace of the English drama. It has also an ancient celebrity for larks and for straw-plait, which still is the staple industry. The grammar-school (1715) was rebuilt in 1888, at a cost of £10,000. Dunstable, which stood at the intersection of Watling and Icknield Streets, was the site of an Eleanor Cross (demolished 1643), and the scene of Queen Catharine's divorce by Cranmer. It was made a municipal borough in 1864. Pop. 5513.

Dunstaffnage, a ruined castle of Argyllshire, 3½ miles NNE. of Oban.

Dunstanburgh, a ruined castle (1315) on the Northumbrian coast, 7 miles NE. of Alnwick.

Dunster, a town of Somerset, 24 miles WNW. of Bridgwater. Pop. of parish, 1114.

Duntocher, a town of Dumbartonshire, 9 miles NW. of Glasgow, with cotton-mills. Pop. 2124.

Dunvegan, the Macleods' castle in Skye, on a sea-loch, 23 miles W. by N. of Portree.

Dunwich, a Suffolk coast-village of 213 inhabitants, 4½ miles S. of Southwold. Made the episcopal see of the Anglic Southfolk in 630, it became a large place, but has mostly been swept away by the sea. It returned two members till 1832, and till 1883 was a municipal borough.

Dupplin, the castle (1832) of the Earl of Kinnoull, in Perthshire, 6 miles SW. of Perth. Here Edward Baliol defeated the Regent Mar (1332).

Düppel, or **Dybböl**, a village in the Prussian province of Sleswick-Holstein, 15 miles NE. of Flensburg. In 1848 its fortifications were stormed by the Germans; and again in 1864, by the Prussians, after a month's bombardment.

Dura Den, between Cupar and St Andrews, Fife, a small glen traversed by a tributary of the Eden, and famous for the numerous and beautifully preserved fossil fish entombed in its yellow sandstone. See Dr Anderson's *Dura Den* (1859).

Durance (*Dü-ronſss'*), a river of SE. France, rises in the dep. of Hautes-Alpes, and flows 225 miles to the Rhone, 3 miles below Avignon.

Durango (called also *Guadiana* and *Ciudad de Victoria*), an episcopal city of Mexico, on a dry plateau, 6700 feet above sea-level, 500 miles NW. of the city of Mexico. Pop. 27,000. Area of state of Durango, 42,373 sq. m.; pop. 370,000.

Durazzo (Serb *Dratsch*, Albanian *Dürresi*; anc

Epidamnos or *Dyrrachium*), a decayed port of Turkish Albania, on the Adriatic, 50 miles S. of Scutari. Pop. 1200.

Durban, the seaport of Natal, is situated on the northern shore of a nearly landlocked tidal bay. It was laid out in 1834 by the Dutch, who had formed a republic in Natal before the British under Sir Benjamin D'Urban occupied it in 1842. Its public buildings include a town-hall, museum, library, theatre, &c. The Town Gardens form a conspicuous open space in the middle of the town, and besides the Botanical Gardens, there are two public parks and a good racecourse. The residences are chiefly situated on the Berea, a low range of hills overlooking the town. The climate, though hot, is healthy; and the town is well supplied with water and tramways. Harbour-works (1888–91) have made the inner harbour (4700 acres) accessible to large vessels. Durban is the terminus of railways into the Transvaal and Orange River provinces. Pop. (1866) 4991; (1904) 67,850. See the history of the town by Ingram (1900).

Durdans, The, Lord Rosebery's seat, Epsom, Surrey.

Düren (Roman *Marcodurum*), an ancient town of Rhenish Prussia, on the Roer, 18 miles E. of Aix-la-Chapelle. It manufactures cloth, iron, paper, sugar, &c. Pop. 27,740.

Durham, a maritime county in the north-east of England, between the Tyne and Tees. It has 32 miles of coast, generally low, and an area of 1012 sq. m., two-thirds being arable. The surface is hilly, and slopes to the east. In the west, which is waste but rich in minerals, are branches of the Pennine chain, rising in Kilhope Law (2196 feet), Collier Law (1678), and Pontop Pike (1018). The chief rivers are the Wear, Tyne, and Tees, navigable respectively for 12, 15, and 10 miles. The valuable Durham coalfield measures 25 by 10 miles. Other mineral products are limestone, black marble, freestone, ironstone, firestone, slate, millstone, grindstone, iron pyrites, fluor-spar, zinc, and lead. The principal lead-mines are in Teesdale and Weardale; and there are many large iron-furnaces. Durham has the largest coal production of any county in England, the annual output being nearly 30,000,000 tons, and the number of persons employed above or below ground at the mines being over 100,000. The chief shipping ports are Stockton-on-Tees, South Shields, Sunderland, and Hartlepool. The Teeswater or Holderness breed of cattle and the Durham horses are alike famed. Many sheep are pastured on the hills. There are manufactures of iron, coke, pottery, glass, alkalies and chemicals, and salt, and much shipbuilding at Jarrow, Sunderland, South Shields, Hartlepool, and Stockton. Coal is the chief export. Durham is one of the three counties palatine, the other two being Lancaster and Chester. It is divided into four wards and 269 civil parishes, and is entirely in the diocese of Durham. Pop. (1801) 149,384; (1841) 307,963; (1881) 867,576; (1901) 1,187,324. The chief towns are Durham, the county town, Sunderland, Darlington, Gateshead, South Shields, Stockton, and Hartlepool. The county includes eight parliamentary divisions, each returning one member; and the following parliamentary boroughs: Sunderland (2 members) and Darlington, Durham, Gateshead, Hartlepool, South Shields, and Stockton (each 1). There are extensive remains of Roman stations at Lanchester, Binchester, and Ebchester. Durham formed part of the Saxon kingdom of Northumbria (547–827). Subsequently it suffered severely from the incursions of the Scots. See works by R. Surtees (4 vols. 1816–40), Fordyce (2 vols. 1855–57), W. H. Smith (1885), Boyle (1892), and Lapsley (1900).

Durham, a parliamentary and municipal borough, near the middle of Durham county, 12 miles S. of Newcastle, is built around a steep rocky hill 86 feet high, nearly encircled by the Wear, and crowned by the cathedral and castle. Ancient walls partly enclose the hill, from which are fine views of the fertile wooded country around, and of the suburbs across the river. The chief manufactures are mustard, carpets, and iron. In the vicinity are coal-mines and coke-ovens. Since 1885 Durham has returned only one member. Pop. (1841) 14,151; (1901) 14,679. Durham arose about 995, when Bishop Aldhun brought hither St Cuthbert's bones from Ripon, and built a church to enshrine them. On the site of this church, Bishop William de Carilef in 1093 began the present cathedral, one of the noblest specimens of Norman architecture, alike from situation and from structure, that massive pile—'half church of God, half castle 'gainst the Scot.' Added to at various periods up till 1500, it has an extreme length of 510 feet, and a breadth across the transepts of 175 feet; whilst the height of the central tower is 214 feet, and of the two western towers 138 feet. The cathedral contains the tombs of St Cuthbert and Bede. The castle, formerly the residence of the bishops of Durham, but now occupied by the university, was founded about 1072, by the Conqueror, but has received many alterations and additions. The dormitory of the monastery, now the new library of the cathedral, is one of the finest in England. The see extends over the county of Durham (Northumberland having been detached in 1882 to form the diocese of Newcastle); among its bishops have been Bek, Aungerville, Wolsey, Cosin, Butler, and Lightfoot. The university of Durham was opened for students in 1833; and a royal charter in 1837 empowered it to bestow degrees. It has two collegiate establishments—University College and Bishop Hatfield's Hall. The Colleges of Medicine and of Physical Science at Newcastle-on-Tyne are affiliated with Durham.

Durisdeer, a parish of upper Nithsdale, 21 miles NNW. of Dumfries. In its church are interesting monuments of the Queensberry family.

Dürkheim (*Dürk'hime*), a town of Rhenish Bavaria, 6 miles SW. of Mannheim. Pop. 6311.

Durlach (*Door'lahh*), a town of Baden, on the Pfinz, 4 miles E. of Carlsruhe by rail. Pop. 11,350.

Dürrenstein (*Dür'ren-stine*), a village of Lower Austria, on the left bank of the Danube, 45 miles WNW. of Vienna. In its ruined castle, Richard Cœur-de-Lion was confined by Leopold of Austria for three months. Pop. 650.

Durrow, a market-town of Queen's county, 2 miles NW. of Attanagh station. Pop. 557.

Dursley, a town of Gloucestershire, near the Cotteswold hills, 15 miles SW. of Gloucester by rail. Pop. of parish, 2369.

Düsseldorf, the chief town of the populous district of Düsseldorf, in Rhenish Prussia, on the right bank of the Rhine, at the influx of the Düssel, 24 miles NNW. of Cologne. Its ramparts were converted into promenades in 1802; its streets are regular and spacious, while the squares and garden-grounds in and near the town are tastefully laid out and embellished with fountains and statues. Düsseldorf has developed its trade and industries, but its chief importance is still as an art centre. In the market-place rises a

colossal equestrian statue of the Elector Johann Wilhelm, who founded a famous picture-gallery here in 1690, most of which, however, was removed to Munich in 1805. The Düsseldorf Academy was founded in 1767, and attained great eminence during 1822–59, under the management of Cornelius and Schadow. The present building, an imposing Renaissance edifice, with a façade 520 feet in length, was finished in 1879. The Art Hall (1881) contains a gallery of modern paintings. Among the other principal buildings are the old electoral palace (1710–1846; burned 1872); the present palace, the residence of the governor of the province; the government house, the observatory, town-hall (1567), theatre, gymnasium, public library (50,000 vols.), St Andrew's (1629), formerly the church of the Jesuits, and St Lambert (14th c.). The Hofgarten is one of the finest public gardens in Germany. The iron and cotton industries of Düsseldorf are very important, and it has also manufactures of pianofortes, paper, soap, beer, chemicals, tobacco, chocolate, glass, &c., besides mills of all kinds, and photographic, lithographic, printing, and other industries. Pop. (1875) 80,750; (1885) 115,190; (1900) 213,767—mostly Catholics. Made a town by the Duke of Berg in 1288, Düsseldorf became the capital of the duchy in 1385; in 1609 passed to the Palatinate; and in 1815 it was united to Prussia. The brothers Jacobi, Heine, Varnhagen von Ense, and Cornelius were natives.

Dwarka, a town with a lighthouse near the north-west corner of the peninsula of Kathiawar, 235 miles SW. of Ahmedabad. On an eminence stands a great temple of Krishna, visited annually by 10,000 pilgrims. Pop. 5000.

Dwina, two important rivers of Russia.—(1) The Northern Dwina is formed by the Suchona and the Jug, two streams rising in the government of Vologda, and uniting in 60° 46′ N. lat., 46° 20′ E. long. It flows north-westward through a flat country, to the Gulf of Archangel, which it enters by three principal mouths, of which only the easternmost is navigable. Its length is 450 miles (with the Suchona, 760). The chief tributaries are the Vaga, Emza, Pinega, and Vytchegda, the last 625 miles long (500 navigable). The river is free from ice from May to October. Its waters are rich in fish.—(2) The Western Dwina (Ger. *Düna*) rises in the government of Tver, not far from the sources of the Volga and the Dnieper, and flows 580 miles WSW. and WNW. to the Gulf of Riga, being navigable from the Mezha's confluence, although shallows and rapids greatly impede traffic. It is connected by canals with the Black Sea, the Caspian, the Gulf of Finland, &c.

Dyrrhachium. See DURAZZO.

Dy'sart, an old-fashioned seaport of Fife, on the Firth of Forth, 2½ miles NE. of Kirkcaldy, much of whose extended municipal burgh lies within Dysart's parliamentary boundary. It owes its name (Lat. *desertum*, 'a solitude') to St Serf's cave near Dysart House, Lord Rosslyn's seat. James V. made it a royal burgh, and with Kirkcaldy, &c., it returns one member. Pop. of royal burgh, 3539; of parliamentary, 15,256.

Dzungaria. See ZUNGARIA.

EAGLE, an island of County Mayo, 3 miles SW. of Erris Head.

Eaglehawk, a gold-mining town of Victoria, 4 miles NNW. of Bendigo. Pop. 8315.

Eaglesham, a Renfrewshire village, 8½ miles S. of Glasgow. Pop. (1861) 1769; (1901) 686.

Ealing, a municipal borough (1901) of Middlesex, 5¾ miles W. of Paddington by rail. It is the birthplace of Huxley. Pop. 36,000.

Earlestown, a town of Lancashire, 5 miles N. of Warrington. It has manufactures of sugar, iron, &c. Pop. 8000.

Earlsferry, a decayed royal burgh of Fife, just W. of Elie (q.v.). Pop. with Elie, 1000.

Earlston, or ERCILDOUNE, a Berwickshire village, 4 miles NNE. of Melrose. It manufactures ginghams, woollens, &c., and has a fragment of the 'Rhymer's Tower,' the traditional abode of Thomas the Rhymer; 1 mile S. is Cowdenknowes, with its 'bonny broom.' Pop. 1060.

Earn, a river and loch in the south of Perthshire, in the finely-wooded, beautiful valley of Strathearn. Lying 306 feet above sea-level, Loch Earn extends 6⅓ miles eastward, is 3¼ to 6¼ furlongs wide, and 600 feet deep; and sends off the river Earn 46 miles eastward, past Comrie, Crieff, and Bridge of Earn, to the Tay's estuary, 7 miles SE. of Perth.

Easdale, an Argyllshire island, in the Firth of Lorn, 16 miles SW. of Oban. It contains 1½ sq. m., and is separated from the much larger Seil Island by a channel 400 yards wide. Its slate-quarries date from about 1630, and extend to a depth of 220 feet below sea-level. Pop. 284.

Easingwold, a town in the North Riding of Yorkshire, 13 miles NNW. of York. Pop. 1932.

East Anglia. See ANGLIA.

Eastbourne, a favourite Sussex watering-place, in the Rape of Pevensey, nearly midway between Brighton and Hastings, and 66 miles S. of London. Roman remains bear witness to its antiquity, but nothing is known of its ancient history. In Domesday it is called Borne (after the burn or stream which still flows here). The fine 12th-century church clearly belonged to a much more important place than the four groups of houses and cottages which constituted the fishing-hamlets of East-Borne, South-Borne, Meads, and Sea-Houses, not a century ago. The last generation has witnessed the growth of the modern watering-place, which now challenges comparison, in respect of its attractions to visitors and advantages to residents, with any of its south-coast rivals. Its air is singularly healthy, and on the hillside bracing; whilst the close vicinity of the bold promontory of Beachy Head and the 'front-hills' of the South Downs affords unusual facilities for exercise. Defended by a redoubt of eleven guns and other fortifications, the sea-front boasts a parade two miles long, laid out in spacious terraces in three tiers, bordered by creeping plants. The streets are broad and lined with trees; and there are a pier 1000 feet long, the Devonshire Park, the Devonshire Baths, theatre, cricket, football, and other clubs, admirable golf-links, electric-lighting, &c. A large part of the improvements is due to the late Duke of Devonshire, but the town has also taken an enterprising share in them. The town-hall, costing £46,000, was opened in 1886, and the Princess Alice Memorial Hospital in 1883. Eastbourne was incorporated as a borough in 1883. Pop.

(1821) 2007; (1861) 5795; (1901) 43,344. See Chambers' *Handbook for Eastbourne* (23d ed. 1893).

East Cape, the name of the south-eastern extremity of New Guinea, in Goschen Strait, and of the most easterly headlands of Madagascar, the North Island of New Zealand, and Siberia. The last, on Behring Strait, in 169° 38′ W. long., is the easternmost extremity of Asia.

East Dereham. See DEREHAM.

Easter Island, a lonely Pacific islet in 27° 8′ S. lat., and 109° 24′ W. long. Discovered by Roggeveen on Easter Day 1722, and visited in 1773 by Captain Cook, it is 47 sq. m. in area; is entirely volcanic, with many extinct craters rising more than 1000 feet; and is fertile, but badly off for water. Sheep and cattle grazing was started by a French firm in Tahiti, after the departure in 1878 of the missionaries, with 300 natives (fair Polynesians), for the Gambian Archipelago, 500 having been shipped to Tahiti four years earlier, and most of the adults kidnapped by Peruvians in 1863 to work the guano deposits. Thus the pop. has dwindled from 3000 to 150. The 555 rude stone statues, for which Easter Island is famous, are thought to have been effigies, not idols. Thin-lipped, disdainful of aspect, and capped by crowns of red tufa, they are 3 to 70 feet high (16 on an average), and stand on seaward platforms, 200 to 300 feet long, of cyclopean masonry. There are besides nearly a hundred stone houses with walls 5 feet thick, and interiors bearing paintings of birds, animals, &c. In September 1888 Chili annexed Easter Island for a convict settlement. See Thomson's *Report of the U.S. National Museum* (Wash. 1892).

Eastern Roumelia. See BULGARIA.

Eastham, a township of Cheshire, on the Mersey, 6½ miles SE. of Birkenhead by rail. Near Eastham is the seaward terminus of the Manchester Ship Canal. Pop. 1029.

East Indies, THE, include the two great peninsulas of southern Asia, and all the adjacent islands from the delta of the Indus to the northern extremity of the Philippines. For the Dutch East Indies, see HOLLAND.

Eastleigh and Bishopstoke, a Southampton urb. dist., 5 miles NE. of Southampton. Pop. 9320.

East Liverpool, a town of Ohio, on the Ohio River, 44 miles WNW. of Pittsburgh by rail, Pop. (1880) 5568; (1900) 16,485.

East London, a South African seaport, at the mouth of the Buffalo River, 700 miles E. of Capetown, with a large trade. It is the terminus of a railway to the interior. Pop. (1904) 25,220.

East Lothian. See HADDINGTONSHIRE.

East Main, a region of the Hudson Bay territory, constituted a Canadian territory in 1897 under the name of Ungava, and comprising the peninsula of Labrador (q.v.) except the Atlantic coast strip (attached to Labrador) and the southern part (attached to Quebec). The East Main or Slade River enters James Bay after a course of 400 miles.

Easton, capital of Northampton county, Pennsylvania, stands in the fork between the Delaware and Lehigh rivers, 67 miles N. of Philadelphia by rail. It carries on a considerable transport trade by rail and canal, and has foundries, rolling-mills, and manufactures of locks, wire, rope, flour, &c. Easton is the seat of Lafayette (Presbyterian) College (1832). Pop. (1880) 11,924; (1890) 14,481; (1900) 25,238.

East Orange, a manufacturing and residential city of New Jersey, adjoining Orange, and 13 miles E. of Jersey City. Pop. 21,600.

East Providence, a town of Rhode Island, separated from Providence by the Blackstone River. Pop. 12,540.

East River, the strait between Long Island Sound and New York Harbour, separating Brooklyn (q.v.) and New York. It is 10 miles long, ½ mile wide at the narrowest, and navigable by the largest ships.

East St Louis, a town of Illinois, connected with St Louis, Missouri, by a bridge over the Mississippi. Pop. (1880) 9185; (1900) 29,655.

Eastwood, an urban dist. in the county, and 8 miles NW. of the town, of Nottingham. Pop. 4820.

Eaton Hall, 3½ miles S. of Chester, the Duke of Westminster's splendid Gothic seat (1803).

Eau Claire (*O Clair*), capital of Eau Claire county, Wisconsin, at the mouth of the Eau Claire River, and at the head of navigation on the Chippewa River, 183 m. NW. of Madison by rail. It has a vast trade in lumber, and numerous sawmills, besides planing-mills, foundries, machine-shops, &c. Pop. (1870) 2293; (1900) 17,517.

Eaux Bonnes (*Ō Bonn*), a French watering-place, in a gorge of the Pyrenees, 2454 feet above the sea, and 29 miles S. of Pau. Pop. 765, with 6000 to 10,000 visitors in the season (July to August). The springs, both hot (53° to 91° F.) and cold, contain sulphur and sodium, and are used for disorders of the chest and respiratory organs.

Eaux Chaudes (*Ō Shoad*), a watering-place of France, 27 miles S. by W. of Pau, situated in a narrow Pyrenean valley, 2215 feet above sea-level. Its sulphurous waters (50° to 93° F.) are useful for catarrh, rheumatism, and skin-diseases.

Ebal. See GERIZIM.

Ebbsfleet. See RAMSGATE.

Ebbw Vale (*Ebboo*), an urban sanitary district of Monmouthshire, 21 miles NNW. of Newport, lies in the middle of a rich iron and coal district, and has numerous ironworks. Pop. 21,025.

Eberswalde (*Ay'bers-val'deh*), an industrial town of Prussia, 28 miles NE. of Berlin by rail, with manufactories of nails, paper, &c. Pop. 23,241.

Eboli (*Eb'o-lee;* anc. *Eburi*), a town of Italy, 49 miles SE. of Naples by rail. Pop. 10,000.

Eboracum. See YORK.

Ebro (Lat. *Hibērus*), a Spanish river, rising at an altitude of 2778 feet, in Santander province, within 20 miles of the Bay of Biscay. Thence it flows 442 miles SE. to the Mediterranean below Tortosa. The mouth is choked up with sand, but the San Carlos canal has been carried through the delta. Affluents are the Najerilla, Jiloca, and Guadalope from the right, and the Aragon, Gallego, and Segre from the left. Narrow and sometimes rocky, its course is obstructed by shoals and rapids; but this is partly remedied by Charles V.'s Imperial Canal, extending from Tudela to 40 miles below Saragossa.

Ecbat'ana. See HAMADAN.

Ecclefechan (*Ek'kel-feh'han*), a Dumfriesshire village, 20 m. NW. of Carlisle. The house in which Carlyle was born (4th Dec. 1795) still stands, and in the churchyard of the U.P. church he was laid beside his father and mother. Pop. 786.

Eccles, a municipal borough (incor. 1892), 4 miles W. of Manchester. Pop. (1901) 34,369.

Ecclesfield, a township in the West Riding of Yorkshire, 6 miles N. of Sheffield, with which it is now partly incorporated. The chief industries are cutlery and coal-mining.

Eccleshall, a town of Staffordshire, 7¼ miles NW. of Stafford. Pop. of parish, 3778.

Eccleshill, a town of Yorkshire, on the Aire, in 1899 incorporated with Bradford.

Echuca (formerly Hopwood's Ferry), a town of Victoria, on a peninsula formed by the Murray and Campaspe rivers, 156 miles N. of Melbourne by rail. It has considerable trade in red-gum timber, wool, and wine, and important river traffic by steamer. A roadway and railway bridge, 1905 feet long (cost £124,000), connects it with Moama in New South Wales. Pop. 4234.

Ecija (*Ay-thee'ha*), a Spanish city, in the province of Seville, 34 miles SW. of Cordova by rail. An old Roman and Moorish town, it is popularly known, on account of the great heat, as the 'Frying-pan of Andalusia.' Pop. 26,637.

Eckmühl, a little village on the Laber, in Bavaria, 15 miles by rail S. of Ratisbon. Here, on 22d April 1809, Napoleon defeated the Archduke Charles of Austria.

Ecuador', a republic of South America, so named from its position on the equator, lies between 1° 23′ N. and 4° 45′ S. lat., and in about 73°–81° W. long. Bounded on the west by the Pacific, it is inserted like a wedge between Colombia and Peru. But its only certain limits are those defined by the ocean, where it has a seaboard of some 400 miles; most of the frontier east of the Andes has never been determined. The area, often stated at 160,000, is really under 120,000 sq. m. (i.e. rather less than the United Kingdom), including the 2940 of the Galapagos Islands (q.v.). The total population is stated at 1,400,000, of whom 1,000,000 may be Indians, 100,000 of European stock, and 300,000 of mixed blood. The principal cities are Quito, the capital (80,000 inhabitants), Guayaquil, the chief port (50,000), Cuenca (30,000), Riobamba, Latacunga, and Ambato. Ecuador consists of three divisions —the lowlands west of the Andes, the mountainous plateau of the interior, and the less elevated forest-country to the east. Besides the main range of the Andes (q.v.), forming the backbone of the country, there is an outer range, with peaks rising to 15,000 feet; from the cordillera proper numerous long spurs, attaining a height of 14,000 feet, are thrown out towards the east, between which rise great affluents of the Amazons, while the coast-range possesses only short and very precipitous spurs. The principal mountains of Ecuador either are or have been volcanoes. Tunguragua (16,690 feet) broke out in 1887; Pichincha is by no means extinct; Cotopaxi (q.v.) and Sangai (17,465) are constantly active. Of the coast-streams the principal are the Guayaquil River, and the Rio Esmeraldas; east of the Andes the chief rivers are the Napo and its affluents, flowing into the Marañon. In mineral wealth Ecuador has been ranked amongst the poorest states of South America; but gold is wrought, and silver, quicksilver, iron, copper, zinc, asphalt, and petroleum occur, as well as graphite and anthracite.

Ecuador is an agricultural country. The eastern winds become saturated as they pass over the Atlantic and up the Amazons; and their moisture is almost ceaselessly precipitated as they approach the snowy peaks of the Andes, producing a dense growth of vegetation on the eastern foothills. On the other side also, where the rain-clouds of the Pacific are caught, the gorges of the western spurs become very hothouses. Natural *sabanas* or open plains are, however, found on the western lowlands. Sarsaparilla, balsams, caoutchouc, vegetable ivory, and wax are collected, and coffee, rice, cotton, tobacco, &c. are grown, but in smaller quantities; while the trade in cinchona promises soon to be a thing of the past, owing to the reckless destruction of the trees. The plateau region and large tracts to the east are comparatively healthy; the valleys on the Pacific side are commonly full of disease. In the interior there is a very small thermometric range, and a perpetual spring reigns in the uplands. The fauna is rich: the mammalia include the jaguar, puma, ounce, ocelot, deer, tapir, peccary, capybara, and several species of monkeys and bats; fish abound, both in the rivers and along the coast; and among reptilia are the boa constrictor, turtles, and alligators. Chiefly, however, is Ecuador the paradise of birds (ranging from the condor to the humming-bird) and insects. The live-stock includes cattle, sheep, horses, mules, donkeys, and llamas.

The state religion, to the exclusion of every other, is the Roman Catholic; and in no country have the Jesuits had such a paramount influence as in Ecuador, or employed it so well. Quito possesses a university and an institute of sciences (1884), with three faculties. The manufactures are limited to coarse cloths, kerosene, ice, and the preparation of spirits from the sugar-cane, and of flour or starch from the yuca or cassava root. Guayaquil is famed for its hammocks and Panamá hats, made from the fibre of the 'pita' plant. Commerce is sadly handicapped by the want of roads. There are only about 60 miles of railway open; but the chief towns have been connected by telegraph, and there are even telephones in Quito and elsewhere. The value of the exports, chiefly cocoa, coffee, vegetable ivory, caoutchouc, and hides, varies from £1,200,000 to £2,300,000 per annum; the imports, chiefly cottons, other textiles, and provisions, vary between the same limits. Great Britain, the United States, Germany, and France have large shares in the trade. Exports to Britain vary from £72,000 to £220,000 a year, and imports from Britain from £260,000 to £300,000.

Constituted as an independent state on the dissolution of Bolivar's Colombia (q.v.), the Republic of the Equator has, in little more than half a century, passed through a succession of violent political changes that render its history equally difficult and profitless to follow. Under its last constitution the executive is vested in a president, elected for four years, with a vice-president, a cabinet of four ministers, and a council of state; the legislative power is entrusted to a senate and house of representatives. The army consists of 3340 officers and men, and there is a navy of one steel transport, two gunboats, and a cruiser. The finance of the country is in hopeless embarrassment: the revenue, some £670,000, is usually exceeded by the expenditure. The foreign debt is stated at £700,000, and there are heavy arrears of interest.

See Hassaurek, *Four Years among Spanish Americans* (New York, 1867; 3d ed. 1881); Simson, *Travels in the Wilds of Ecuador* (1887); Col. Church's *Report* to the U.S. Government in 1883; Whymper's *Great Andes of the Equator* (1892).

Edam, a town of Holland, 13 miles NNE. of Amsterdam. Its specialty is cheese. Pop. 5824.

Edar, a Rajput state of Guzerat in the Mahi Kantha agency, tributary to Baroda, and subject to Bombay. Area, 4966 sq. m.; pop. 258,429. Edar, its capital, has 6223 inhabitants.

Eday, an Orkney island, 13½ miles NNE. of Kirkwall. Area, 11 sq. m.; pop. 547.

Eddystone, a group of gneiss rocks, daily submerged by the tide, in the English Channel, 9 miles off the Cornish coast, and 14 SSW. of Plymouth Breakwater. The rocks lie in 50° 10′ 54″ N. lat., and 4° 15′ 53″ W. long., and have 12 to 150 fathoms water around. The frequent shipwrecks on these rocks led to the erection of a wooden lighthouse, 100 feet high, by Winstanley, 1696–1700. The great storm of 20th November 1703 completely washed it away, with the architect. A similar lighthouse (1706–9) was burned in 1755. The next, constructed by Smeaton in 1757–59, was built of blocks, generally one to two tons weight, of Portland oolite, encased in granite, the granite being dovetailed into the solid rock, and each block into its neighbours. The tower, 85 feet high, had a diameter of 26¾ feet at the base, and 15 feet at the top. The light was visible at a distance of 13 miles. As the rock on which it was built is undermined by the action of the waves, the foundation of another was laid on a different part of the reef in 1879. The new lighthouse, completed in 1882 by Sir James N. Douglass, F.R.S., is, like its predecessor, ingeniously dovetailed throughout. Its dioptric apparatus gives, at an elevation of 133 feet, a light equal to 159,600 candles, and visible to a distance of 17½ miles. Smeaton's lighthouse was taken down to the level of the first room as soon as the new one was completed, the removed upper portion being re-erected on Plymouth Hoe.

Eden, a river of Westmorland and Cumberland, rising in the Pennine chain, and running 65 miles north-north-west, past Appleby and Carlisle, to a fine estuary at the head of the Solway Firth. There is another Eden in Sussex and Kent (12 miles long), a third in Fife (29½), and a fourth in Berwickshire (23½).

Edenderry, a town of King's county, 37½ miles W. of Dublin. Pop. 1677.

Edenhall, the ancient seat of the Musgraves in Cumberland, 4 miles NE. of Penrith. Here is still preserved the famous 'Luck of Edenhall,' an old painted glass goblet (a chalice originally) said to have been snatched from the fairies; on its safety the welfare of the house depends.

Edenkoben, a town of the Bavarian Palatinate, 6 miles N. of Landau. Pop. 6008.

Edessa (Arabic *Er-Ruha*, called by travellers *Orfa*), a very ancient city, in the north of Mesopotamia, between Aleppo and Diarbekir, 78 miles SW. of the latter town. Made a Roman military colony (216 A.D.), it was an early seat of Christianity, but was conquered by the Moslems in 638. It was twice wrested from them (1031–86 and 1097–1144); in 1147 it was laid waste; and all who were not massacred were sold as slaves. Since 1515 it has formed a portion of the Turkish dominions. Edessa has numerous mosques and bazaars; manufactures of cotton goods, goldsmiths' wares, and morocco leather, and a large trade. Easterns, to whom it is the residence of Abraham, regard it as a sacred city. Pop. 20,000, of whom 2000 are Armenian Christians.

Edfu (Coptic *Atbô*, Egypt. *Teb*, Gr. *Apollinopolis Magna*), a town of Upper Egypt, on the Nile's left bank, in 25° N. lat., and 32° 45′ E. long. It contains the remains of two temples: the larger (451 by 250 feet) is the best-preserved monument of its kind in Egypt, and was founded by Ptolemy IV. Philopator about 210 B.C. Pop. 2000.

Edgbaston, a western suburb of Birmingham. The Oratory here (1849) was founded by, and till his death was the home of, Cardinal Newman.

Edgehill, a hill-ridge on the border of Warwick and Oxford shires, 14 miles SSE. of Warwick. A tower, erected in 1760, marks the scene of the indecisive battle, the first in the Great Rebellion, which was fought on Sunday, 23d October 1642, between 12,000 royalists under Charles I. and 10,000 parliamentarians under the Earl of Essex.

Edgewater, once a town of Staten Island, since 1897 included in Richmond borough of New York.

Edgeworthstown, a town of County Longford, 67½ miles WNW. of Dublin. It was the home of Maria Edgeworth. Pop. 570.

Edgware, a village of Middlesex, 11¼ miles NW. of King's Cross station. In a forge here, where he had taken refuge from the rain, Handel conceived his 'Harmonious Blacksmith.' Pop. of parish, 864.

Edinburgh (*Ed'din-bur-ro*), capital of Scotland, and county town of Midlothian, situated in 55° 57′ N. lat., 3° 11′ W. long. By rail 393 miles NNW. of London, 44 to 47¼ E. of Glasgow, it stands 2 miles from the Firth of Forth, on a series of ridges, and is overlooked by Arthur's Seat and other hills (see EDINBURGHSHIRE), to the foot of which it has now extended; of hills within the city itself the highest are the Castle Rock (437 feet) and the Calton (349). Although the Castle Rock, which for centuries was considered an almost impregnable fortress, must have been a place of refuge and of arms from the earliest times, Edinburgh is first noticed in history in the beginning of the 7th century, as a stronghold of Northumbria, from whose king Edwin it is said to derive its name. In 1093 its castle figures in the story of St Margaret, queen of Malcolm Canmore, and the little Norman chapel on the summit of the rock, dedicated to her memory, is the oldest building connected with the city. In 1128 David I. founded the abbey of Holyrood, about a mile east of the castle, and round it grew up the little burgh of the Canongate, which maintained its separate municipality until 1856.

To the east of the castle, where the ground slopes down from the rock in a narrow 'hog's back,' there grew up the town of Edinburgh. In 1329 it was made a burgh by Robert the Bruce, by a charter which also granted the town the right of establishing a port at Leith, 2 miles distant; thus began the vassalage of the port to the capital, which continued until 1833, when Leith was made a burgh. It was during the 15th century, under the Stewart dynasty, that Edinburgh began to be recognised as the capital, and parliament regularly met here, at first within the great hall of the castle, and afterwards in the City Tolbooth, until in 1631 the present Parliament House was erected. James V. further confirmed its choice as the capital by building a palace within the abbey of Holyrood; and by establishing, in 1532, the Court of Session, as a supreme court of justice for Scotland. In 1450 the first wall was built; and in 1513, after the defeat at Flodden, an extended wall was erected to include the suburb of the Cowgate, which had meantime arisen in the valley to the south. The town was defended on the west by the castle; on the north by a morass, called the 'Nor' Loch;' and on the east and south by the city wall. As the population increased, the houses rose higher and higher, until the town abounded in great 'lands' of houses, which, being erected on the steep sides of the 'hog's back,' had entrances from two levels, and rose to ten, twelve, and even fourteen

stories in height. In 1583 the university was founded; shortly after the middle of the 18th century the town wall was broken down in every direction, and the Nor' Loch was drained; whilst access was given to the country sloping down to the Firth of Forth, on which arose the New Town, by the erection in 1763–72 of the North Bridge (rebuilt in 1894–95). In 1785 the valley to the south, in which lies the Cowgate, was bridged, and the town spread southwards. In 1815–19 another bridge was thrown over a deep hollow on the north-east, and the Calton Hill was connected with the city; while in 1827–36 George IV. Bridge was built across the Cowgate parallel to the South Bridge.

The modern city now spreads on every side round the steep ridge to which for centuries she was confined. It is especially fortunate in its open spaces and public parks. The Princes Street gardens occupy the site of the old Nor' Loch, at the foot of the Castle Rock; the range of the Meadows and Links—the remains of the once extensive Burgh Muir—divides the town proper from the southern suburbs; the old royal hunting-ground attached to Holyrood—the King's Park and Arthur's Seat—is open to the citizens; on the north are the Botanic Gardens and the Arboretum (1824–81); and on the south Blackford Hill and the Braids have been added (1884–89) to the town property devoted to recreation. The view from either Arthur's Seat or Blackford Hill is a very noble and extensive one; that from the latter eminence is finely described in Scott's *Marmion*.

Edinburgh has many buildings famous in history, or important from their architectural merit. The Abbey and Palace of Holyrood, the latter rebuilt by Sir William Bruce of Kinross in 1671–79, and the former represented by its ruined chapel, are a memorial of the old Scottish monarchy; of the castle, the earliest portion, the old Parliament Hall, was restored (1888–92) by the late Mr William Nelson, publisher, while the Queen Mary portion contains the Scottish regalia; St Giles' Church, the old parish church of Edinburgh, dating most of it from the 15th century, was restored by the late Dr William Chambers, the work being completed in 1883; the Parliament House, erected in 1633 for the Scottish parliament, is now used as the 'Outer House' of the Supreme Courts, and adorned with many fine portraits and statues belonging to the Faculty of Advocates; John Knox's House is the 'manse' used by the great Reformer while minister of the town; the beautiful 17th-century building of Heriot's Hospital is now (since 1885) used as a technical school. Many of the modern buildings are fine. The Episcopal Cathedral of St Mary's, opened in 1879, is one of the largest churches built in Britain since the Reformation; and many of the other churches are handsome buildings; while the National Gallery (1850–58), the Royal Institution (1823–36), the Museum of Science and Art (1861–89), the National Portrait Gallery and Antiquarian Museum (1885–90), the Blackford Observatory (1893–95), and many of the banks, insurance-offices, clubs, and public schools are fine buildings, and occupy sites made remarkable by the broken nature of the ground on which the city is built. Among its numerous monuments are the graceful Gothic spire (1844) in memory of Sir Walter Scott, and the Prince-Consort Memorial (1876).

Edinburgh has been long known for its educational institutions, and these draw many inhabitants to the city for the benefits they offer. At the head of these is, of course, the university, founded in 1582, and comprising the faculties of arts, science, divinity, law, medicine, and music, with 50 chairs and over 3000 students. The present university buildings were begun in 1789 from designs by the elder Adam, and completed in 1887 by the addition of a dome. New medical buildings were opened in 1884, a students' union in 1889, and the M'Ewan college hall in 1895. Besides the university there are theological halls connected with the United Free, Episcopal, and other churches, and normal schools for training teachers. The High School and Academy, and many of the private schools, have also attained a high reputation; but the most noteworthy feature perhaps is the exceptionally large sum which is annually derived for educational purposes from bequests left by citizens. Among the principal is the trust founded by George Heriot in Charles I.'s time, which now yields £30,000 per annum, applied by the Act of 1885 to the Heriot-Watt Technical College, and to the maintenance of a Science and Technical School; the trusts under the charge of the Merchant Company of Edinburgh, with an annual income of £40,000, applied principally to middle-class education; and the Fettes endowment, applied to higher-class education on the English model. In libraries Edinburgh is rich, having besides the University Library (200,000 vols. and 5000 MSS.), the magnificent collection of over 350,000 volumes belonging to the Faculty of Advocates, and the valuable library of the Society of Writers to the Signet, amounting to nearly 90,000 volumes. A free public library was also erected in 1887–89, the building being a gift of Mr Andrew Carnegie of Pittsburgh, U.S. The Royal Infirmary (1736), which occupies spacious new buildings of 1870–80, is a necessary adjunct to the great medical school, and is one of the most admirably appointed hospitals in Europe.

Edinburgh, as a residential town, is probably the most important shopkeeping centre out of London; it is not in any great measure a manufacturing town, its most important industries being brewing, printing, and publishing. It has been known for its printers since 1507, when Walter Chepman set up the first Scottish printing-press. The publishing of books, with the subsidiary businesses of printing, bookbinding, and type-founding, is now a most important industry; the publications of Messrs Blackwood, Chambers, Nelson, and numerous other firms are well known; and the book-factories are exceptionally large and well appointed. There are many paper-mills near the city; and in or near it there are distilleries, india-rubber manufactories, tanneries, and nurseries. Edinburgh is a great railway centre, and, besides suburban railways, has a complete cable system of tramways. It is divided, for municipal purposes, into sixteen wards, and for parliamentary purposes into four divisions. Portobello was incorporated in 1896, and Granton in 1900. Pop. (1831) 136,548; (1861) 221,846; (1901) 316,837.

See works by Maitland (1753), Arnot (1779), Sir D. Wilson (1847; new ed. 1892), Drummond (1879), R. L. Stevenson (1878), Grant (1880–82), Sir A. Grant (for university, 1884), Lees (for St Giles', 1889), Mrs Oliphant (1890), Hutton (1891), Geddie (1900), Oliphant Smeaton (1904), and Miss R. Masson (1904).

Edinburghshire, or MIDLOTHIAN, a Scottish county, extending 12 miles along the low southern shore of the Firth of Forth. Its greatest length

from east to west is 36 miles; its greatest breadth, 24; and its area, 367 sq. m. The surface has a general southward rise to the Pentlands, culminating in Scald Law (1898 feet), and the Moorfoot Hills, whose highest point is Blackhope Scar (2136). Intermediate eminences are Arthur's Seat (822), Blackford Hill (500), Corstorphine Hill (520), Craiglockhart (550), the Braid Hills (698), and the Dalmahoy Crags (800). The streams —Esk, Water of Leith, and Almond—all flow to the Forth, with the exception of Gala Water, which runs to the Tweed. Coal has been largely mined for nearly three centuries; and ironstone, oil-shale, and fireclay are also raised. There are large quarries of sandstone at Craigleith and elsewhere. Agriculture is highly advanced, though only 57 per cent. of the entire area is in cultivation. Near Edinburgh are large market-gardens and sewage-meadows; and on the Esk and the Water of Leith there are paper-mills. The county returns one member to parliament, and contains the parliamentary burghs of Edinburgh, Leith, Portobello, and Musselburgh, besides the police-burghs of Dalkeith, Bonnyrigg, Lasswade, Loanhead, and Penicuik. Pop. (1801) 122,597; (1841) 225,454; (1901) 487,554. Midlothian's four battlefields are Roslin, Pinkie, Carberry Hill, and Rullion Green; its antiquities are the Catstane, the Roman remains of Inveresk and Cramond, Roslin Chapel, and the castles of Borthwick, Crichton, Craigmillar, &c. See works by Small (2 vols. 1883), and Miss Warrender (1890).

Edin's Hall, a ruined broch in Berwickshire, on Cockburnlaw, 4½ miles NNW. of Duns.

Edmonton, an urban district of Middlesex, 10½ miles NNE. of Liverpool Street Station, London. Lamb spent his last years here, and is buried in the churchyard; and here, too, is the 'Bell,' where John Gilpin did not dine. Pop. of parish (1861) 10,936; (1891) 36,351; (1901) 46,899.

Edmonton, the capital of the Canadian province of Alberta, as defined in 1905, is situated on the North Saskatchewan River, which is navigable hither from Winnipeg. Pop. 3000.

Ednam, a Roxburgh parish, on the Eden, 2½ miles NNE. of Kelso. The poet, James Thomson, was a native.

Edom (Heb., 'red'), a name applied to the whole country extending from the Dead Sea southwards to the Gulf of Akabah. Its chief town, Sela, stood on the eastern slope of Mount Hor (4320 feet), the highest peak of Mount Seir, other towns being Maon (now Maan), Bozrah (now Buseirah), Punon, and the seaports Elath and Ezion-geber on the Gulf of Akabah.

Edwardesabad, a town and cantonment in the Kuram Valley, 50 miles up from the Indus, named from Sir Herbert Edwardes, who reduced the tribes here to order. Pop. 10,000.

Edzell Castle, Forfarshire, 7 miles N. by W. of Brechin, a ruined seat of the Lindsays.

Eecloo, a town of Belgium, on the Lièvre, 12 miles NW. of Ghent by rail. It manufactures woollens, cottons, &c. Pop. 13,164.

Eel Pie Island, Middlesex, in the Thames, opposite Twickenham.

Egba, an African state or territory on the borders of Dahomey and the Yoruba country.

Eger (*Ay'ger; g* hard), a Bohemian town, on the river Eger, 66 miles NW. of Pilsen by rail. It was formerly a border fortress of some importance, but its fortifications were razed in 1809; it is now a great railway centre. The ruins of the imperial burg consist of a square black tower, a chapel, and part of the great hall. The industries include weaving, brewing, shoemaking, &c. In the town-house Wallenstein was murdered (1634). Eger was taken by the Swedes in 1631 and 1647, and by the French in 1742. Pop. 27,148.—The river Eger rises 12 miles NW. of the town, in the Fichtelgebirge, at an altitude of 2362 feet and flows 190 miles ENE. to the Elbe opposite Leitmeritz. See also ERLAU.

Egerdir, a small town of Konieh vilayet, Asia Minor, gives name to a beautiful fresh-water lake, 30 miles long, between the Sultan Dagh and northern offshoots of the Taurus Mountains.

Egg. See EIGG.

Egga, an African trading town on the Niger, in Gando, since 1900 part of (British) Northern Nigeria. Pop. 15,500.

Egham, a Surrey village on the Thames, 1½ mile W. by S. of Staines. Pop. of parish (1861) 4864; (1901) 11,895.

Egilshay, an Orkney island, 11 miles N. of Kirkwall. Area, 2½ sq. m.; pop. 142.

Eglinton Castle, the seat (1798) of the Earl of Eglinton, in Ayrshire, 2½ miles N. of Irvine. Here was held the Eglinton Tournament (1839).

Egremont (*Eg're-mont*), a Cumberland market-town, on the Ehen, 6 miles SE. of Whitehaven, whither it sends by rail the iron ore mined in the neighbourhood. On an eminence to the west stands the ruined castle, the legend of whose horn was sung by Wordsworth. Pop. of parish, 6105.—(2) A NW. suburb of Birkenhead.

Egripo. See EUBŒA.

Egypt, a country in North-east Africa, extending from the Mediterranean to the first cataract of the Nile at Assouân, from 31° 36′ to 24° 6′ N. lat. The name is derived from the Greek *Aigyptos*, perhaps a transliteration of *Hakeptah*, 'the city of Ptah'—i.e. Memphis. In Hieroglyphics and Coptic, it was called *Kemi* (Black Land), from the colour of the soil; the Hebrew *Mizraim* is still preserved in the Arabic *Misr*. Egypt is literally, what Herodotus termed it, 'the gift of the Nile;' for it extends only so far as the annual inundation of the river spreads its layer of alluvial sediment, brought down from the washing of the Abyssinian mountains, and turning the barren rock into cultivable soil. Geologically and ethnologically, Egypt is confined to the bed of the flooded Nile, a groove worn by water in the desert; and the bordering deserts and the southern provinces of Nubia and the Soudan towards the equator form no part of the Egypt of nature or of history, though from time to time they have been politically joined to it. Thus limited, Egypt occupies little more than 11,000 sq. m., or about a third of the area of Ireland, and from Wady Halfa to the Mediterranean, with the desert, the area is nearly 400,000 sq. m.

The Nile, after breaking through the rocky barrier at Assouân, pursues a northerly course, varied by only one considerable bend near Thebes, until, a few miles north of Cairo, it divides into two main streams, terminating in the Rosetta and Damietta mouths, through which, after a course of 3300 miles, it pours during 'high Nile' some seven hundred thousand million cubit metres daily into the Mediterranean Sea. The other five mouths which existed in antiquity have silted up; the triangular or Δ-shaped district enclosed by them, formed the Delta, now called Lower Egypt. The basin of

the Nile is bounded by the smooth rounded ranges of the Arabian hills (which are not in the Arabian peninsula, but in Egypt, between the Nile and the Red Sea) on the east, and the Libyan on the west; neither rising as a rule higher than 300 feet above the sea-level, though near Thebes the eastern hills attain an altitude of 1200 feet. One great physical peculiarity of Egypt is the general absence of rain; occasional showers have indeed become more frequent of late years, but the land still depends for irrigation upon the annual overflow of the Nile. The reservoir works at Assouan and Assiout (1902; see NILE) add greatly to the cultivable area. The climate is remarkably mild, especially south of the Delta and in the desert; from Cairo to Alexandria the air contains more moisture, while the Mediterranean coast is subject to rain, and infected by the belt of salt-marshes. From June till February cool northerly winds prevail; then till June comes a period of easterly, or, still worse, hot southerly sand-winds called the *Khamâsin*. The simoom is a rare but violent sand-wind. Earthquakes are occasionally felt. The temperature in winter in the shade averages 50° to 60° F., and in the heat of summer 90° to 100° in Lower Egypt, 10° higher in the upper valley. The most remarkable phenomenon is the regular increase of the Nile, fed by the fall of the tropical rains. In the middle of July the 'red water' appears in Egypt, and the rise may be dated from that time; it attains its maximum (an average rise of 36 feet at Thebes, of 25 at Cairo) at the end of September, and begins to decline visibly in the middle of October, loses half its height by January, and subsides to its minimum in April. By the end of November, the irrigated land, over which the water has been carefully equalised by drains and embankments, has dried and is sown; soon it is covered with green crops, which are reaped in March. Except in the dry air of the valley and desert, Egypt is by no means remarkably healthy.

The signal peculiarity of the vegetation of the Nile Valley is the absence of woods and forests. Even clumps of trees (except palms) are rare. The date and the doom palm, the sycamore, acacia, tamarisk, and willow are the commonest trees. Among fruit-trees, the vine, fig, pomegranate, orange, and lemon abound; apricots, peaches, and plums are of poor flavour; Indian figs (prickly pears) and bananas have been naturalised; and water-melons are at once the meat and drink of the people in the hot days. Of flowers, the lotus, or water-lily, has long been famous. The lack of jungle or cover of any sort accounts for the poverty of the Egyptian fauna. The hyæna, jackal, wolf, fox, hare, rabbit, jerboa, lynx, ichneumon, and weasel are common enough; the antelope is the chief quarry; but the wild ass and wild cat are almost extinct; and the crocodile, like the hippopotamus, scared by European rifles, is beating a retreat to the tropics. The ordinary beasts of burden are the ass and camel; and there are buffaloes and short-horned cattle; goats also are common. There are three or four varieties of vulture; eagles, falcons, hawks, and kites are common, as is also the ibis. Of reptiles, besides the vanishing crocodile, lesser saurians—chameleons and lizards—abound. Serpents are numerous, and among these the dreaded cobra and the cerastes. The Nile is full of fish, generally of rather poor flavour. The Sacred Beetle (*Scarabæus sacer*) is one of the most remarkable insects. The scorpion's sting is sometimes fatal. Egypt is essentially an agricultural country, and in some parts, by the aid of regulated artificial irrigation, the rich alluvial deposit will bear as much as three crops in the year. Wheat is the principal cereal; but barley, maize, durra, beans, lentils, clover, &c. are also largely grown, with very little trouble beyond the management of the water. The extensive culture of papyrus, which anciently supplied material for paper, has in modern times been superseded by that of the sugar-cane, cotton, indigo, and tobacco.

In ancient as in modern times Egypt was always divided into the Upper and the Lower, or the Southern and the Northern, country. For the divisions of the territory outside Egypt proper, annexed in 1876, and abandoned in 1885, extending as far south as the Victoria Nyanza, see SOUDAN. The population of the country, placed at 7,000,000 under the Pharaohs, in 1844 was 2,500,000; in 1859, 5,125,000; and in 1897, 9,734,405 in Egypt proper. There are about 10,000 schools (seven-eighths elementary), with 17,000 teachers and 228,000 pupils; the government has under its immediate direction 150 schools, including schools for law, medicine, agriculture, and engineering. Of the inhabitants 92·23 per cent. are native Mohammedans; the Copts are 600,000, and the rest include Bedawis (Bedouins), Negroes, Abyssinians, Turks, Syrians, Armenians, Jews, Greeks, and other Europeans. The dominant population in antiquity appears almost certainly to have been of mixed origin, part Asiatic and part Nigritic; and there seems to have been an aboriginal race of copper colour, with rather thin legs, large feet, high cheek-bones, and large lips. The chief towns of Egypt proper are Cairo (pop. 570,062); Alexandria (319,766); Tantah (57,289); Port Said and Assiout, over 40,000; Zagazig, Mansourah, Damietta, and Fayoum, over 30,000; and Kena, 27,500. There are in Egypt about 113,000 foreigners, including 38,000 Greeks, 24,000 Italians, 20,000 Englishmen, and 14,000 Frenchmen. The Egyptian army is under the command of an English general, and officered partly by Englishmen and partly by Egyptians; its total strength is 18,000, while the English army of occupation, which, since the rebellion of 1882, has remained in Egypt, has a strength of over 5500. The finance of Egypt has improved enormously under British management, irrigation and cotton cultivation greatly helping; the revenues have been increased, the burdens on the people greatly lightened. The revenue in 1903 was £E11,000,000, the expenditure £E10,975,000; in 1904 the revenue was over £E13,000,000, being two millions in excess of the estimates. The chief sources of revenue are the land-tax, the tobacco monopoly, and customs; the principal items of expenditure are the service of the debt and the internal administration. The total debt of Egypt amounted in 1904 to £E102,186,920, the interest on which was met by a total charge of £E4,384,549 in the year's budget, including the tribute to Turkey (£665,041). The total exports in 1889-1903 (chiefly cotton, cotton-seed, beans, sugar, and grain) increased from £E7,020,000 to £E19,118,487 (of which over one-half went to Britain); the imports (mainly cotton goods and other textiles, machinery, and coal) from £E11,950,000 to £E16,753,190 (about a third from Britain). Some cotton is now exported to the United States. The railway system embraces over 1450 miles, connecting Alexandria and Damietta with Cairo and the Suez Canal, and extending up the Nile Valley as far south as Siout; the telegraphs reach 2562

miles, and there is a telephone between Cairo and Alexandria.

The epoch of Menes, the earliest known point in Egyptian history, is variously calculated at from 5004 B.C. to 3892. Egypt was in the height of its glory under the 19th dynasty, to which Rameses I. and II., and Meneptah (son of the latter, and probably the Pharaoh of Exodus) belonged. The Persians conquered Egypt in 527 B.C., Alexander the Great in 332 B.C., and the Romans after 31 B.C. The Arab and Moslem conquest took place in 641 A.D. Napoleon invaded the country in 1798; and a new epoch in recent Egyptian history began with the able reign of Mohammed Ali (Mehemet Ali) in 1805. Ismail Pasha, his grandson, obtained in 1867 the title of Khedive, and made extensive conquests in the Eastern Soudan, but was deposed by the Sultan in 1879, at the instance of the western powers, and succeeded by his son Tewfik. In 1881 came the revolt by Arabi Pasha, suppressed at Tel-el-Kébir by Britain, whose troops now occupied Egypt, France having withdrawn. The troubles with the Mahdi fall between 1881 and 1885, the year of Gordon's death. Egypt, still nominally a tributary province of the Ottoman empire, became under Ismail practically an autonomous state under an hereditary Khedive. Since the occupation in 1882 British influence is supreme, and the Khedive, who has a native ministry, is not allowed to contravene the advice of the British minister resident (Lord Cromer). Under Abbas II. (from 1892), who at first strove to escape from British control, the prosperity of the country has increased rapidly; and the Anglo-French agreement of 1904 removed the most serious embarrassment to the administration.

For ancient Egypt, see works by Sharpe, Wilkinson, Brugsch, Mariette, Maspero, and others; for modern Egypt, S. L. Poole (1881), Mackenzie Wallace (1883), Fraser Rae (1892), Milner (1892), Steevens (1898), Cameron (1898), Silva White (1899), Worsfold (1900), and Dicey (1902).

Ehrenbreitstein (*Ay-ren-brite'stine*), a town and fortress of Prussia, is situated on the Rhine's right bank, directly opposite Coblenz, with which it is connected by a bridge of boats and an iron railway-viaduct. Pop. 5299. The fortress (1672) crowns a precipitous rock, 387 feet above the river. The French vainly besieged it in 1688, but captured it in 1799, and in 1801 blew up the works. It was assigned to Prussia in 1815, and in 1816–26 was thoroughly fortified.

Ehrenfeld, a busy town of Prussia, since 1888 incorporated with Cologne, manufactures glass-wares, railway fittings, chemicals, bricks, &c. Pop. about 30,000.

Eibenstock, a town of Saxony, 41 miles SSW. of Chemnitz by rail. It has since 1775 become a centre of lace-making industry. Pop. 7913.

Eichstätt (*Ikh-stätt*), a town of Bavaria, in a deep valley on the left bank of the Altmühl, 67 miles NNW. of Munich. Here are the palace of the Dukes of Leuchtenberg, the cathedral (1259), the town-house (1444), and, on a neighbouring eminence, the ruined Wilibaldsburg. Pop. 7631.

Eider (*Ider*), a river of N. Germany, forming the boundary line between Sleswick on the north and Holstein on the south, rises south-west of Kiel, and winds 117 miles westward to the North Sea at Tönning. It is navigable to Rendsburg, whence the Eider Canal (constructed 1777–84) stretches east to Kiel Harbour in the Baltic.

Eifel, The (*I'fel*), a bleak plateau of Rhenish Prussia, between the Rhine, Moselle, and Rore. Its surface, 1500 to 2494 feet in altitude, is for the most part broadly undulating, and diversified by crater-like depressions and volcanic peaks and ridges, whilst towards its edges it is seamed by deep, wooded, rocky ravines.

Eigg, or Egg, a Hebridean island, 7½ miles W. of the mainland of Inverness-shire, and 5 SW. of Skye. With an utmost length and breadth of 6½ and 4 miles, it is 12 sq. m. in area, and culminates in the remarkable Scuir of Eigg (1346 feet), near which are columnar cliffs like those of Staffa. Pop. (1851) 546; (1901) 211. Here in 617 St Donnan and fifty more monks from Iona were killed; and here, towards the close of the 16th century, 200 Macdonalds were smoked to death in a cave by Macleod.

Eil, Loch, a sea-loch of Argyll and Inverness shires. It consists of Upper Loch Eil (6⅜ miles × ¾ mile), striking eastward, and Lower Loch Eil (9⅝ miles × 2 miles), striking south-westward. The latter is rather part of Loch Linnhe.

Eildons, a triple-crested height in Roxburghshire, S. of Melrose, whose middle and highest peak (1385 feet) commands a glorious view.

Eilenburg (*I'len-boorg*), a manufacturing town of Prussian Saxony, on an island in the river Mulde, 15 miles by rail NE. of Leipzig. Pop. 16,032.

Eimeo (Fr. *Moorea*), one of the French Society Islands, in the Pacific Ocean, 10 miles WNW. of Tahiti. Area, 51 sq. m.; pop. 1500. It consists of deep fertile valleys and abrupt wooded hills. Here Christianity was introduced in Polynesia; and here the South Sea College of the London Missionary Society was established.

Einbeck, or Eimbeck, a decayed town of Hanover, on the Ilme, 23 miles N. of Göttingen by rail. It was noted in the 15th century for its beer (*Eimbecker Beer*, whence 'Bock'). Pop. 7991.

Einsiedeln (*Ine-zee'deln*), a town in the Swiss canton of Schwyz, 27 miles SE. of Zurich by rail. It makes great numbers of prayer-books, images, rosaries, &c., but is chiefly celebrated for its Benedictine abbey (10th c.; rebuilt 1719), to which some 200,000 pilgrims resort annually to the shrine of a black image of the Virgin, the 14th September being the principal day in the year. Near the town the French defeated the Austrians, 14th August 1799. Pop. 8501.

Eisenach (*I'zen-ahh*), a town of Saxe-Weimar, is beautifully situated at the north-western verge of the Thuringian Forest, 69 miles by rail SE. of Cassel, and 49 W. of Weimar. It has a ducal palace (1742), now used as a court-house; a spacious market-place, and manufactures of art pottery, leather, &c. Bach, of whom a statue was erected in 1884, was a native; and Fritz Reuter died here in 1874. Population, above 31,000. On an eminence rising 600 feet above the town, engirt by forests, stands the Wartburg, founded in 1067, and till 1440 the castle of the Landgrave of Thuringia. It is famous as the spot where the Minnesingers assembled to hold a poetic contest ('the war of the Wartburg') about 1207; as the home of St Elizabeth (1511–27); and as the ten months' asylum to which Luther was carried by the Elector of Saxony (May 1521). The chapel in which Luther preached, and the chamber in which he discomfited the Evil One by throwing the inkstand at his head, are pointed out. The pile was magnificently restored in 1847–70.

Eisenberg, a town of Saxe-Altenburg, between the Saale and Elster, 36 miles SE. of Leipzig. Pop. 8901.

Eisenerz, a mining town of Austria, in the north of Styria, 20 miles NW. of Bruck. It stands in a narrow mountain-valley at the north foot of the Erzberg (5011 feet), a mountain so rich in iron ore that the miners quarry the rock from the outside. Pop. 6950.

Eisenstadt, a town of Hungary, 26 miles SE. of Vienna. The Esterhazy palace (1683–1805) here contains a valuable library. Pop. 2972.

Eisleben (*Īze-lay'ben*), Luther's birthplace, a mining-town of Prussian Saxony, 24 miles WNW. of Halle. Population, above 24,000. The house in which Luther was born was partially burnt in 1689, but was restored, as also have been the house in which he died, the church (Peter-Paulskirche) where he was christened, and another (Andreaskirche) in which he preached. In 1883, his quatercentenary, a bronze statue was unveiled of the Reformer, and a new gymnasium inaugurated, successor to the one which he founded two days before his death.

Ekaterinburg, a fortified town of Russia, on the east slope of the Urals, and on the Isset, 312 miles SE. of Perm by rail. It has two cathedrals, and a mint for copper coinage, and is in the centre of the Ural mining districts. Its manufactures include iron, copper, machinery, soap, candles, and linen. Pop. 56,750.

Ekaterinodar, a Russian town, capital of the country of the Kuban Cossacks, on the Kuban River, 100 miles from its mouth. It has a cathedral and a military hospital. Pop. 66,308.

Ekaterinoslav, a government in South Russia, reaching in the south-east to the Sea of Azov. Area, 26,050 sq. m.; pop. 2,153,543.—The capital, Ekaterinoslav ('Catharine's fame'), on the Dnieper, 323 N. by E. of Sebastopol by rail, has a cathedral and large tobacco-factories. It was founded in 1784 by Prince Potemkin for the summer residence of the Empress Catharine II. It was the birthplace of Madame Blavatsky. Pop. 121,200.

Ekhmim, or IKHMÍM (anc. *Apu* or *Khemmis*, Greek *Panopolis*), a town of Upper Egypt (pop. 15,000), on the east bank of the Nile, 15 miles S. of Girgeh.

Ekowe, the capital of Zululand (q.v.).

Ekron, the northernmost of the five great cities of the Philistines, on the borders of Judah and Dan.

El Araish, or LARAISH, a seaport of Morocco, 45 miles SSW. of Tangier; pop. 5000.

El Arish, an Egyptian town (pop. 17,000), on the Mediterranean, at the mouth of the Wady-el-Arish, held to mark the boundary between Egypt and Syria, Africa and Asia.

Elba (Gr. *Æthalia*, Lat. *Ilva*), an Italian island in the Mediterranean, 6 miles off the coast of Tuscany. Area, 85 sq. m.; pop. 26,997. The coast is precipitous, the interior traversed by three ranges which reach 3380 feet. The chief industry is iron-mining; serpentine, chalk, granite, and marble also are quarried, while salt is produced from salt-pans. Much wine is made, and the tunny-fisheries are important. Porto Ferrajo, the capital, has a pop. of 5391. Elba was the place of Napoleon's exile, 1814–15.

El Bassan, a town of Turkey, in central Albania, 75 miles SSE. of Scutari. Pop. 15,000.

Elbe (the Roman *Albis* and the Bohemian *Labe*), an important river of northern Europe. It is formed by numerous streams which rise on the southern side of the Riesengebirge, a range on the borders of Bohemia, and unite at an elevation of 2230 feet above sea-level. Thence it winds 725 miles north-westward through Bohemia, Saxony, Anhalt, and Hanover, passing Pirna, Dresden, Meissen, Torgau, Wittenberg, Magdeburg, Harburg, and Hamburg, until it empties itself into the North Sea at Cuxhaven, where it attains a breadth of upwards of 10 miles. Here the tide rises about 10 feet; it is felt 100 miles up the river. The Elbe is navigable for 525 miles, as far as Melnik, but for sea-vessels only up to Hamburg (84 miles); and it drains an area of 55,000 sq. m., of which two-thirds is German territory. Of its fifty and more tributaries, the most important are the Moldau, Eger, Mulde, Saale, and Havel (with the Spree); and in connection with these is a fine system of canals. The Elbe is divided into several branches between Hamburg on the north, and Harburg on the south, by the numerous islands that there interrupt its course; and between Hamburg and the sea the sandbanks and shoals leave only a very narrow channel, 4 to 5 fathoms deep. The scenery of the Elbe, although generally pleasing, is not remarkable, except in the Saxon Switzerland, above Dresden, where the river's course is between fantastic sandstone cliffs.

Elberfeld, one of the manufacturing capitals of Germany, on the Wupper, an affluent of the Rhine, 16 miles ENE. of Düsseldorf. It is famous for its dyeing, bleaching, and calico-printing establishments, also for its extensive manufactures of cotton, silks, tapes, ribbons, thread, lace, buttons, fancy woollen goods, &c. Its Turkey-red dyeworks are especially noted. There are also manufactures of machinery, iron and steel wares, pianofortes, paper, and carpets, besides large breweries. For miles around an immense number of weavers are labouring for the Elberfeld factories. Pop. (1875) 80,599; (1890) 125,899; (1900) 156,966.

Elbeuf (nearly *El-buf'*), a town in the French dep. of Seine-Inférieure, on the left bank of the Seine, 14 miles S. by W. of Rouen by rail. The manufactures of cloth, flannel fabrics, billiard cloth, and light woollens of every colour and description, employ some 25,000 men here and in the neighbouring towns (Caudebec, &c.), and the annual output of the district is valued at from 85,000,000 to 95,000,000 francs. Pop. (1872) 22,563; (1901) 18,164.

Elbing, a town of West Prussia, 48 miles by rail ESE. of Danzig, on the navigable Elbing, which enters the Frisches Haff 5 miles to the north. Founded in the 13th century by colonists from Lübeck and Bremen, it has a 14th-century church, and a public library with over 25,000 volumes. A canal connects it with the Dreventz, a tributary of the Vistula, and in 1877–84 a mole was constructed in the harbour, 3500 yards long and 5½ wide. Steamships and torpedo-boats are built here; and there are large iron and brass rolling-mills, and tinware, machine, and cigar factories, &c. The linen industry and the export of lampreys are also of importance. Pop. (1875) 33,572; (1900) 52,520.

Elburz (*El-boorz'*), a mountain-range of Persia, running for 450 miles along the southern border of the Caspian Sea, and culminating in Mount Demavend (q.v.).—ELBURZ is also the name of the loftiest summit of the Caucasus (q.v.).

Elché (*El'tchay*), a Spanish town, 13 miles SW. of Alicante by rail, fringed by an encircling grove of nearly 100,000 palms, which gives the place an appearance half Moorish. It has a fine collegiate church, with a lofty tiled dome. Pop. 29,636.

Elchingen (*Elkh'ing-en*), a Bavarian village, near the Danube, 5 miles NE. of Ulm. Here, on 14th October 1805, Ney defeated the Austrians.

Elcho Castle, a ruin, Perthshire, on the Tay, 5¼ miles ESE. of Perth.

Elderslie, a Renfrewshire village, 2½ miles W. by S. of Paisley. It is the traditional birthplace of Wallace.

Eldon, a Durham township, 3½ miles SE. of Bishop Auckland.

Elephanta (native *Ghárápuri*), an island over 4 miles in circuit, in the harbour of Bombay, 6 miles E. of the city, and 4 from the mainland. It owed its European name to a large figure of an elephant near its former landing-place, which, after 1814, gradually sank into a shapeless mass. Of its far-famed Brahmanic rock-caves (9th c.), four are complete, or nearly so; the most important is the Great Temple, still used by the Hindus on Sivaite festivals. It is hewn out of a hard trap-rock, and measures 130 feet either way. The most striking of its many sculptures is a three-headed bust of Siva, nearly 18 feet high and 23 feet round the eyes.

Elephantiné (Arab. *Gezírat Aswân* or *Gezírat-ez-Zahr*, 'isle of flowers'), a small island of the Nile, with remains of an ancient city, lying opposite to Assouan (q.v.), on the confines of Egypt and Nubia, in 24° 5′ N. lat., and 32° 34′ E. long. Its ruins were much demolished in 1822.

Eletz. See Jeletz.

Eleusis, an ancient town of Attica, on the Bay of Eleusis, opposite Salamis. It was the seat of the worship of Ceres, whose mystic rites were performed here with great pomp. Its site is now occupied by the little village of Lefsina, 16½ miles WNW. of Athens by rail.

Eleu'thera, one of the Bahamas (q.v.), has an area of 238 sq. m., and a pop. of 7010.

Elgin (*El'gin; g* hard), county town of Elginshire, 5 m. by rail SSW. of its port, Lossiemouth, 37 ENE. of Inverness, 178 N. of Edinburgh. It lies on the Lossie, in the 'garden of Scotland;' and while it retains a few quaint old houses, a cross (restored 1888), and its ruined cathedral, it has brightened up much during the 19th century. The Elgin Institution was erected in 1832 as an almshouse and school, out of £70,000 bequeathed by General Anderson. Other edifices are Gray's Hospital (1819) and the adjoining asylum (1834–65), the county buildings (1866), the court-house (1841), the market buildings (1850), the academy (1800), and the parish church (1828), with a tower 112 feet high. The once glorious Gothic cathedral (1224–1538) was 289 feet long by 120 across the transept, with two western towers, and a loftier central spire (198 feet). It was partially burned in 1270, and again in 1390 by the 'Wolf of Badenoch;' was dismantled in 1568; and in 1711 was finally reduced to ruins by the fall of the great tower. The chapter-house, with its 'prentice pillar,' is noteworthy. Little remains of the royal castle, which in 1296 lodged Edward I. of England; its ruins are surmounted by a monument (1839–55) to the last Duke of Gordon. A royal burgh since the reign of David I. (1124–53), Elgin unites with Banff, Macduff, Peterhead, Inverurie, Cullen, and Kintore to return one member. Pop. (1831) 4493; (1901) 8460.

Elgin, a city of Illinois, on the Fox River, 36 miles WNW. of Chicago, with large watch-works and manufactures of carriages and agricultural machinery. Pop. (1880) 8787; (1900) 22,433.

Elginshire, or Moray, a Scottish county extending 33 miles along the low shore of the Moray Firth. It is 34 miles long, and 488 sq. m. in area, a former detached portion having in 1870 been annexed to Inverness-shire, whilst a corresponding portion was transferred from that county to Elginshire. The surface has a general southward ascent, and attains a maximum altitude of 2328 feet. Rivers are the Spey, Lossie, and Findhorn; and of several small lakes much the largest is Lochindorb (2 miles by 5 furlongs). West of the Findhorn's mouth are the sand-dunes of Culbin, due to drifting chiefly in 1694, and some of them rising 118 feet. Agriculture is highly advanced over all the flat fertile lower tract. Elgin and Nairn shires return one member to parliament. Pop. (1801) 27,760; (1841) 35,012; (1901) 44,800. The ancient province of Moray included the counties of Elgin and Nairn, with parts of Banff and Inverness. Antiquities are Kinloss Abbey (1150), Pluscarden Priory (1230), a Romanesque church at Birnie, and the castles of Duffus, Lochindorb, and Spynie. See the history by Rampini (1897).

Elgon, a volcanic mountain mass, 40 miles square, in British East Africa, 50 miles NNE. of the Victoria Nyanza, first visited by Joseph Thomson in 1883; highest point of the crater's rim, 14,100 feet above the sea. The southern slopes show a series of vast caves, partly artificial.

Elie, a watering-place of Fife, 23 miles NE. of Edinburgh. Pop. with Earlsferry (q.v.) 1000.

Eliock House, the birthplace of the 'Admirable' Crichton, in Dumfriesshire, 3 miles SE. of Sanquhar.

Elizabetgrad, a fortified town of South Russia, in the government of Kherson, 283 miles by rail NE. of Odessa. Soap-boiling, tallow-refining, and candle-making are carried on. Elizabetgrad was founded in 1754, and named after the Empress Elizabeth. Pop. 63,418.

Elizabeth City, capital of Union county, New Jersey, and formerly capital of the state, lies 5 miles SSW. of Newark by rail, with one quarter (Elizabethport) on Staten Island Sound. It is the seat of a large Singer sewing-machine factory, and of manufactories of oilcloth, pottery, ironwares, hats, combs, &c. Elizabethport has steamboat communication with New York City, 12 miles NW., and ships much anthracite coal. A great drawbridge over Staten Island Sound, 800 feet long, with a draw-span 500 feet long, connects New Jersey here with the Staten Island shore. Pop. (1880) 28,229; (1900) 52,130.

Elizabetpol, a town of Russian Transcaucasia, on a tributary of the Kur. Pop. 19,000.

Elkhart, a town of Indiana, at the junction of the St Joseph and Elkhart rivers, 101 miles E. by S. of Chicago by rail, with manufactures of paper, machinery, flour, starch, &c. Pop. 15,360.

Elland, a town in the West Riding of Yorkshire, on the river Calder, 3 miles SE. of Halifax by rail. It has cloth-mills, and valuable stone-quarries in the vicinity. Pop. 12,000.

Ellen's Isle. See Katrine (Loch).

Elleray, the Westmorland seat of Prof. Wilson ('Christopher North'), close to Windermere village.

Ellesmere, a Shropshire town, near a beautiful lake or mere of 120 acres, 19 miles NNW. of Shrewsbury. Population, 2000. The Ellesmere Canal, connecting the Severn and the Mersey, passes here. It is carried across the Dee and the Vale of Llangollen by Telford's Ellesmere Aqueduct (1805), 1007 feet long and

127 high. Ellesmere Port, at its mouth, on the Mersey, is on the Manchester Ship Canal.

Ellesmere Land, part of the Arctic territory west of Smith Sound.

Ellice Islands, in the South Pacific, due N. of Fiji, and SW. of Samoa, extend for 360 miles from NW. to SE. between 5½° and 11° S. lat., and 176° and 180° E. long. They consist of nine groups of atolls or coral islands, one of which groups, known specially as Ellice Islands (the main island in it being Funafuti), was discovered in 1819 by the American Captain Peyster. Another had previously been discovered in 1781. The islands grow little but cocoa-nut trees, copra being the main export. Pop. 2500 Polynesians, mostly Christianised.

Ellichpur, a town in the north of Berar, at one time capital of the Deccan, and said to have contained 40,000 houses. Its buildings include a ruinous palace, a fort, and several handsome tombs of the nawábs. The military cantonment of Paratwada is 2 miles distant. Pop. 36,240.

Ellisland, Burns's farm in Dumfriesshire, on the Nith's right bank, 6 miles NNW. of Dumfries.

Ellon, an Aberdeenshire village, on the Ythan, 20 miles N. by E. of Aberdeen. Pop. 1554.

Ellora, a village in the Nizam's dominions, 13 miles NW. of Aurungabad. Of its wonderful rock-cut temples, which date from the 7th century, there are 34 of a large size, Buddhist, Brahmanical, and Jain. Some are cave-temples proper; but others are vast buildings hewn out of the solid granite of the hills, having an exterior as well as an interior architecture.

Ellore (*Elúr*), a town in the Godavari district, Madras, on the Jammaler River, 255 miles N. of Madras, with manufactures of woollen carpets and saltpetre. Pop. 39,382.

Ellsworth, a port of entry in Maine, on the river Union, 28 miles SE. of Bangor, with a large lumber trade. Pop. 4304.

Ellwangen (*Ell-vang'en*), a town of Würtemberg, on the Jagst River, 55 miles N. of Ulm. Pop. 4993. Hohen-Ellwangen, an old castle close by, has been an agricultural school since 1843.

Elm, a Swiss village in Glarus canton, with 1000 inhabitants when, in 1881, the whole of the northern side of Tshingel Peak (10,230 feet) crashed down upon it.

Elmalu, a town of Asia Minor, in the province of Konieh, 45 miles W. of Adalia. Pop. 25,000.

Elmina, a British settlement on the Gold Coast, W. of Cape Coast Castle. First settled by merchants of Dieppe, it came to the Portuguese in 1471, to the Dutch in 1637, and in 1872 to the British, who destroyed the native town during the Ashanti war. Pop. 6000.

Elmira, capital of Chemung county, New York, on the Chemung River, 149 miles ESE. of Buffalo by rail. It manufactures iron rails, railway and other carriages, flour, leather, woollens, boots, &c. Pop. (1870) 15,863; (1900) 35,672.

Elmshorn, a town in the Prussian province of Sleswick-Holstein, on a navigable feeder of the Elbe, 20 miles NW. of Hamburg. Pop. 15,000.

El Obeid. See OBEID (EL).

Elopura. See BORNEO.

El Paso del Norte (*El Páh'zo del Nor'tay*, 'the pass of the north'), or EL PASO, a town of Mexico, on the Rio Grande's right bank, 1232 miles NNW. of Mexico City by rail. Pop. 6000.—On the opposite bank is El Paso, capital of El Paso county, Texas. Population, 16,100.

Elphin, a town (once episcopal) of Roscommon, 9 miles SW. of Carrick-on-Shannon. Pop. 855.

Elsass-Lothringen. See ALSACE-LORRAINE.

Elsinore (Dan. *Helsingör*), a seaport of Denmark, on the island of Zealand, and on the western shore of the Sound, at its narrowest part, 2½ miles nearly due west of Helsingborg in Sweden, and 37 by rail N. of Copenhagen. The harbour (enlarged in 1883–84) has 18 to 20 feet of water, and the roadstead outside affords excellent anchorage. Pop. 14,082. Saxo Grammaticus was born here, and here too Shakespeare lays the scene of *Hamlet*. A little east of the town is the castle of Kronborg, built by Frederick II. in 1580, while to the north-west stands the royal castle of Marienlyst.

Elster, the name of two rivers of Germany. The White Elster rises at the foot of the Elster Mountains, on the NW. boundary of Bohemia, and flows 122 miles N. to the Saale, above Halle, in Prussian Saxony. The Black Elster rises in Saxony, south of Elstra, and flows 112 miles NW. to the Elbe, 9 miles SE. of Wittenberg.

Elstow, Bunyan's birthplace, 1½ mile S. of Bedford.

Elstree, a village on the south border of Herts, 7 miles S. of St Albans, with a noted school. Pop. 750. In a gig on the road near Elstree, Thurtell in 1823 shot Weare; and the 'Gills Hill murder' and trial largely occupied contemporary literature.

Elswick, a western part of Newcastle, forming three wards of the county borough. Here are the works of Sir W. G. (Lord) Armstrong. The engineering section dates from 1847, the ordnance-works from 1857. Elswick Park, including Elswick Hall, was opened as a recreation ground in 1878.

Eltham, seat formerly of a royal palace in Kent, now part of the metropolitan borough of Woolwich (q.v.).

Elton, a shallow, oval-shaped salt lake of Russia, 62 sq. m. in area, is situated in the government of Astrakhan, in lat. 48° 56′ N., and long. 46° 40′ E. The annual yield of salt ranges between 88,000 and 96,000 tons.

Elvas, the strongest fortified city of Portugal, near the Spanish frontier, 10 miles W. of Badajoz by rail. Pop. 13,471.

Ely (*Ed'lie*), a city of Cambridgeshire, crowns a low eminence on the left bank of the Ouse, amid the fen-land, 16 miles NNE. of Cambridge, and 30 SE. of Peterborough. Here, in 673, St Etheldreda founded a mixed monastery, which, burned in 870 by the Danes, was refounded in 970 as a Benedictine abbey. That abbey a century later became Hereward's 'camp of refuge,' until, in 1071, Abbot Thurstan had to surrender to the Conqueror. In 1083 the first Norman abbot laid the foundation of the present church, which was made a cathedral in 1109, and which, as we see it to-day, is one of the most glorious shrines in Christendom. A cruciform structure, 537 feet long by 179 feet across the great transepts, it offers examples of all styles of Gothic, from early Norman to late Perpendicular, and is a growth of more than four centuries. There is the western tower, 225 feet high (1174–1382); the late Norman nave (1150–89), 208 by 78 feet, with modern painted ceiling; the richly sculptured choir (1234–1533); and at the crossing, the exquisite Decorated 'octagon' and lantern (1322–42), built by Alan de Walsingham on the fall of the great central tower. This, 'the only Gothic dome in

existence,' rises to a height of 170 feet. The 13th-century Guesten Hall is now the deanery, and the 'Ely Porta,' or great gateway (1380), houses a grammar-school founded by Henry VIII. in 1541. The Bishop's Palace is a fine brick Tudor building. Cromwell lived here 1636-40. There is a weekly market; and oil, earthenware, and clay-pipes are manufactured. The population is about 7700. The 'Isle' of Ely contains also March and Wisbeach, and is 355 sq. m. in area. Till 1837 it was a county palatine.

Emba, a river in the Kirghiz territory, Asiatic Russia, flowing 450 miles SW. to the Caspian.

Embrun (*On^g'brun^g'*; anc. *Ebrodunum*), a fortified town in the French dep. of Hautes Alpes, on the Durance, and at the base of Mont St Guillaume (8344 feet), 23 miles E. of Gap by rail. The cathedral of its former see (374–1802) has a lofty Romanesque tower. Pop. 3857.

Emden, the chief commercial town in the Prussian province of Hanover, a little below the embouchure of the Ems into Dollart Bay, 77 miles WNW. of Bremen by rail. Walled and moated, it is well built, with several lofty antique houses in the Dutch style, and is intersected by numerous canals. A canal runs south from the town to Dollart Bay, a distance of two miles; but it is navigable at high-water only, and then only by vessels of 14 feet draught. The finest building is the town-hall (1574–76). Emden has a large shipping trade and several manufactures; the principal industry, however, is shipbuilding. Pop. 17,020. Emden belonged originally to East Friesland, and after various vicissitudes was created a free imperial town under Dutch protection in 1595, but in 1744 passed to Prussia. After belonging successively to Holland, France, and Hanover, it again became Prussian in 1866.

Emilia, a compartimento of Central Italy, comprising the provinces of Bologna, Ferrara, Forlì, Modena, Parma, Piacenza, Ravenna, and Reggio Emilia. Through them passed the ancient *Via Æmilia*, and hence the name.

Emmerich (*Em'mer-ihh*), an old town of Rhenish Prussia, on the Rhine, 94 miles by rail E. of Rotterdam. It manufactures iron, glass, tobacco, &c. The seat of a famous Jesuit seminary from 1592 to 1811, its pop. dwindled from 40,000 in the 15th century to 8000; it is now 11,000.

Em'poli, a town of Italy, on the Arno, 22 miles WSW. of Florence. Pop. 6719.

Emporia, capital of Lyon county, Kansas, on the Neosho, a tributary of the Cottonwood River, 61 miles SSW. of Topeka by rail. Pop. 8551.

Ems, a river of north-west Germany, rises in Westphalia, on the south-west slope of the Teutoburger Wald, and flows 205 miles NW. and N. to Dollart Bay, an estuary of the German Ocean. It is navigable as far as Greven (139 miles), and canals connect it with the Lippe and Jade.

Ems, or Bad Ems, a German bathing-place known to the Romans, on the river Lahn, 10 miles ESE. of Coblenz by rail. Pop. 6431, a number more than doubled by patients. Its warm mineral springs (80–135°) contain soda and carbonic acid gas. Here, in 1870, Benedetti got his final answer from King William.

Emsworth, a small seaport of Hampshire, 2 miles ESE. of Havant. Pop. 1881.

Enara, an isleted lake in the extreme north of Finland, 550 sq. m. in area.

Enarea, or Limmu, a kingdom of Africa, SW. of Shoa, with an area of over 1100 sq. m., and 40,000 inhabitants. It is a land of forest-clad hills, over 8000 feet high, their slopes covered with the wild coffee-plant. Its people, a stem of the Gallas, are mostly Mohammedans. The chief town is Saka, near the river Gibbe.

Enderby Land lies in 65° 57′ S. lat., 47° 20′ E. long., discovered by the whaler John Briscoe in 1831, and named after his employer, Samuel Enderby, an adventurous London merchant, the grandfather of Chinese Gordon.

Endor, a village of Palestine, 4 miles S. of Tabor, now a poor mud hamlet.

Endrick, a Stirlingshire stream, winding 20 miles westward to the foot of Loch Lomond.

Enfield, a town of Middlesex, 13 miles N. of London. The government small-arms factory here is capable of turning out 5000 rifles a week; the ordinary output is, however, about 1800. Pop. (1851) 9453; (1891) 31,532; (1901) 42,738.

Engadine (*Eng'ga-deen*), a famous valley in the Swiss canton of the Grisons, and one of the loftiest inhabited regions in Europe, extends 65 miles NNE. along the Inn and its lakes, from the foot of Mount Maloja to the village of Martinsbruck. It is divided into two portions—the Upper Engadine towards the south-west, and the Lower Engadine to the north-east, the latter the wilder and bleaker of the two. The Inn has many villages upon its banks, the highest of which, St Moritz, is 6090 feet above sea-level, while the lowest, Martinsbruck, is 3343 feet. Most of these villages have of late years become health and pleasure resorts. Pop. 11,600, almost all of the Reformed Church. The language most generally spoken is the Ladin (a corruption of Latin), a Romance tongue, resembling Italian.

Enghien (*On^g-ghe-an^g'*), a watering-place and summer-resort, 7 miles N. of Paris, on a small lake. It has five sulphur-springs, good for the skin and throat. Pop. 2670.—(2) In the Belgian province of Hainault, a busy manufacturing place (beer, salt, lace, linen, and cloth). Pop. 4387.

England is the southern, the larger, and by far the more populous portion of Great Britain, the largest and most important of European islands. Separated from Belgium, Holland, Germany, and Denmark by the North Sea, from France by another 'streak of silver sea,' the Channel, and from Ireland by St George's Channel and the Irish Sea, the kingdom of England and Wales has only one short land frontier, that towards Scotland. In shape it forms an irregular triangle, of which the eastern side measures in a straight line 350 miles, the southern 325 miles, the western 425; but its shores are so deeply indented by bays and estuaries as to make the coast-line longer in proportion to the size of the land than in any other country but Scotland and Greece. The area of the British Islands (120,832 sq. m.) is less than $\frac{1}{71}$th of the land-surface of the world. The colonies and dependencies of the empire of which England is the centre now cover about a fifth of the land-area of the globe. England without Wales (50,823 sq. m.) is about the size of Roumania, less than a fourth of France or of Germany, and but little larger than the single state of New York (49,170 sq. m.); and England with Wales (58,186) is not equal in area to the state of Georgia (59,475), nor a fourth of the size of Texas. Twenty-eight of the states or territories in the Union are each larger than England, several much larger than the whole United Kingdom. Her name England owes to the *Engle* or Angles, who with the kindred Jutes

(*Geátas*) and Saxons (*Seaxe*) descended on Albion or Britain, inhabited by Celts and Celticised Iberians, and conquered and occupied the greater part of it in the 5th–8th centuries. These kindred peoples all learned to call themselves *Englisc* or English, and by *Englaland* they understood the whole area now occupied by them—an area which in the 7th century extended from the Forth to the English Channel. South-eastern Scotland, as occupied by Angles, and not by Saxons or Jutes, was in the stricter sense English; and the people of the non-Celtic parts of Scotland, though now markedly differing from the southern English, are in blood and in mental and physical type at least as English in the wider sense as the people of Oxford or Kent. Political circumstances led the English and Anglicised Celts of North Britain beyond Solway and Tweed to become the subjects of the alien Scottish king, but their language they still called *Inglis*, as distinguished from the Gaelic of their Highland fellow-countrymen.

The people of the southern kingdom constitute nearly three-fourths of the inhabitants of the three kingdoms; the English language in some form is that of all but a small minority in any of the three; the English literature is the common inheritance of the whole; the constitution and polity of England, slightly modified, is the British constitution under which the three kingdoms have unitedly become glorious. Hence it is not strange that not merely by Englishmen, but by all foreigners, the name of England is used for what, after the union of the crowns of Scotland and England in 1603, became officially Great Britain, and even for the whole empire, which, since the Irish Union of 1801, is strictly the United Kingdom of Great Britain and Ireland. For the physical features, geology, climate, and statistics of England, see GREAT BRITAIN.

The area of England without Wales is 50,823 sq. m.; that of Wales, 7363; together, 58,186. So that, as the area of the United Kingdom, with Scotland, Ireland, Man and the Channel Islands, is 120,382, England alone covers 42 per cent. of the whole, Wales 6, and England and Wales 48 per cent. The pop. of England and Wales in 1650 is estimated to have been 5,450,000. In 1750 it was probably 6,400,000. From that date the increase was rapid; and the census of 1801 showed a pop. of 8,892,536. In 1841 the pop. of England alone was 15,002,443; in 1851 it was 16,921,888; in 1861, 18,954,444; in 1871, 21,495,331; in 1881, 24,613,926. At the census of 1891, England had 27,483,490, and Wales 1,519,035, or together 29,002,525. In 1901 the population of England was 30,807,243, and of Wales 1,720,600; together 32,527,843, making 78·4 per cent. or three-fourths of the total population of the United Kingdom. The density of the pop. in England is greater than in any other European country (disregarding Monaco) save Saxony (725 per sq. m.) and Belgium (589). In 1901 it was for England alone 606 per sq. m.; for England and Wales, 558; for Scotland, only 150. In England and Wales there were, in 1901, 33 towns with more than 100,000 inhabitants, in Scotland only 4, in Ireland 2. In England there were 75 above 50,000, in Scotland 7, in Ireland 3. For the Welsh counties, see WALES; for the area of the English counties in square miles, see the articles on the counties. In 1901 the area (in acres) and the pop. of the historic English counties were as in the following table (meanwhile, under the Local Government Act of 1888, a county of London had been created for administrative purposes out of Middlesex and adjoining counties, with an area of 75,442 acres, and a pop. of 4,536,541, included in the following table in the old counties):

Counties.	Area.	Population.
Bedford	294,983	171,240
Berks	462,210	256,509
Buckingham	477,151	195,764
Cambridge	524,935	190,682
Cheshire	657,123	815,099
Cornwall	863,665	322,334
Cumberland	970,161	266,933
Derby	658,624	620,322
Devon	1,655,208	661,314
Dorset	627,265	202,936
Durham	647,592	1,187,361
Essex	987,032	1,085,771
Gloucester	783,699	634,729
Hampshire	1,037,764	797,634
Hereford	532,918	114,380
Hertford	405,141	250,152
Huntingdon	229,515	57,771
Kent	995,392	1,348,841
Lancashire	1,208,154	4,406,409
Leicester	511,907	434,019
Lincoln	1,767,879	498,858
Middlesex	181,317	3,585,323
Monmouth	370,350	292,317
Norfolk	1,356,173	460,120
Northampton	638,912	338,088
Northumberland	1,290,312	663,498
Nottingham	527,752	514,578
Oxford	483,621	181,120
Rutland	94,889	19,709
Shropshire	844,565	239,324
Somerset	1,049,812	508,256
Stafford	748,433	1,234,506
Suffolk	944,060	384,293
Surrey	485,129	2,012,744
Sussex	933,269	605,202
Warwick	566,271	897,835
Westmorland	500,906	64,303
Wiltshire	866,677	273,869
Worcester	472,453	488,338
York	3 882,851	3,584,762
Total of England	2,527,070	30,807,243
Total of the 12 Welsh Counties	4,712,281	1,720,600
Total of England and Wales	37,239,351	32,527,843

The situation of Britain has been shown to be in the very centre of the land-masses of the globe, a very great advantage for commerce and navigation; England, being nearer the European shores, enjoys the advantage in higher measure than its sister-kingdoms. Its seas are less stormy, and it has a greatly more developed system of navigable rivers. The north-west of England is mountainous and hilly, the east and south mainly a plain crossed by lines of low hills. The fertility of England is much greater than that of Scotland or Ireland, especially that of the wheat-bearing area of eastern England. The agriculturally productive area of England is estimated at 80 per cent. of its total, and of Wales 60 per cent., whereas that of Scotland is only 28·8 per cent., and of Ireland 74. England, whose surface has been said for variety to be an epitome of Europe, is very rich in minerals, of which coal and iron are incomparably the most important, making nine-tenths in value of the whole. The output of coal and iron in England is vastly greater than in Scotland, and Ireland is exceptionally poor in both.

England (peopled by a mixed race descended from pre-Aryan 'Euskarians,' Celts, 'Anglo-Saxons,' Danes, Normans, and other elements) became the special home and headquarters of agricultural enterprise, mineral production, machine-making of all kinds and steam-power, of commerce, navigation, and shipping. But the great and rapid advance which made the commerce and manufactures of England the wonder of the

world dates only from the later half of the 18th century, and is largely owing to the unparalleled development of machinery, the use of steam as a motive power, improved communication, and later, steam-navigation, railways, and electricity. It is very observable that the local distribution of the great industries of England has changed very greatly since the 17th century. At the Revolution period, most of the greater towns of England were in the south and east; but these have now been long outstripped by northern rivals, and what were then important manufacturing towns have in many cases sunk into mere villages. Now English manufacturing industries have most of their special seats in the north and midlands. The greater wealth of England as compared with Scotland and Ireland may be shown by a few miscellaneous figures as to textile industry, the collecting of customs, and the assessments for income-tax. There are in the United Kingdom about 7200 textile factories, of which 6185 are in England, 750 in Scotland, and 265 in Ireland. Of the total trade (exports and imports) 90·6 per cent. falls to England and Wales, 7·7 per cent. to Scotland, and 1·7 per cent. to Ireland. Of the coal raised in the United Kingdom in 1902 (227,084,871 tons) Scotland produced 34,115,309 tons. Though this indicates with approximate accuracy the movement of shipping, it is true that a share of the vessels in English ports belongs to Scottish owners, and Scotland builds in some years almost as large a tonnage as England does. The total amount of the annual value of property and profits assessed to income-tax in 1901–2 in the United Kingdom was £866,993,453; the share of England being £749,127,300; of Scotland, £83,515,877; and of Ireland, £34,350,276.

On England, besides the histories, and the books cited at Great Britain, see for physical geography works by A. Geikie, Seeley, Hull, Ramsay, Green, &c., and works named in Anderson's *Book of British Topography* (1881); also Escott, *England* (1879; 2d ed. 1886); Grant White, *England Without and Within* (1881); Thorold Rogers, *Agricultural Prices in England* (1866–93); T. H. Ward, *The Reign of Queen Victoria*; W. Besant, *Fifty Years Ago* (1887); W. Cunningham, *The Growth of English Industry and Commerce* (1882; 2d ed. 1890).

England, New. See New England.

English Channel. See Channel (English).

English Harbour, a port of Antigua (q.v.).

English River, (1) an estuary on the west side of Delagoa Bay; (2) another name for the Churchill River (q.v.).

Enkhuizen (*Enk-hoi'zen*), a town of North Holland, one of the 'dead cities of the Zuider Zee,' 35 miles NNE. of Amsterdam. It was the first town to throw off the Spanish yoke (1572), and was Paul Potter's birthplace (1625). Pop. 6751.

Enna. See Castrogiovanni.

Ennerdale Water, a Cumberland lake (2½ miles × ½ mile), 7½ miles ESE. of Whitehaven.

Ennis, a municipal borough of County Clare, on the Fergus, 151 miles WSW. of Dublin by rail. Here are the Catholic cathedral of Killaloe diocese, a fine court-house, the Clare lunatic asylum, large flour-mills, a school founded by Erasmus Smith (1689), a column to O'Connell (1863), and a memorial to the 'Manchester martyrs.' Till 1885 Ennis returned one member. Pop. (1851) 7840; (1901) 5093.

Enniscorthy, a Wexford market-town, on the navigable Slaney, 78 miles S. of Dublin by rail. It has a Norman castle, a church by Pugin, with a good spire, and a large corn-trade. Population, about 5500. Cromwell took Enniscorthy in 1649; and the rebels from Vinegar Hill stormed and burned it in 1798.

Enniskillen, a municipal (till 1885, also parliamentary) borough, the capital of County Fermanagh, 87 miles WSW. of Belfast, is beautifully situated on an isle in the river between Upper and Lower Loughs Erne. It has barracks, a lofty monument to Sir Lowry Cole, the Royal Portora School, and a manufacture of straw-plait. Population, about 5500. Enniskillen is famous for the victory, in 1689, of William III. over James II. The Enniskilleners, or 6th Dragoons, were drawn from the brave defenders of the town.

Enns, an Austrian river, rises in Salzburg, 12 miles S. of Radstadt, and flows 190 miles (only 20 navigable) northward to the Danube below Linz. It receives the Salza and the Steier.

Enoch, a little lonely loch of Kirkcudbrightshire, 6 miles SSW. of the head of Loch Doon.

Enos (anc. *Ænos*), a Turkish seaport, on a rocky isthmus near the Maritza's mouth, 35 miles NW. of Gallipoli. Pop. 8000.

Enschede (*En-skay'deh*), a town of Holland, 30 miles ENE. of Zutphen. Rebuilt since the fire (1862), it has yarn and cotton mills. Pop. 27,600.

En'terkin, a Dumfriesshire (q.v.) burn, rising on Lowther Hill, and running 5½ miles SSW. to the Nith between Sanquhar and Thornhill, with a descent of 1720 feet.

Entrecasteaux. See D'Entrecasteaux.

Entre Douro e Minho (*Entray Dooro-ay-Meen'yo*), or simply Minho, a province of NW. Portugal, is bounded N. by the river Minho, and S. by the Douro. Area, 2810 sq. m.; pop. 1,014,768. It comprises three districts, Braga, Vianna, and Oporto (the capital).

Entre Rios (*Entray Ree'os,* 'between rivers'), a province in the 'Mesopotamia Argentina,' between the Paraná and the Uruguay. Area, 29,021 sq. m.; pop. 350,000. Capital, Paraná.

Eperies (*Ay-pay-ree-esh'*; Slovak *Pressova*), an old town of Hungary, on the Tarcza, 150 miles NE. of Pesth by rail. A fire of 7th May 1887 destroyed 400 houses. It manufactures earthenware, linens, and woollens; and in the vicinity are the Sovar salt-works. Pop. 15,139.

Épernay (*Ay-per-nay'*), a French town in Marne, the headquarters of the wines of Champagne, on the Marne's left bank, 19 miles WNW. of Chalons. It manufactures earthenware, hosiery, refined sugar, and leather. Pop. (1872) 12,877; (1891) 18,252; (1901) 19,243.

Eph'esus, an ancient Ionic city of Asia Minor in Lydia, near the mouth of the Cayster, celebrated for the famous temple of the Ephesian Diana, the largest Greek temple ever built. It was the seat of one of the Seven Churches of Asia, and the scene of a great church council in 431, but perished utterly during the later Byzantine empire. There is now a wretched village, Ayasaluk, on its site; the ancient ruins include the theatre, the odeon, and the temple, excavated by Mr Wood in 1869–74.

Épinal (*Ay-pee-nâhl'*), capital of the French dep. of Vosges, at the western base of the Vosges Mountains, on the Moselle, 46 miles SSE. of Nancy by rail. It has a ruined castle, a church founded about 960, and manufactures of cotton, paper,

&c. Pop. (1872) 10,938; (1901) 21,392, an increase largely due to the influx of Alsatians.

Epirus (*Ep-ī'rus*), a mountainous region of the Balkan Peninsula, between Mount Pindus and the Ionian Sea. Peopled largely since the 14th century by Albanians, it formed latterly a part of the Turkish vilayet of Janina. Under pressure from the great powers, Turkey ceded the portion east of the river Arta to Greece in 1881.

Epping, a market-town of Essex, at the north end of Epping Forest, 16 miles NNE. of London. It is noted for its cream, butter, sausages, and pork. Population, 4000.—Epping (formerly Waltham) Forest once covered all Essex, and extended almost to London. Enclosures gradually curtailed it from 60,000 acres to 12,000 in 1793, and to less than 4000 in 1871, when the corporation of London undertook the preservation of all that was left, and the recovery of the more recent enclosures. As an outcome of their exertions, and at a cost of about £500,000, the Queen declared 5600 acres of Epping Forest free to the public on 6th May 1882. Reached easily from Loughton, Chingford, and other stations, Epping Forest is still a glorious place alike for naturalist and mere holiday-maker. Its 9 sq. m. of almost unbroken woodland, which at High Beech or Queen Victoria's Wood attain 379 feet above sea-level, form one of the most extensive and beautiful pleasure-grounds in Europe. Separated by a stream from Epping Forest is Hainault Forest (the 'garden fair' of Mr Besant), disafforested in 1851. Here, till 1820, stood Fairlop Oak, the scene of a July fair, as famous in its way as the old Epping stag-hunt on Easter Monday. See works by Buxton (1884) and Fisher (1887).

Epsom, a market-town of Surrey, on the margin of the Banstead Downs, 15 miles SSW. of London. The sulphate of magnesia springs, which made Epsom so fashionable a resort in the later half of the 17th century, gave name to the Epsom salt formerly manufactured from them. The Royal Medical College (1851), on the Downs, provides education for the sons of medical men, and affords a home to decayed members of the profession and their widows. Pop. (1841) 3533; (1901) 10,915. On the Downs, 1½ mile S. of the town, the famous horseraces are held yearly; the Derby stakes dating from 1780.

Epworth, a Lincolnshire market-town, in the 'Isle' of Axholme, 10 miles NNW. of Gainsborough. John Wesley was a native. Pop. 2500.

Ercildoune. See Earlston.

Erdington, an urban district of Warwickshire, 5 miles NE. of Birmingham. Pop. 16,368.

Erebus, Mount, an active volcano (12,760 feet) in Victoria Land, discovered in 1841 by Ross.

Eregli (*Heraclea*), a port on the Black Sea coast of Asia Minor, 125 miles E. of the Bosporus, and terminus of the Bagdad railway scheme. Pop. 700.

Eretria, an ancient trading town on the SW. coast of Eubœa.

Erfurt (*Er-foort'*), a city of Prussian Saxony, once capital of Thuringia, stands in a highly cultivated plain, on the Gera, 13 m. W. of Weimar by rail. Till 1873 it was strongly fortified. Its two citadels, the Petersberg and the Cyriaksburg, were formerly monasteries. The cathedral is one of the most venerable Gothic buildings in Germany, with a very rich portal, and a bell cast in 1497, and weighing 13½ tons. The monastery of St Augustine, famous as the residence of Luther, whose cell was destroyed by fire in 1872, was converted in the year 1819 into a foundling asylum. From 1378 to 1816 Erfurt was the seat of a university, of which the academy of sciences and the library (60,000 volumes and 1000 MSS.) alone remain. The growing of flowers and vegetables, and an extensive trade in flower-seeds are carried on. The principal manufactures are woollen, silk, cotton, and linen goods, lamps, machines, shoes, beer, malt, &c. Pop. (1871) 42,616; (1900) 85,190. Erfurt, originally called Erpesford or Erpesfurt, was made a bishopric in 741. In the 15th century its woollen and linen manufactures raised it to the position of one of the foremost cities of Germany. Since 1803 (except during 1806–14) it has belonged to Prussia.

Ergasteria, a mining town of Attica, near Cape Colonna, with ancient lead and silver works, reopened in 1864. Pop. 6500.

Ericht, Loch, a lonely lake between Perth and Inverness shires, 1 mile from Dalwhinnie station, and 60 miles NW. of Perth. Lying 1153 feet above sea-level, it stretches 14¾ miles SSW., is 512 feet deep, is overhung by Ben Alder (3757 feet), and sends off a stream 6 miles to Loch Rannoch.—Another Ericht runs 10 miles SE. to the Isla near Coupar-Angus.

Erid'anus. See Po.

Erie (*Ee'ry*), the most southern of the five great lakes which empty themselves by the St Lawrence, separates the province of Ontario, in Canada, from Michigan, Ohio, Pennsylvania, and New York. It receives at its western extremity the waters of Lakes Superior, Michigan, and Huron by the river Detroit, and discharges them at its north-east by the Niagara into Lake Ontario. With a length of 240 miles, Erie has a breadth varying from 30 to nearly 60 miles, with an area of 9960 sq. m. It is 8¾ feet below Lake Huron, and 326 and 573 respectively above the Ontario and the Atlantic. The shores are for the most part low and clayey. At its south-western extremity are several wooded islands, the largest 14 miles in circumference. It is by far the shallowest of the five great lakes. Its mean depth is 70 feet, its maximum 210 feet; and from this comparative shallowness and the consequent liability to a heavy ground-swell, as well as the small number of good harbours, the navigation is difficult and dangerous; still the amount of traffic is enormous. It is connected by one canal with the Hudson, and by more than one with the Ohio; while, on the British side, it communicates with the Ontario by means of the ship-channel of the Welland Canal. From the beginning of December it remains more or less frozen till March or April. Lake Erie was the scene of a naval defeat of the British by the Americans, September 10, 1813.

Erie, the capital of Erie county, Pennsylvania, on Lake Erie, 88 miles SW. of Buffalo, and 95 NE. of Cleveland. It is a port of entry and important centre of trade, its harbour, one of the largest and best on the lake, being formed by an island 4 miles long, whose name, Presque Isle (Fr., 'peninsula'), preserves the memory of its having been once connected with the mainland. The belt of water thus sheltered forms a natural harbour; it is now protected by a breakwater, is 3 to 4 miles long and 1 mile wide, and varies in depth from 9 to 25 feet. The town's important industrial works include oil-refineries, tanneries, iron-foundries, paper, flouring, and planing mills, factories for railroad cars, engines and boilers, &c. It is a Roman Catholic bishop's see. A natural-gas well was opened here in 1889. Pop. (1870) 19,646; (1880) 27,737; (1900) 52,733.

Erin. See IRELAND.

Eriskay, an Inverness-shire island, 2 miles S. of South Uist. Here Prince Charles Edward landed, 23d July 1745. Pop. 474.

Erith, a town of Kent, on the right bank of the Thames, 15½ miles by rail E. of Charing Cross. It is a summer-resort for Londoners, and the headquarters of several yacht clubs; in the Erith and Plumstead Marshes are large powder-magazines, the scene of a great explosion (1864). Here the *Grace de Dieu* was built in 1515. Pop. of parish (1851) 3231; (1901) 25,296. See C. J. Smith's *History of Erith* (1873).

Eritrea. See ITALY.

Erivan' (Persian *Rewán*), the fortified capital of a Transcaucasian government, on the elevated plain to the north of Ararat, on the river Sanga, 3432 feet above sea-level. The town dates probably from the 7th century A.D.; in later years it was held alternately by Persians and Turks. Pop. 29,000. The province has an area of 10,165 sq. m., and a pop. of 805,000, nearly all Armenians and Tartars. See ETCHMIADZIN.

Erlangen (*Er'lang-en*), a town of Bavaria, on the Regnitz, 12 miles N. of Nuremberg. As old as the 10th century, it owes its prosperity to the settlement here of French Huguenots (1685), and to its university (1743), which is celebrated as a school of Protestant theology, and attended by from 600 to 900 students. A statue of its founder, the Margrave Frederick of Brandenburg-Baireuth, was erected in the market-place in 1843. There are manufactures of hosiery, gloves, mirrors, tobacco, and especially beer. Burned in 1449 and 1632, Erlangen came to Bavaria in 1809. Pop. 25,000.

Erlau (*Er'low*; Hung. *Eger*), a city of Hungary, on the Erlau, 89 miles NE. of Pesth. It has a domed cathedral, built since 1837 at a cost of £67,000, and 328 feet long; a lyceum (1761–99), with library and observatory; a hospital (1830); and two warm baths. The Erlau red wine is the best of Hungary. Pop. 25,427.

Ermeland (*Er'meh-lant*), a district of the old province of Prussia, inland of the Frisches Haff.

Ermenonville (*Erm'non^{g}veel'*), a village 18 miles NNE. of Paris. Rousseau died here.

Erne, a river of Ulster, rising in Lough Gowna, on the borders of Longford and Cavan counties, and flowing 72 miles north-west, through Loughs Oughter and Erne, to Donegal Bay. Lough Erne extends 40 miles through Fermanagh county, consisting of two lakes, the Upper and Lower, which are joined by a network of channels 10 miles long. Both are studded with green hilly islands, and teem with salmon and trout.

Erroman'go, one of the New Hebrides (q.v.), the scene of the martyrdom of the missionary John Williams.

Eryx, the ancient name of a mountain in NW. Sicily, near Drepanum (mod. Trapani), with a famous temple of Venus, hence called *Erycīna*.

Erzberg. See EISENERZ.

Erzerûm (*Er-zer-oom'*), a town in Turkish Armenia, not far from the Kara-Su, or western source of the Euphrates. It stands 6200 feet above sea-level, surrounded by mountains. In spite of the Transcaucasian Railway, Erzerûm is still an entrepôt between Europe and the interior of Asia, particularly Persia. It imports shawls, silk goods, cotton, tobacco, rice, indigo, &c., and exports corn, sheep and cattle, horses, mules, gall-nuts, and copper and iron wares. Pop. 40,000. Erzerûm, which passed to the Turks in 1517, had early in the 19th century 100,000 inhabitants; but it suffered much in the wars of 1829, 1854–55, and 1877–78.

Erzgebirge (*Ertz'ge-bir'ge*, *g* hard; 'Ore Mountains'), a mountain-chain stretching SW. and NE. for 96 miles on the confines of Saxony and Bohemia, from the Elbe valley to the Fichtelgebirge, and culminating in the Keilberg (4052 feet) and Fichtelberg (3980). Silver and lead are the chief metals; next come tin, iron, cobalt.

Esbjerg (*Es-byerg*; *g* hard), a port of Denmark, the best on the west coast of Jutland, with a large export trade in cattle, &c., mostly to England. Its harbour was rebuilt in 1868–74, and the pop. has grown from 4000 to 15,000.

Eschscholtz Bay (*Esh-sholtz*), the innermost part of Kotzebue Sound, in Alaska. It was named after the naturalist Eschscholtz (1793–1834), who sailed with Kotzebue.

Eschwege (*Esh'vay-ge*; *g* hard), a town in the Prussian province of Hesse-Nassau, on the Werra, 40 miles ESE. of Cassel by rail. Pop. 9892.

Eschweiler (*Esh'vei-ler*), an industrial town of Rhenish Prussia, 8 miles ENE. of Aix-la-Chapelle, has important iron, zinc, and tin works, machine-shops, tanneries, &c. Pop. 22,889.

Escorial, or ESCURIAL (Span., 'mining rubbish,' cf. *scoriæ*), an immense royal palace, mausoleum, and monastery of Spain, 31 miles NW. of Madrid, on the south-eastern slope of the Sierra Guadarrama, at an altitude of 3700 feet. Of dark-gray granite, stern and forbidding of aspect, it was built by Philip II. in 1563–84, partly to provide a royal burying-place for the kings of Spain, partly to commemorate his victory over the French at St Quentin on St Lawrence's day, 10th August 1557. Its general shape is that of a quadrangular parallelogram, 706 feet long by 550 broad, with a smaller square projecting from the east side, in shape thus somewhat resembling St Lawrence's gridiron. At each corner rises a tower 200 feet high; and in the centre a cupola 312 feet. The library, once one of the richest in Europe, still contains over 32,000 vols. and 4500 valuable MSS., including 1900 written in Arabic. In the palace the most interesting apartment is the cell of Philip II., in which he spent his last days. The Escorial was for the second time greatly injured by fire in 1872.

Esdraelon (*Ez-dra-ee'lon*), or PLAIN OF JEZREEL, a fertile valley of Palestine, constituting the basin of the Kishon, extends westwards from Mount Hermon to the slopes of the Carmel range. Here Gideon defeated the Midianites, and here in 1799 the Turks were defeated by the French.

Esher, a pretty village of Surrey, on the Mole, 15 miles SW. of London by rail. Here are Esher Place, a brick gate-tower of Wolsey's palace, and Claremont (q.v.). Pop. 10,000.

Esk (Cymric *wysg*, Gael. *uisge*, 'water,' akin to *Exe*), the name of several small Scotch rivers. The Dumfriesshire Esk, formed by the Black and White Esks (12 and 14 miles long), runs 22 miles SSE., next 5 furlongs along the Border, and lastly 8 miles SSW. through Cumberland to the head of the Solway Firth. It passes Langholm and Longtown, receives the Tarras, Liddel, &c., and affords capital fishing.—The Edinburghshire Esk, formed by the North and South Esks (17 and 19 miles long), flows 4 miles northward to the Firth of Forth at Musselburgh. Its scenery is very pretty, the northern branch passing Habbie's Howe, Roslin, Hawthornden, and

Melville Castle.—In Forfarshire the South Esk runs 49 miles SE. and E. to the North Sea at Montrose, and the North Esk 29 miles SE. to a point 4 miles N. of Montrose; both give earls' titles to branches of the Carnegie family—South-esk (1633) and Northesk (1662).—There is an Esk in SW. Cumberland, and one in the Cleveland district of Yorkshire.

Eski-Djumna, a town of Bulgaria, 20 miles WSW. of Shumla. Pop. 10,038.

Eskilstuna, 55 miles W. of Stockholm, is a very important centre of the Swedish iron and steel industries, and is very famous for its cutlery. Pop. 15,000.

Eski-Shehr, an important railway junction in the NW. of Asia Minor, 165 miles W. of Angora. Pop. 20,000.

Eski-Zagra, a town of Eastern Roumelia, at the southern base of the Balkans, 70 miles NNW. of Adrianople. Pop. 20,000.

Esla, a northern tributary of the Douro.

Esmeraldas (Span., 'Emeralds'), the most northerly maritime province of Ecuador. Area, 5200 sq. m.; pop. 14,600.—The capital, Esmeraldas (pop. 3000), stands 10 miles from the mouth of the navigable river Esmeraldas.

Esné, a town of Upper Egypt, on the Nile's left bank, 36 miles above Luxor, with some interesting remains of antiquity. Pop. 16,000.

Espir'ito Santo (Port., 'Holy Spirit'), a maritime province of Brazil. Area, 17,053 sq. m.; pop. 131,562. Capital, Victoria.

Espir'itu Santo, (1) the largest and most westerly island of the New Hebrides, with an area of 1868 sq. m., and a pop. of 20,000.—(2) An island in the Gulf of California, 30 miles N. of La Paz.—(3) A cape of Tierra del Fuego.

Esquimalt, a port with docks at the south end of Vancouver Island, on Juan de Fuca Strait, 5 miles W. of Victoria. Till Canada assumed military and naval responsibility in 1905, it was used as a British naval station. Its admirable harbour, connected by rail with the coalfield of Nanaimo, has increased since the opening of the Canadian Pacific Railway, and the connected Japanese and Australian mail routes. Pop. 1500.

Essek (Roman *Mursia*), the capital of Slavonia, on the right bank of the Drave, 12 miles above its confluence with the Danube, and 189 S. of Pesth by rail. It has been the seat of a bishopric since 335 A.D. Pop. 23,000.

Essen, a town in Rhenish Prussia, 22 miles by rail NE. of Düsseldorf, stands in the midst of a rich coal and iron district. It possesses numerous establishments for manufacturing iron, chief among them being the celebrated Krupp works and cannon-foundries, whose hands have risen from 74 men in 1848 to over 30,000. There are other manufactures. Pop. (1875) 54,852; (1900) 182,100. Although its industrial activity is recent, the town itself dates from the foundation of the Benedictine nunnery in 873.

Essendon, in Victoria, 5 miles NW. of Melbourne, has a pop. of 16,000.

Essequi'bo, the most westerly of the great rivers of British Guiana, rises in the Acarai Mountains, 46 miles N. of the equator, and after a course of 620 miles enters the Atlantic, forming an estuary 15 miles wide, in which lie numerous fertile islands, but the entrance to which is much silted up. Navigable for 35 miles only, owing to cataracts, it receives a number of large tributaries, as the Rupununi, and the united Cuyuni and Mazaruni; on the Potaro, another affluent, is the grand Kaieteur Fall, 741 feet in sheer descent, discovered in 1870.

Essex, a county in the east of England, washed by the North Sea, and separated from Kent by the Thames estuary, from Suffolk by the Stour. Measuring 57 miles from east to west, and 44 from north to south, it has an area of 1657 sq. m. The low flat seaboard is close on 100 miles long, deeply indented by shallow creeks, and much of it fringed by desolate salt-marshes. Inland the surface becomes gently undulating or even hilly, with Danbury Hill (317 feet), Laindon Hill (378), and High Beech (350), and in the NW. nearly 500 feet. The rivers are the Thames, Stour, Lea, Stort, Colne, Blackwater, Crouch, Roding, and Chelmer—rivers that sometimes flood the low-lying lands. In 1884 an earthquake, proceeding from north-east to south-west, did almost £10,000 damage. Nearly 79 per cent. of the entire area is in cultivation. Epping Forest (q.v.) is a mere remnant of the once wide woodlands, whose total area is now reduced to less than 44 sq. m. Fishing is not very actively prosecuted; and the Colne has long been famous for its oysters. Brewing is an important industry, especially at Romford; but outside of the metropolitan area there are no great manufactures. Essex since 1877 has been included in the new diocese of St Albans, and since 1885 has returned one member to parliament for each of its eight divisions—South-west or Walthamstow, South or Romford, West or Epping, North or Saffron Walden, North-east or Harwich, East or Maldon, South-east, and Mid or Chelmsford. Chelmsford is the county town; and towns other than the above are Colchester, Stratford, Barking, Braintree, Brentwood, Coggeshall, Dunmow, Halstead, Harlow, Ilford, Ongar, Witham. Pop. (1801) 227,682; (1881) 576,434; (1901) 1,085,771. Essex was named after the East Saxons. Castle Hedingham and Audley End are famous mansions. Among Essex worthies have been Tusser, John Ray, Quarles, Sydney Smith, and Isaac Taylor. See works by Morant (1768), Suckling (1845), E. Walford (1882), and Barrett (1892).

Essex, a manufacturing village of Middlesex county, Connecticut. Pop. 2530.

Esslingen (*Ess'ling-en*), a town of Würtemberg, on the Neckar, 9 miles by rail ESE. of Stuttgart. The chief buildings are the old citadel; the Liebfrauen Church (1440), with a beautiful spire 246 feet high; the old (1430) town-house, and the new (1742). It has great machine-shops, and manufactures 'Esslingen champagne,' besides woollens, cotton and woollen yarns, lackered iron, &c. Population, 30,000.

Essouan. See ASSOUAN.

Es'te (anc. *Ateste*), a town of Italy, on the southern slope of the Euganean Hills, 17 miles SSW. of Padua. Pop. 6979.

Estella, an ancient city of Spain, on the Ega, 27 miles SW. of Pamplona. Pop. 6648.

Estepa, a town of Spain, 60 miles ESE. of Seville. Pop. 8965.

Estepona, a maritime town of Spain, 26 miles NNE. of Gibraltar. Pop. 9934.

Esthonia, called by the natives Wiroma, the most northerly of the Baltic provinces of Russia, is bounded S by Livonia, W. and N. by the Baltic. Area, 7818 sq. m.; pop. 415,000. A large part of the surface is covered with forests, moors, and small lakes; rivers are numerous, but mostly small and sluggish in flow; erratic boulders of

granite are common everywhere. The chief town is Revel (q.v.). The population consists of two divisions, the Esths and the Esthlanders. The latter are a mixed race of immigrants, the German element strongly preponderating. The Esths, a people of Finnish race, constitute the peasantry, some 290,000 in number, and the original possessors of the soil. About 440,000 of this people are also found in Livonia, and 11,500 more in the governments of St Petersburg, Pskov, and Vitebsk. In spite of six centuries of slavery to their German lords, the Esths have preserved their national characteristics—language, customs, clothing, dwelling, physical attributes. In religion they are mostly Lutherans, though the Russians are making strenuous efforts to bring them over to the Greek Church. Esthonia was conquered by Waldemar II. of Denmark in 1219; but in 1346 it was sold to the Teutonic Knights, and incorporated with Livonia. From 1561 it belonged to Sweden, in 1710 it was seized by Peter the Great. Serfdom was abolished in Livonia in 1816, and in Esthonia in 1819.

Esthwaite Water, a lake of Lancashire, 2 miles long by ½ mile wide, extending from Hawkshead towards the W. shore of Windermere.

Estremadu'ra, a district of Spain, lying between Portugal and New Castile, and watered by the Tagus and the Guadiana. It was divided in 1833 into the provinces of Badajoz and Cáceres. Area, 16,701 sq. m.; pop. 845,000.

Estremadura, a Portuguese province containing Lisbon. Area, 6876 sq. m.; pop. 1,232,600.

Estremoz, a town of Portugal, 23 miles NE. of Evora. It makes porous red jars. Pop. 7575.

Eszek. See Essek.

Étampes (*Ay-ton²p'*), a French town of Seine-et-Oise, 35 miles SSW. of Paris by rail. An ancient place, with a street 4 miles long, it has a fragment of a royal castle (*c.* 1160), a statue of the naturalist Geoffroy Saint-Hilaire, a mediæval hôtel-de-ville, large flour-mills, market-gardens, &c. Pop. 8860.

Eta'wah, a town of the Doab, picturesquely situated among the ravines near the Jumna's left bank, 70 miles SE. of Agra. Cloth, horn combs, and sweetmeats are manufactured. Close by are some famous Hindu temples, and the *ghats* leading to the river are lined with handsome shrines. Pop. 42,793.

Etchmiadzin, a monastery near Erivan, the ecclesiastical metropolis of the Armenians since 302 A.D.

Ethiopia, a term of ancient geography, somewhat vaguely and variously used. Originally, all the nations inhabiting the southern part of the globe, as known to the ancients, or rather all men of dark-brown or black colour, were called Ethiopians (assumed by the Greeks to be from the two Greek words *aithō ōps*, and to mean 'burnt-face;' but more probably a form of an unknown Egyptian word). Later, this name was given more particularly to the inhabitants of the countries south of Libya and Egypt, on the Upper Nile, extending from 10° to 25° N. lat., 28° to 40° E. long.—the present Nubia, Sennaar, Kordofan, Abyssinia. The nucleus of the kingdom of Ethiopia, which already powerful about 1000 B.C., fell under Egyptian power about 760, was conquered by Cambyses of Persia in 530, and became Roman and Christian in due time, was Meroë on an island in the Nile; and the dominant people, the Ethiopians proper, were a Semitic people originally from the other side of the Red Sea, speaking the Ethiopian, a well-marked Semitic dialect, closely akin to old Sabæan, a form of Arabic. See Abyssinia.

Etive (*Et'iv*), a salmon-river and a sea-loch of Argyllshire. The river runs from a loch on the Moor of Rannoch, near Kingshouse Inn, 15 miles south-westward to the loch, which itself extends 10½ miles south-westward, then 8¾ westward, until at Dunstaffnage Castle, 3½ miles NNE. of Oban, it merges in the Firth of Lorne. Narrowing from 1½ mile to less than 2 furlongs at Connel Ferry, its reef-barred entrance, where the depth too decreases from 420 feet to 6 at low-water, this loch offers a good example of an ancient submerged glen. Its scenery is magnificent, the upper reach closely engirt by mountains, of which the loftiest are Ben Cruachan (3689 feet) and Ben Starav (3541). See Ardchattan and Dunstaffnage.

Etna (modern Sicilian Monte Gibello—the last part of the name being the Arabic *Jebel* Italianised), an isolated volcanic mountain close to the east coast of Sicily, with a base 90 miles in circumference, and a height of 10,850 feet. It slopes gently up to a single cone, containing the crater, a chasm 1000 feet in depth and from 2 to 3 miles in circumference. The regularity of the slope is, however, broken on the east by an immense gully, 4 or 5 miles in diameter, and 2000 to 4000 feet deep. Many secondary cones are dotted all over the flanks of the mountain, the principal being the Monti Rossi, 450 feet high, twin peaks which were cast up in 1669. The slopes are divided into three sharply defined zones, the cultivated, the woody, and the desert region. This last, extending from about 6300 feet upwards, is a dreary waste of black lava, scoriæ, ashes, and sand, covered during the greater part of the year with snow. The wooded region, which stretches down to the line of 2000 feet, is planted with forests of chestnuts, beeches, birches, pines, maples, and oaks. Below this lies the cultivated zone, a thickly peopled region of great fertility. The ascent is usually made from Catania (q.v.), a town on the coast to the south. In 1169 Catania was destroyed; in 1329 a new crater opened near the Val del Bove; in 1444 the cone fell into the crater; in 1537 two villages perished; from 1603 to 1620 Etna was almost continually in activity; and in 1666 three new craters were formed. In 1669 a chasm 12 miles long opened in the flank of the mountain; in 1755 a large flood of water was poured down from the eastern gully; in 1852–53 there was a violent nine months' eruption, when a torrent of lava, 6 miles long by 2 broad, and some 12 feet in depth, was ejected. In 1880 an observatory was built on the south side of the mountain, 9075 feet above the sea, being the highest inhabited house in Europe (nearly 1000 feet higher than the hospice of the Great St Bernard).

See Rodwell, *Etna and its Eruptions* (1878); and Sartorius von Waltershausen, *Der Aetna*, edited by Von Lasaulx (2 vols. Leip. 1880).

Eton, a town in the south of Buckinghamshire, on the left bank of the Thames, 21 miles WSW. of London. It lies opposite to Windsor, in Berkshire, and is included in its parliamentary borough. Eton College was founded by Henry VI. in 1440, and its beautiful buildings were completed in 1525, though many additions have been made from time to time, notably in 1889. The boys number about 1000, of whom 70 are king's scholars or collegers, and the rest oppidans. Famous Etonians have been Bolingbroke, Boyle,

Canning, Chatham, Derby, Fielding, Fox, Gladstone, Gray, Hallam, Kinglake, Lyttelton, Milman, Porson, Praed, Pusey, Shelley, the Walpoles, Wellesley, and Wellington. Pop. 3300. See works by Lyte, Creasy, Jesse, Lubbock (1899), Benson, Cust, and Clutton Brock (1900).

Etretat (*Aytr-tâh'*), a Norman watering-place, 18 miles NE. of Havre. Pop. 2000.

Etruria, the country inhabited or ruled by the Etruscans, a very ancient people of Italy. Lying west of the Tiber and the Apennines, and including the Arno valley, it was a confederation of twelve cities or states. Some of these cities are now deserted sites, marked only by vast cemeteries and the remains of cyclopean walls, while others still retain more or less of their old importance. See works by Dennis (2d ed. 1878), K. O. Müller (1877), and Jules Martha (1888).

Etruria, a village of Staffordshire, in the municipal borough of Hanley. Here, on 13th June 1769, Josiah Wedgwood and Thomas Bentley opened their celebrated Etruria potteries, so named after the Etruscan ware. Pop. 8000.

Etset. See ADIGE.

Ettrick Water, a stream of Selkirkshire, rising on Capel Fell, and winding 32 miles north-eastward to the Tweed, 3 miles below Selkirk, and 5 from the influx of its chief affluent, the Yarrow. In Ettrick churchyard, towards the stream's source, lie Boston and Hogg the 'Ettrick Shepherd.' Ettrick Forest, erst so 'fair,' now treeless and pastoral, included all Selkirkshire, with parts of Peebles and Edinburgh shires.

Eu (*Öh;* nearly *Uh*), a French town of Seine-Inférieure, on the Bresle, 2 miles from its mouth, and 21 NE. of Dieppe by rail. The Château d'Eu (1578), a low red brick building, with high roofs of slate, was purchased by Mademoiselle de Montpensier in 1675; eventually, in 1821, it came to Louis-Philippe, who here received Queen Victoria in 1843. In 1874 Viollet-le-Duc restored it for the Comte de Paris. Pop. 4900.

Eubœa (anc. *Euboia*, Turk. *Egripo*, Ital. *Negroponte*), an island of Greece in the Ægean Sea, runs 98 miles south-eastward parallel to the mainland, its breadth varying from 30 miles to 4. Area, 1457 sq. m., or a little smaller than Suffolk. About midway along its west shore, the strait (Euripus) separating Eubœa from the mainland contracts to 120 feet, and is spanned by a bridge, resting on a rocky islet in the middle. The island is traversed longitudinally by a chain of wooded mountains, culminating in Mount Delphi (5725 feet). Iron and copper occur in the mountains; and at Carystos, in the south of the island, the marble called *cipolino* is quarried. Hot springs (sulphur) exist in the north. The east coast is steep and rocky; the west side of the island slopes gradually. The chief towns are Chalcis on the west coast and Carystos (pop. 4119) on the south coast. Pop. of the island, 110,000, mostly Greeks and Albanians. Eubœa was successively subjugated by the Athenians, by Philip of Macedon, by the Romans, by the Venetians (1351), and by the Turks (1470); since 1830 it has been part of the kingdom of Greece.

Euganean Hills, a range of well-wooded hills, lying SW. of Padua in Northern Italy, and culminating in Monte Venda (1749 feet). On their slopes stand several villas, amongst them Petrarch's house at Arquà.

Eupatoria (formerly *Koslov*), a Russian seaport, on a bay in the west of the Crimea, 40 miles NW. of Simferopol. The principal building is the Tartar mosque (1552). Pop. 13,416.

Eupen, a town of Rhenish Prussia, on the Vedre, close to the Belgian frontier, and 12 miles by rail S. of Aix-la-Chapelle. It has flourishing woollen manufactures, besides dyeworks, machine-shops, breweries, &c. French refugees settled at Eupen after the peace of Lunéville (1801); in 1814 it came from Limburg to Prussia. Pop. 15,441, almost all Catholics.

Euphrates (Pers. *Ufratu*, Heb. *Phrat*, Syr. *Ephrat*, Arab. *Furat*), the largest river in Western Asia, has its source in the heart of Armenia in the Kara-Su (270 miles) and the Murad (300 miles), of which the former rises NE. of Erzerûm, and the latter over 130 miles to the east, near Lake Van—uniting close to Keban Maadin (2664 feet above the sea). The united stream breaks through the Taurus in a succession of rapids and cataracts for about 40 miles. Flowing south and then south-east, it separates Mesopotamia from Syria and the deserts of Syrian Arabia, and is joined by the Tigris at Kurna. The joint river, taking the name of the Shat-el-Arab, empties itself by several arms (only one of which is navigable by large vessels) into the Persian Gulf, 60 miles below Basra, after a course of fully 1700 miles. The principal of its few tributaries are the Sajur, Balik-su, and Khabûr, besides the Persian river Karûn, which enters the estuary at Mohammera. The chief towns now on its banks are Sumeysât, Bir, Ana, Hit, and Hilla, Basra lying really on a creek a short distance from the main stream; the river between Ana and Hit is studded with islands, many of them inhabited. The Euphrates is more or less navigable for light craft as far as Bir (nearly 1200 miles); war-vessels can ascend to the junction at Kurna (120 miles). In ancient times, when canals and embankments regulated the river's inundations, these exercised the same beneficial effect on the country as those of the Nile on Egypt. Numerous remains of ancient cities are still to be traced near the banks, such as the famous site of Babylon, and the Birs Nimrûd. In 1831 Captain F. R. Chesney, R.A., descended the Euphrates, and established the fact that the river was navigable for vessels of moderate draught, at least as high up as Ana. He maintained that this was the shortest and best route to Bombay, and in 1835 he commanded a second and equally successful expedition. Two attempts, however, to establish a railway, in 1856 and 1862, both collapsed, though, as an alternative to the Suez Canal, and as an instrument for opening up a rich but neglected country, the Euphrates Valley route would still be a valuable channel of commercial and military communication for the British empire. See works by Chesney (1850), Cameron (1888), and Ainsworth (1888).

Eure (*Ohr;* nearly *Ehr*), a dep. of Normandy, south of the dep. of Seine-Inférieure. Area, 2290 sq. m.; pop. (1846) 423,247; (1901) 334,781. The river Eure, which gives it name, flows 141 miles to the Seine. The dep. is divided into the five arrondissements of Evreux (the capital), Louviers, Les Andelys, Bernay, and Pont-Audemer.

Eure-et-Loir (*Ehr-ay-Lwar*), a dep. of France, south of the preceding; area, 2260 sq. m. Pop. (1872) 282,622; (1901) 275,483. It is divided into four arrondissements, Chartres (the capital), Châteaudun, Dreux, and Nogent-le-Rotrou.

Eureka, (1) a port and capital of Humboldt county, California, on Humboldt Bay, with lumber-mills; pop. 7658.—(2) A town, capital of

Eureka county, Nevada, 90 miles by rail S. of the Palisades station on the Central Pacific Railroad. Here are silver and lead mines; pop. 1000.

Euri'pus. See CHALCIS, EUBŒA.

Europe, historically and politically the most important of the five great divisions of the world, is, next to Australasia, the smallest in area, but Asia alone exceeds it in population. Geographers are agreed that, apart from its history and significance for the history of civilisation, it should be regarded rather as a peninsula of Asia, or as a portion of the great joint Eurasian continent; for in regard to physical geography, fauna, and flora, it is difficult to draw a sharp line between Europe and Asia. On three sides Europe is bounded by sea—north by the Arctic Ocean, west by the Atlantic, south by the Mediterranean, Sea of Marmora, and Black Sea. But on the east the Urals, Ural River, and Caspian, though commonly assumed as the boundary towards Asia, do not mark a precise limit in respect of climate, flora, fauna, or physical conditions generally; the governments of Perm and Orenburg in European Russia extend far beyond the Urals. Between the Caspian and the Black Sea, the ridge of the Caucasus seems a convenient dividing line between Europe and Asia, but the Manytch depression is really, from the geographical point of view, a more correct boundary; physically the whole lieutenancy of the Caucasus is part of Asia. It is more curious that North Africa and South Europe are very closely related in many respects, geological and biological. It has even been said that the mountains of Auvergne divide northern France more sharply from Provence than the Mediterranean (q.v.) does southern Provence from Morocco and Algeria.

Various etymologies have been proposed for the name Europe. The old mythological one was that it was named from Europa—the Phœnician damsel whom the enamoured Zeus, in the form of a bull, bore off to Crete. Another was that it came from Eurus, the south-east wind. A third notes that the name is first applied, not to the whole continent, but (in the Homeric Hymn to Apollo) to the mainland of Thrace, as distinguished from the Peloponnesus and the Greek islands, and suggests that Europe therefore means Broad Land (*eurus ôps*, 'broad face'). Of late the tendency is to assume that the name was first given by Phœnician traders, and is from the word *Erebh*, 'darkness'—i.e. the land of sunset, of the west. The area to which the name of Europe was applied grew with the extension of Greek geographical knowledge.

Europe has a total length from Cape St Vincent on the south-west to the mouth of the Kara River on the north-east of 3400 miles; and from North Cape in Norway to Cape Matapan, the southernmost point of Greece, a total breadth of 2400 miles. The continent of Europe, irrespective of islands, lies within 36° 20′—71° 10′ N. lat., and 9° 30′ W.—66° 30′ E. long. Its area is estimated at 3,800,000 sq. m., being about a third of that of Africa, a fourth of that of America, and a fifth of that of Asia. It does not greatly exceed the total area of the United States. Its indented coast-line is, owing to the number of deep inlets and gulfs, more extensive in proportion to its size than that of any other great natural division of the globe, and is estimated to measure little less than 50,000 miles. It has a pop. of above 392,000,000, which gives an average of over 103 for every square mile.

The body of the European continent divides itself naturally into two great portions—the great plain in the north-east, and the highlands from near the centre towards the south-west, the mountainous peninsula of Scandinavia lying apart from either. The plain occupies about two-thirds of the continent, reaching from the eastern boundary, north to the Arctic Ocean, south to the Caucasus and the Black Sea, and westward over the whole extent of the continent. In shape this plain resembles a triangle; its base rests on the eastern boundary, and it may be said to reach its apex on the shores of Holland. It separates the two mountain-systems of Europe—the Scandinavian system (highest summit 7566 feet) on the north, and on the south the system of southern Europe. The mass of the Alps, covering an area of nearly 100,000 sq. m., forms the centre of the mountain-system of southern and western Europe, and stretches down on four sides towards France, Germany, Hungary, and Italy; the highest summit being 15,732 feet. The other chief mountain-masses are the Carpathians (8343 feet), the Balkans (9750), the Apennines (9574), the Pyrenees (11,170), and the Sierra Nevada (11,670), and in Sicily, Etna (10,850).

Europe is surrounded by water on three sides. The White Sea comes in from the Arctic Ocean; the German Ocean (with the Baltic) and the Mediterranean from the Atlantic. The most important peninsulas are in the north Scandinavia, and in the south the Crimea, Turkey and Greece, Italy, and Spain. Except Iceland, the islands cluster closely round the mainland, the chief being Great Britain and Ireland, Iceland, Nova Zembla, Sardinia, Corsica, and Crete. The lakes of Europe are small as compared with those of Africa or America, the largest being Ladoga and Onega in Russia, and Wener in Sweden. The Volga (1977 miles), the Danube (1740), the Ural (1450), the Don (1125), the Kama (1050), the Petchora (975), and the Rhine (760) are the largest rivers of Europe. The details of the geography of Europe are given under the names of its several political divisions, and of its lakes, rivers, and mountains.

In respect of climate, by far the greater portion of the area of Europe belongs to the northern section of the temperate zone, though parts of Norway, Sweden, and Russia lie within the Arctic Circle. The southern parts of Spain, Sicily, and Greece are some twelve degrees from the northern tropic. The natural history of Europe very much agrees with that of the corresponding latitudes of Asia. The most northern regions have the arctic flora and fauna; whilst the natural history of the most southern countries assumes a subtropical character. The temperature of the western and northern parts of Europe being raised by the Gulf Stream and the winds from the great mass of dry and desert land in Africa above what is elsewhere found in similar latitudes, the flora and fauna exhibit a corresponding character, affected, however, by the great amount of moisture derived from the Atlantic Ocean, and also to a still greater degree by the comparative uniformity of temperature which the proximity of the ocean produces. The effect of the last-mentioned causes is so great that the northern limit of some plants is sooner reached on the shores of the Atlantic than in the more central parts of Europe, where the winters are much colder, and the average temperature of the year is lower. Of this the vine and maize are notable examples. Plants which require a mild winter will not grow in the north—and scarcely even in the centre of Europe—but they advance along the western coast under the influence of the maritime climate.

Thus, the myrtle—although not indigenous—grows even in the south of England. Amongst plants the date-palm, and amongst animals a species of ape, are found in the south of Europe (the ape only on the Rock of Gibraltar): whilst some strictly African birds are frequent visitants, and many birds—as the cuckoo, swallow, stork, &c.—are common to Europe and Africa, inhabitants in summer even of very northern regions, and returning in winter to the warm south. Of the plants now most commonly associated in our thoughts with the southern countries of Europe, many have probably been introduced from Africa or from the East. This has probably been the case even with the myrtle, and certainly has been the case with the vine, olive, orange, lemon, fig, peach, almond, apricot, &c. Some fruits are certainly indigenous to Europe, as the apple, pear, plum, and cherry, although even of these the first improved varieties may have been introduced from the East. Among the wild animals of Europe, the bison is still reckoned; and the ox existed at no very remote period in a truly wild state. The reindeer inhabits the extreme north; the elk, the stag, the fallow-deer, and the roebuck are found in more southern regions; the ibex or bouquetin exists on the high central mountains; two species of antelope—the chamois of the Alps, and the saiga of the Russian plains—connect the European fauna with the Asiatic and African. Of mammals peculiar to Europe, the most notable are the chamois, musk rat, and fallow-deer, while the civet, ichneumon, and porcupine are not found in any other part of the palæarctic region but in Europe. Of carnivorous animals, the most noteworthy are the bear, wolf, fox, and lynx. The European seas afford valuable fisheries, particularly of herring and of cod in the north, and of tunny, anchovy, &c. in the Mediterranean.

The European races belong in the main to the various branches of the great Aryan stock, though in few European countries is there a pure race—the admixture of various stocks being in some cases very great and close. But, generally speaking, Celtic blood is most largely found in France (especially in Brittany, where a Celtic tongue is still spoken) and parts of Great Britain and Ireland; Teutonic peoples occupy Germany, Switzerland, Holland, part of Belgium, part of Austria, Denmark, Norway and Sweden, Iceland, and Great Britain. Slavonic races are found in Austria, Prussia, the Balkan peninsula, and Russia. Romanic language and blood are prominent in Italy, France, Spain and Portugal, and Roumania. The Greeks belong to the same Greco-Italian branch of the Aryans as the Italians. Non-Aryan peoples are the Finns, Lapps, and Samoyedes of the north and north-east, various Turanian tribes in the east of Russia, the Hungarians and the Turks, and the Basques of the Pyrenees; and a strong element of pre-Aryan blood is also to be traced in other parts of western Europe, as in Ireland and Britain. The most obvious method of classifying races is language. By this test, some 105,000,000 Europeans are Teutonic (German, English, Dutch, Flemish, Swedish, Norwegian, Danish); 95,000,000 Slavs (Russian, Polish, Czech, Slovak, Serb, Croat, Slovenian, Bulgarian); 100,000,000 Romance-speaking (French, Italian, Spanish, Portuguese, Roumanian, Walloon, Rhætian); 3,000,000 Letts and Lithuanians; 5,250,000 Greeks and Albanians; 3,600,000 Celtic (Welsh, Breton, Irish, Gaelic, Manx); 1,050,000 Armenians, Ossetians, and Gypsies. Some 18,000,000 are non-Aryan (Magyars, Finns, Ugrians, Tartars, Turks, Kalmucks, Basques, Circassians, &c., and Maltese). Upwards of fifty languages are spoken in Europe. But language is by no means a sure test of race; thus, the Normans quickly took to speaking the Romance tongue of their Romanised Gallic subjects, whilst the French—Celts, with a strong infusion of Frankish-Germanic blood, and a smaller infusion of Italic blood—speak a modified Latin tongue. Many parts of the German-speaking area are mainly Wendish or Prussian (Slavonic) in blood. The Bulgarians, speaking a Slavonic tongue, are originally Ugro-Finnic. South Germany is probably more Celtic and less Teutonic than northern France.

The table gives a comparative view of the states of Europe, their areas, and populations in 1900-5:

States.	Extent in English sq. m.	Population.
Andorra	175	6,000
Austria-Hungary with Bosnia.	264,204	46,901,871
Belgium	11,373	6,603,548
Bulgaria and Eastern Roumelia	37,860	3,733,189
Denmark	15,289	2,464,770
France	204,092	38,641,333
Germany	208,670	56,356,246
Great Britain and Ireland	120,979	41,605,325
Greece	25,041	2,433,806
Holland	12,648	5,179,138
Italy	110,623	32,449,754
Liechtenstein	70	9,434
Luxemburg	998	236,543
Monaco	8	15,180
Montenegro	3,630	228,000
Portugal	34,038	5,428,800
Roumania	48,307	5,912,520
Russia (in Europe)	2,095,504	106,264,136
San Marino	32	9,537
Servia	19,050	2,493,770
Spain	197,670	18,078,500
Sweden and Norway	297,321	7,376,321
Switzerland	15,976	3,315,443
Turkey (in Europe)	64,200	6,400,149

The density varies from 589 per sq. m. in Belgium (606 in England without Wales, and 1897 in Monaco, which is mainly two towns) to 34 in Andorra, and 25 in Sweden and Norway.

Europe is practically a region of monotheists: though there are Buddhist Kalmucks in South Russia, and Pagans amongst the Lapps, Finns, Samoyedes, and Tcheremisses. The Turks, some Russian Tartars, many Albanians, and some Slavs are Mohammedans (6,600,000), and there are nearly 7,000,000 Jews; but the bulk of Europeans are professing Christians. The Catholic Church may number some 156,600,000 adherents, the Greek Church 80,000,000, while the various Protestant communions number about 76,000,000.

See the relevant portions of Reclus, Klöden, and Stanford's *Compendium of Geography* (1886), J. Geikie's *Prehistoric Europe* (1880), J. Sime's *Geography of Europe* (1889); Freeman's *Historical Geography of Europe* (1881), and his *General Sketch of European History* (1876) and *Primer of the History of Europe* (1876); the Histories by Lodge (1886), Dyer (1877), and Fyffe (1884–90); and the annual *Statesman's Yearbook* and *Almanach de Gotha*.

Eurotas (mod. *Iri* or *Vasilo*), the chief river of Laconia in Greece, rising in Arcadia, and flowing past Sparta to the Laconian Gulf.

Euston, the seat of the Duke of Grafton, in Suffolk, 4½ miles SE. of Thetford.

Eutaw Springs, a small affluent of the Santee River, in South Carolina. Near it, in the last serious battle in the war of independence, 8th September 1781, the Americans were repulsed after a desperate engagement.

Euxine. See Black Sea.

Evanston, a city of Illinois, on Lake Michigan,

12 miles N. of Chicago by rail, with the Garrett Biblical Institute, the North-western University (Methodist), &c. Pop. 19,250.

Evansville, a port of entry and capital of Vanderburg county, Indiana, on the Ohio, 162 miles ESE. of St Louis by rail, with a city-hall, a court-house, a handsome post-office and custom-house, and a public library and art gallery. Coal and iron ore abound near by, and the town has a large number of mills, foundries, &c. Pop. (1870) 21,830; (1880) 29,280; (1900) 59,007.

Evanton, a Ross-shire village, 6 miles NE. of Dingwall. Pop. 490.

Evenlode, a river of Gloucester and Oxford shires, flowing 35 miles SE. to the Thames.

Everest, Mount, a peak of the Himalayas, in Nepal, and the highest ascertained point on the globe's surface, attains 29,002 feet above the sea, in 27° 59′ 12″ N. lat., and 86° 58′ 6″ E. long. It was named in honour of Sir George Everest (1790–1866), surveyor-general of India.

Everett, a manufacturing town of Massachusetts, 3 miles N. of Boston. Pop. (1880) 4154; (1890) 11,068; (1900) 24,336.

Everglades, a large shallow lake or marsh in southern Florida, enclosing thousands of densely-wooded islets, with many alligators.

Eversley, a Hampshire parish, 13 miles NE. of Basingstoke. Charles Kingsley was rector from 1842 till his death in 1875, and he rests in the churchyard.

Everton, a NE. district of Liverpool.

Evesham (*Eevz'am*), a borough of Worcestershire, on the right bank of the navigable Avon, 15 miles SE. of Worcester. It lies in a fertile vale, and the chief industry is market-gardening. There are a fine modern bridge, public gardens, water-works (1884), a 16th-century guildhall, &c.; the stately Benedictine abbey (709) is represented chiefly by a beautiful Perpendicular belfry (1533). Till 1867 Evesham returned two members, till 1885 one. Simon de Montfort was defeated here, 4th August 1265. Pop. (1851) 4605; (1901) 7101. See May's *History of Evesham* (1845).

E'vora (anc. *Ebora*), the capital of the Portuguese province of Alemtejo, 72 miles E. of Lisbon by rail. It is surrounded by ruinous walls, and unfinished modern fortifications as yet. A very ancient city, it has an archiepiscopal cathedral (1186) and a wealth of Roman antiquities (a temple of Diana, a still-used aqueduct, and a beautiful tower, dating from 70 B.C.). There are some manufactures of cotton, cloth, and hats, and a trade in wine. Pop. 15,046.

Evreux (*Ev-ruh'*; named from the anc. *Eburovices*), the capital of the French dep. of Eure, in the fertile valley of the Iton, a feeder of the Eure, 67 miles by rail WNW. of Paris. Among its buildings are the cruciform cathedral (11th to 18th c.); St Taurin's, with the 13th-century shrine of that saint, the first Bishop of Evreux; the episcopal palace (1484); and the 'Tour de l'Horloge,' of the same century. Evreux manufactures paper, linen, &c. Pop. (1872) 10,702; (1901) 14,920. At the neighbouring village of Vieil Evreux excavations have disclosed remains of a theatre, an aqueduct, baths, &c.

Ewe, a river and sea-loch of NW. Ross-shire, the former running 8¼ miles from Loch Marce to the sea-loch (10 × 3 miles) at Poolewe.

Ewes Water, a Dumfriesshire stream, flowing 8 miles S. by W. to the Esk at Langholm.

Exe, a river of Somerset and Devon, rising in Exmoor, and flowing 54 miles SE. and S. to the English Channel at Exmouth. The lower 5 miles form a tideway a mile broad, with wooded shores. An ancient canal connects the estuary with Exeter. Tributaries are the Barle (24 miles), which also rises in Exmoor, Batham, Loman, Culm, and Creedy. The Exe passes Dulverton, Bampton, Exeter, and Topsham.

Ex'eter, the capital of Devonshire, 171 miles by rail WSW. of London, and 75 SW. of Bristol. Dominated by higher hills, it is built on the summit and slopes of a flat ridge, rising 150 feet from the left bank of the Exe; and, having been modernised chiefly in its suburbs, it is a pleasant antique city. The quaint old High and Fore Streets, crossed by North and South Streets, still follow the line of the Icknield Way; and the walls in great part remain, though their four gateways were demolished between 1769 and 1819, and though Rougemont Castle (1068) was almost all swept away in 1774. In 932 Athelstan founded here a Benedictine monastery, and hither in 1050 Edward the Confessor translated the western bishopric from Crediton; but St Peter's Cathedral was not begun till sixty-two years afterwards. Measuring 408 feet by 76 (or 140 across the transepts), and 66 feet high, it is a long, low edifice, with massive transeptal towers—a feature imitated at Ottery St Mary, but otherwise unique. These towers, 140 feet high, are the original Norman ones, but the rest of the pile, rebuilt between 1280 and 1369, is mainly in the purest Geometrical Decorated. Special features are the exterior western screen (*c.* 1388), adorned with sixty-seven statues of saints and princes; the beautiful choir-screen (1324), surmounted by the fine organ (1665); the minstrels' gallery (1353); a clock, dating from 1317 or earlier; the Great Peter bell, brought from Llandaff in 1482, recast in 1616, and weighing 12,500 lb.; and the chapter-house (1420–78), containing 8000 MSS. and early books. The picturesque guildhall (1464) has a cinque-cento façade (1593); of modern buildings, the most noteworthy are the Devon and Exeter Hospital (1743), the Lunatic Asylum (1865), and the Albert Memorial Museum (1868). The chief public walk is Northernhay. A ship-canal (1563–1827) extends 5 miles to the tideway at Topsham; and Exeter has large nurseries and manufactures of gloves, agricultural implements, &c., besides being the chief mart of 'Honiton' lace. The 'ever loyal city' got its earliest charter from Henry II. some time prior to 1162; in 1537 was made a county of itself, in 1888 a county borough; and in 1885 lost one of its two members. Pop. in 1901 of mun. borough (as extended in 1900) 47,185; parl. borough, 53,141. The Celtic *Caerwisc*, the Roman *Isca Damnoniorum*, and in 876 the *Exanceaster* of the West Saxons, who till 926 shared it with the Britons, Exeter was six times captured between 876 and 1646, and three other times besieged. Natives were Archbishop Baldwin, Cardinal Langton (doubtfully), John Vowel or Hoker, the historian of Exeter (1525–1601), the Judicious Hooker, Sir Thomas Bodley, and Henrietta of Orleans. See works by P. Freeman (1873), E. Freeman (1887), and Worthy (1892).

Exmoor Forest, in the west of Somersetshire and north-east of Devon, is a wild, mostly uncultivated waste, consisting of long ranges of steep hills and lonely valleys, and bordered by deep wooded glens. The hills rise in Dunkery Beacon to 1707 feet, in Chapman Barrow to 1540, and in Span Head to 1610. The 'forest' proper

is about 25 sq. m. in area, but with the adjacent commons Exmoor extends over 100. The outlines are less bold and rugged, and the general aspect far less stern and desolate than that of Dartmoor, ribbed and spread with granite. Though 'improvements' were attempted in 1818, and many trees planted by Mr J. Knight, who had purchased the forest from the crown, Exmoor is still in the main covered with grass, bracken, and heather, with dangerous bogs near the hill-tops. Where it ranges down to the coast near Lynton, the scenery is very bold and picturesque. The Exe, Barle, Mole, and the two Lyns are the chief streams rising here. Gold has been found in Northmolton parish, and copper-mines have been worked there from time to time. There is a native breed of very small ponies, known as Exmoor ponies, stout and hardy, as well as a local breed of horned sheep of high quality; and Exmoor is the only place in England where the red deer still run wild. Staghounds have been kept here and stag-hunting followed since at least 1598. Exmoor is the chief scene in Blackmore's *Lorna Doone*, which is based largely on local traditions, and which abounds with admirable descriptions of its most characteristic scenery. See also works by H. B. Hall (1849), C. P. Collyns (1862), J. Fortescue (1886), E. J. Rawle (1893), and F. J. Snell (1903).

Exmouth, a Devonshire watering-place, at the east side of the mouth of the Exe, 11 miles by rail SSE. of Exeter. A sheltered spot, with fine climate, good beach, and beautiful views, it had dwindled from a considerable seaport to a poor fishing-village, when, about the beginning of the 18th century, it rose into repute as a seaside resort; and now it has terraces, hotels, baths, promenades, and pleasure-grounds along the seashore, and docks constructed in 1869. Pop. (1851) 5123; (1901) 10,485. See Webb's *Memorials of Exmouth* (1873).

Exuma. See Bahamas.

Eyam (pron. *Eem*), a village in North Derbyshire, 5 miles N. of Bakewell, with a population of 996, chiefly engaged in lead-mining. By a visitation (1665–66) of the plague, then raging in London, 260 out of a population of 350 perished. See Wood's *History of Eyam* (4th ed. 1865).

Eye (A.S. *ig*, 'island'), a municipal borough of Suffolk, 20 miles N. of Ipswich. It has a fine Perpendicular flint-work church, with a tower 101 feet high, a small ruined castle, a corn exchange, and a grammar-school. Till 1885 it returned one member. Pop. 2004.

Eyemouth, a fishing-town of Berwickshire, 8 miles by rail NNW. of Berwick-on-Tweed. A new harbour was formed in 1885–87. Pop. 2476.

Eylau (*I'low*), a town (pop. 3546), 23 miles S. of Königsberg by rail. Here Napoleon repulsed the Russians and Prussians, February 8, 1807. The place is called Preussisch-Eylau, to distinguish it from Deutsch-Eylau (pop. 4574), 89 miles NE. of Bromberg.

Eyre, Lake, a salt lake of South Australia, lying due N. of Spencer Gulf, at an altitude of 79 feet, and with an area of 3706 sq. m. Except in the rainy season, it is generally a mere salt-marsh. Eyre discovered it in 1840.

Eyrecourt, a Galway village, 12 miles SE. of Ballinasloe.

Eyria Peninsula, a rich pastoral district on the south coast of South Australia, triangular in shape, its base being formed by the Gawler Range, whilst its sides are washed by Spencer Gulf and the Great Australian Bight.

Fabriano (*Fabreeâh'no*), a cathedral city of Italy, at the eastern base of the Apennines, 44 miles by rail SW. of Ancona. It has paper and parchment manufactories (established 1564). Pop. 5593.

Faenza (*Fah-en'tza*; anc. *Faventia*), an Italian town, 31 miles SE. of Bologna by rail, has an imposing cathedral, an arcaded market-place, and numerous palaces. Its manufacture of glazed and coloured earthenware vessels (Ital. *majolica*, Fr. *faience*) has declined, and its chief industries now are silk, linen, and paper. Pop. 18,998.

Fahlun. See Falun.

Faifley, an eastern suburb of Duntocher (q.v.), Dumbartonshire. Pop., with Hardgate, 966.

Fail, Ayrshire, 1¼ mile NNW. of Tarbolton, the seat of a friary (1252).

Failsworth, a Lancashire township, 4½ miles NE. of Manchester. Pop. 14,150.

Faioum. See Fayum.

Fairford, a village of Gloucestershire, 9 miles E. of Cirencester. Its fine 15th-century church is famous for its splendid twenty-eight stained-glass windows, often attributed to Dürer, but really of Flemish workmanship. Keble was a native. Pop. of parish, 1403.

Fair Head, or Benmore, a precipitous promontory (636 feet) of the north coast of Antrim, Ireland, opposite Rathlin Isle.

Fair Isle, a solitary Shetland island, 24 miles SSW. of Sumburgh Head. It is 3 miles long by 2 broad, and 3 sq. m. in area, with high rocky cliffs and promontories, rising to 480 feet in the Sheep Craig. Pop. 223, chiefly engaged in fishing, or knitting parti-coloured woollen articles—the latter art said to have been learnt from sailors of the flagship of the Spanish Armada, which was shipwrecked here (1588).

Fairlie, a coast-village of Ayrshire, on the Firth of Clyde, 2¾ miles S. by E. of Largs. It is famous for its yacht-building. Pop. 671.

Fairlight, a Sussex coast-parish, 2½ miles ENE. of Hastings.

Fairnilee, a Selkirkshire mansion, on the Tweed, 5½ miles NNW. of Selkirk. Alison Cockburn, author of *The Flowers of the Forest*, was born here.

Faizabad (*Fyzabad'*), capital of the Central Asian state of Badakhshan (q.v.), on the Kokcha, 180 miles NE. of Kabul. It is noted for its rubies. —For the Indian town, see Fyzabad.

Faizpur, a town of Bombay presidency, 200 miles E. of Surat. Pop. 9640.

Fakenham, a Norfolk market-town, on the Wensum, 9½ miles S. of Wells. Pop. of parish, 2900.—Great Fakenham, a Suffolk parish, on the Brandon, 5¾ miles SSE. of Thetford, is described by Bloomfield in his *Farmer's Boy*. Pop. 205.

Falaise, a town in the French dep. of Calvados, on the Ante, 23 miles (by rail 31) SSE. of Caen. Crowning a rocky platform, with steep cliff or *falaise*, stands the noble ruined castle of the dukes of Normandy, the birthplace of William the Conqueror. Pop. 7109.

Falcón, a maritime state of Venezuela (q.v.).

Falemé, an important tributary of the Senegal, rising in Futa-Jallon, and flowing northward to a point above Bakel.

Falkirk, a town of Stirlingshire, 3 miles SW. of its seaport Grangemouth, 22 NE. of Glasgow, and 26 WNW. of Edinburgh. Including now the suburbs of Grahamston, Bainsford, Laurieston, and Camelon, it was constituted a parliamentary burgh in 1832, and with Airdrie, Hamilton, Lanark, and Linlithgow returns one member. Its parish church—the *Eglais Bhrec*, *Varia Capella*, or *Faw* ('speckled') *Kirk* of chartularies and local tradition—was rebuilt in 1810. The famous cattle 'trysts' or fairs, where stock was sold to an annual value of £1,000,000, have been largely superseded by the weekly auctions. The iron manufacture is carried on busily at Carron (q.v.) and elsewhere. Pop. (1851) 8752; (1901) 29,280. At Falkirk on 22d July 1298 Edward I. disastrously defeated Wallace, and on 17th January 1746 Prince Charles Edward defeated Hawley. Antoninus' Wall (q.v.) is the chief antiquity.

Falkland, a royal burgh (since 1458) of Fife, at the NE. base of the steep East Lomond Hill (1471 feet), 22 miles N. of Edinburgh. Nothing remains of the old castle of the Earls of Fife, in which David, Duke of Rothesay, was starved to death (1402); but there are stately remains of the later royal palace (*c.* 1450–1542). It was the deathplace of James V. With the estate and a modern mansion (1844), it was purchased in 1888 by the Marquis of Bute, and by him elaborately restored. Pop. 1045. See Wood's *Historical Description of Falkland* (Kirkcaldy, 1888).

Falkland Islands, a British colony in the South Atlantic, lying between 51° and 53° S. lat. and 57° and 62° W. long., 250 miles E. of Patagonia. The group consists of East Falkland (2849 sq. m.) and West Falkland (1990 sq. m.), with about 100 small islands, besides the dependency of South Georgia (q.v.). Many of the islands are occupied only by myriads of penguins. Pop. (1871) 811; (1901) 2043. The shores are deeply indented, and contain many good harbours; the surface culminates in Mount Adam (2315 feet); small streams and lakes are numerous; there are no trees, nor is coal found, but peat is plentiful. The climate is healthy, resembling that of the Orkneys, but is characterised by severe gales and abundance of moisture. The chief industry is sheep-breeding. Wool, frozen meat, live sheep, tallow, skins, and hides are exported. The capital is Stanley (pop. 694), on East Falkland. The group, sighted by Davis in 1592, was renamed in 1689 by Captain Strong after his friend Lord Falkland. It was definitely occupied by Great Britain in 1833, and utilised as a penal colony until 1852.

Fall River, a busy manufacturing city and port of entry of Massachusetts, at the mouth of the Taunton River, 49 miles S. of Boston by rail. It has a deep and capacious harbour, and is well built, the handsome city-hall and many other buildings being constructed of a fine granite quarried in the vicinity. Fall River is noted for its cotton-mills, other manufactures being nails and machinery. Abundant waterpower is supplied by a tributary of the Taunton, which falls 130 feet in its last half-mile. Pop. (1870) 26,766; (1880) 48,961; (1900) 104,863.

Falmouth, a Cornish seaport, on the south side of the Fal's estuary, 18 miles NNE. of the Lizard, and 66 by a branch line (1863) WSW. of Plymouth. The harbour, one of the best in England, is 5 miles long by 1 to 2 miles wide, and 12 to 18 fathoms deep. The entrance is defended on the west by Pendennis Castle (*c.* 1544), which crowns a rock 198 feet high, and which in 1646 surrendered to Fairfax after a five months' siege; on the east, by St Mawes Castle (1543). Pop. of municipal borough (1881) 5973; (1901) 11,789 (within boundary as extended in 1892); of the parliamentary borough of Penryn and Falmouth, since 1885 returning only one member, 16,296. From 1688 to 1850 Falmouth was a principal packet-station for foreign mails. There is a considerable pilchard-fishery. The chief exports are tin, copper, pilchards, and fuel. Here orange and lemon trees yield plenty of fruit on open garden-walls. Falmouth has arisen since 1613, and was incorporated in 1661; once it was a stronghold of Quakerism. See works by C. J. (Truro, 1876) and Caroline Fox (1882).

False Bay. See CAPE COLONY.

False Point, a cape and a good harbour of Bengal, 43 miles E. of Cuttack by canal.

Falster, a Danish island in the Baltic, south of Zealand. Area, 183 sq. m.; pop. 34,212.

Falun, or FAHLUN, a town of Sweden, 57 miles W. of Gefle by rail. It has for over six centuries been famous for its copper-mines, though the annual yield of ore has dwindled from 3150 tons in 1650 to about 400 tons. The excavations extend for miles underground. Pop. 9507.

Famagosta, or FAMAGUSTA, a decayed seaport on the east coast of Cyprus, on the supposed site of ancient Arsinoë. Pop. 3500.

Fanning, or AMERICAN ISLAND, a coral island in the Pacific, lying in 3° 51′ N. lat. and 159° 22′ W. long. It was formally annexed by Britain in 1888. Area, 15 sq. m.; pop. 150. The name Fanning Islands is sometimes given to the group comprising Fanning, Christmas, New York or Washington, Jarvis, and Palmyra Islands.

Fano (*Fáh-no;* Lat. *Fanum Fortunæ*, from the temple of Fortune commemorating Hasdrubal's defeat on the Metaurus), a seaport of Italy, on the Adriatic, 29 miles NW. of Ancona by rail. It has a cathedral, and a marble triumphal arch raised in honour of Augustus. Pop. 9984.

Fareham, a market-town and watering-place of Hampshire, on a creek at the north-west end of Portsmouth harbour, 9 miles NW. of Portsmouth. It has earthenware manufactures and shipbuilding. Pop. (1851) 3451; (1901) 8246.

Farewell, CAPE, a bluff nearly 1000 feet high, on an island off the southern extremity of Greenland, in 59° 44′ N. lat. and 43° 54′ W. long.

Fargo, capital of Cass county, North Dakota, on the Red River of the North, 254 miles W. of Duluth by rail. From an insignificant village in 1874 it has become the commercial centre of the state. Flour is the chief manufacture. A fire in 1893 did immense damage. Pop. 9664.

Faribault (*Far-ee-bo'*), capital of Rice county, Minnesota, on the Cannon River, 53 miles S. of St Paul by rail. It manufactures flour, bricks, furniture, &c. Pop. 7520.

Faridkot (*Fa-reed-kote'*), one of the Sikh cis-Sutlej states, SE. of Firozpur. Area, 643 sq. m.; pop. 125,040. The town of Faridkot (pop. 6593) is 60 miles SSE. of Lahore.

Faridpur, a town in the delta of the Ganges, 110 miles NE. of Calcutta. Pop. 10,263.

Faringdon, a town of Berks, 36 miles WNW. of Reading. Pop. of parish, 3133.

Farnborough, a village on the east border of Hampshire, 32 miles SW. of London, contains part of the camp of Aldershot (q.v.). Near it is Farnborough Hill, the residence of the Empress Eugénie, with the mausoleum whither the remains of her husband and her son were removed from Chiselhurst in 1888.

Farne, Fearne, or **Ferne Isles,** or the STAPLES, a group of seventeen islets and rocks (area, 80 acres; pop. 40), 2 to 5 miles off the Northumbrian coast, opposite Bamborough. There are two lighthouses, and on House Island are remains of a Benedictine priory, dedicated to St Cuthbert. Here Grace Darling rescued the survivors of the *Forfarshire* (1838).

Farnham, a town of Surrey, on the Wey, 38 miles SW. of London by rail. The old castle of the bishops of Winchester, razed by Henry III., and afterwards rebuilt, was garrisoned by Charles I., and restored in 1684 to its present state by Bishop Morley. A handsome Italian town-hall was built in 1866. Moor Park, the seat of Sir William Temple, with memories of Swift and 'Stella,' is in the vicinity; so, too, are the remains of Waverley Abbey (1128), whose *Annales Waverlienses* suggested to Scott the name of his first romance. The chief trade is in hops, a very fine variety being grown here. Toplady and Cobbett were natives. Aldershot Camp (q.v.) is 3 miles NE. Pop. 6545.

Farnworth, a Lancashire township, 12 miles ESE. of Liverpool. It manufactures sail-canvas, watches, files, &c. Pop. (1861) 8720; (1901) 25,925.

Faro, the capital of the Portuguese province of Algarve, on the south coast, behind three islands which form a good roadstead. It was burned by the English in 1596, and partly destroyed by the earthquake of 1755. Pop. 8671.

Faroe Islands (Dan. *Faar-Öer*, 'sheep islands'), a Danish group of islands, twenty-two in number, of which seventeen are inhabited, lying between the Shetlands and Iceland, 200 miles NW. of the former, in 61° 25′—62° 25′ N. lat., and 6° 19′—7° 40′ W. long. Area, 513 sq. m.; pop. (1850) 9150; (1901) 15,230. Seaward they present precipitous cliffs, 1000 to 2300 feet high, whilst inland they rise into flat-topped pyramidal mountains, which attain 2502 feet in Strömö and 2895 in Österö. The currents that run through the sounds are swift and dangerous; storms and whirlwinds are frequent; and the harbours and anchorages in the fjords and bays are not very secure, but, on the other hand, nearly always free from ice. The islands yield peat and coal. Trees there are none, owing to the storms; timber for building purposes is imported from Norway. The principal sources of wealth are sheep-farming, wild-fowling, and fishing; and the products of these, including wool, feathers, salt and dried fish, train-oil, and skins, are the principal exports. The largest islands are Strömö (28 miles long by 8 broad), Österö, Vaagö, Sandö, and Süderö. The capital of the group is Thorshavn in Strömö, with 984 inhabitants; Kirkebö, on the same island, was formerly the seat of a bishop. The inhabitants, of Norse descent, are Lutherans, and speak an Old Norse dialect, though modern Danish is the language of law-courts, churches, and schools. Since 1854 they have enjoyed a certain amount of self-government. From the time of their first colonisation in the 9th century the Faroe Islands belonged to Norway down to 1380, in which year they passed to Denmark.

Farrar, a river of Ross and Inverness shires, flowing 28 miles eastward, and uniting with the Glass to form the Beauly.

Farringford, Freshwater, near the western extremity of the Isle of Wight, 2½ miles SW. of Yarmouth, a home from 1853 of the poet Tennyson.

Fars, or FARSISTAN (anc. *Persis*), a sparsely peopled province of Persia, bordering on the Persian Gulf. Area, 53,500 sq. m. The capital is Shiraz; the port, Bushire, on the Persian Gulf.

Farsley, a town in the West Riding of Yorkshire, 4 miles NE. of Bradford. Pop. 5580.

Farukhabad, a city of the United Provinces of India, near the right bank of the Ganges, 83 miles NW. of Cawnpore. Pop. 68,000.

Fasano (*Fa-zâh'no*), a town of Italy, 35 miles NW. of Brindisi by rail. Pop. 16,941.

Fasher, a province of Dar-Fûr (q.v.).

Fash'oda, a town in the Shilluk country, on an island in the White Nile, 60 miles below the mouth of the Sobat tributary.

Fasque, a Kincardineshire mansion (Sir J. R. Gladstone), 1¾ mile N. by W. of Fettercairn.

Fast Castle, a ruin on the Berwickshire coast, 4½ miles NW. of Coldingham. It is Scott's 'Wolf's Crag' in the *Bride of Lammermoor*.

Fastnet Lighthouse, on a rock 4 miles SW. of Cape Clear (q.v.), with a revolving light 148 feet above high-water, and visible for 18 miles.

Fatehganj ('Victory Market'), two villages in the United Provinces of India. (1) EAST FATEHGANJ, 23 miles SE. of Bareilly, was founded by the Nawáb of Oudh to commemorate a British victory over the Rohillas in 1774. —(2) WEST FATEHGANJ, 35 miles NW. of the former, was the scene of another victory over the Rohillas in 1794.

Fatehgarh, the cantonment and administrative headquarters of Farukhabad district, 3 miles E. of Farukhabad city, forming with it one municipality. There are many native Christians. A British military station since 1802, the place was attacked by Holkar in 1804, and here in 1857 over 200 Europeans—men, women, and children —were massacred by the rebels. Pop. 12,435.

Fatehpur, (1) capital of a district in the United Provinces, 70 miles NW. of Allahabad. Pop. 20,179.—(2) A fortified town of Rajputana, 145 miles NW. of Jaipur. Pop. 14,731.

Fatehpur Sikri, a ruined capital of the Mogul empire, founded by Akbar in 1570, but soon after abandoned for Agra, 23 miles to the east. There are imposing remains of ancient buildings.

Fatshan, an important manufacturing city of China, 6 miles SW. of Canton. Pop. 450,000.

Fauldhouse, a mining-town of Linlithgowshire, 7 miles WSW. of West Calder. Pop. 2762.

Favara, a town of Sicily, 4 miles SE. of Girgenti. Pop. 15,983.

Faversham, an ancient municipal borough and river-port of Kent, 52 miles by rail ESE. of London, and 10 WNW. of Canterbury. It has a valuable oyster-fishery, and the creek on which it stands admits vessels of 200 tons. In the vicinity are important powder-mills. Pop. (1851) 4595; (1901) 11,290. As Favresfield it was a seat of the Saxon kings, where Athelstan in 930 held a Witenagemot. It has scanty remains of a Clugniac abbey founded (1147) by King Stephen, whose tomb is pointed out in the parish church, a fine cruciform building, with a spire 148 feet high. Near it is the house of 'Arden of Feversham,' whose murder by his wife in 1551 forms

the theme of an anonymous tragedy (1592). A grammar-school (1527) was rebuilt outside the town in 1879. In 1638 James II. was seized at Faversham, attempting to flee to France. See local histories by Jacob (1774) and Giraud (1876).

Fayal (*Fī-al'*), one of the Azores (q.v.), with an area of 69 sq. m., and a pop. of 26,264, attains 3000 feet in height, and on its SE. coast has a safe bay with the town of Horta.

Fayetteville, capital of Cumberland county, North Carolina, at the head of navigation on the Cape Fear River, 82 miles by rail (55 direct) S. of Raleigh. Pop. 4822.

Fayyûm, or **Fayoum** (*Fī-yoom';* Egypt. *Phiom*, 'marsh-land'), a district of Egypt (pop. 360,000), a nearly circular basin or oasis, about 30 miles in diameter, or 840 sq. m. in area, sunk beneath the level of the Libyan desert, 50 miles SW. of Cairo, and connected with the Nile Valley by a narrow pass, through which an ancient canal pours the fertilising water which renders the Fayyûm one of the most productive parts of Egypt. The irrigation was anciently regulated by a large reservoir, called Lake Mœris (q.v.), and the overflow now forms the large sheet of brackish water, 35 miles long, known as the Birket-el-Karu, which marks the eastern boundary of the oasis. On the banks of Lake Mœris was the famous 'labyrinth,' reckoned one of the wonders of the world—a vast palace whose remains are seen in the ruins near the brick pyramid of Hawâra. For recent explorations in Fayyûm, see Petrie's *Hawâra, Biahma, and Arsinoë* (1889), and Grenfell's *Fayum Towns* (1901).

Fear, Cape, the most southerly point of North Carolina, forms the southern extremity of Smith's Island, at the mouth of the Cape Fear River.—Cape Fear River, formed by the Deep and Haw rivers, runs 250 miles SE. to the Atlantic.

Fearne Islands. See Farne.

Feather River, California, rises in two forks in the Sierra Nevada, and flows 250 miles S. to the Sacramento.

Featherstone, a township of Yorkshire, 2½ miles W. by S. of Pontefract. In a coal-strike riot here (1893) two men were killed and six others wounded. Pop. 12,093.

Fécamp (*Fay-kon'*), a town and seaport in the French dep. of Seine-Inférieure, 28 miles NNE. of Havre by rail. It has a fine abbey church (*c.* 1220), cotton-mills, sugar-refineries, tanneries, shipbuilding-yards, &c. Pop. (1872) 12,651; (1901) 15,206.

Fehrbellin, a town of Prussia, with 1920 inhabitants, 40 miles NW. of Berlin by rail. Here the Great Elector defeated the Swedes in 1675. A tower (1879) marks the battlefield.

Felaniche, or **Felanitx**, a town of the island of Majorca. Pop. 12,053.

Felegyhaza, a town of Hungary, 80 miles SE. of Pesth by rail. Pop. 33,406.

Felixstowe, a coast-village of Suffolk, 10½ miles by rail SE. of Ipswich. It is named from a priory (1105), dedicated to St Felix, a Burgundian, the first bishop of Dunwich (631–647). With a fine beach for bathing, a pier, good golf-links, and many Roman remains near by, the place is rapidly becoming a popular resort. Pop. with Walton, 1 mile to the west, 5815.

Felstead, an Essex village, 3½ miles ESE. of Dunmow. It has a richly-endowed grammar-school (1554). Pop. of parish, 1959.

Feltre (*Fel'tray*), a town of northern Italy, 19 miles SW. of Belluno by rail. Pop. 6715.

Femern, an island of Sleswick-Holstein. Area, 71 sq. m.; pop. 9800.

Fenny-Stratford, a town of Bucks, on the Ouzel, 7 miles S. of Newport-Pagnell. Pop. 4800.

Fens. See Bedford Level.

Fenwick, an Ayrshire village, on Fenwick Water, 4¼ miles NNE. of Kilmarnock. Pop. 329.

Feodosia, or **Theodosia**. See Kaffa.

Ferentino (*Ferentee'no*), a town of Italy, 55 miles by rail SE. of Rome. Pop. 7679.

Ferghana (*Fergá'na*), a province of Russian West Turkestan, formerly the khanate of Khokand, lies among the western ranges of the Tian-Shan mountain complex. Area, 28,222 sq. m.; pop. 1,500,000. The chief towns are Khokand (the former capital), Marghilan (the present capital), Namangan, and Andijan.

Fergus, a river of County Clare, flowing 25 miles SE. to the Shannon.

Fermanagh (*Ferman'a*), an Irish county in the south-west of Ulster, 45 miles long by 29 broad; area, 714 sq. m., one-fourth arable and one-half pasture. The surface is mostly a succession of hills, culminating in Belmore (1312 feet). Some coal, iron, and marble occur. The chief river is the Erne. Fermanagh is divided into 8 baronies and 23 parishes; it returns two members. Pop. (1851) 116,047; (1901) 65,430 (36,198 Catholics). Enniskillen is the county town.

Fermo (anc. *Firmum*), a town of Italy, 36 miles SSE. of Ancona. It is the seat of an archbishop, and once had a university. Pop. 6692. Its port is Porto San Giorgio (pop. 3114), on the Adriatic.

Fermoy, a town in County Cork, Ireland, on the Blackwater, here spanned by a noble bridge (1866), 19 miles NE. of Cork city. In the 12th century it became the seat of a Cistercian abbey; but the present town was the creation of a Scotch merchant towards the close of the 18th century. It contains a Catholic cathedral, St Colman's College, and barracks for 3000 men. Pop. (1861) 8705; (1901) 6126.

Fernandina (*Fernandee'na*), a port of entry and capital of Nassau county, Florida, on an island 28 miles NNE. of Jacksonville. It is the seat of the Episcopal bishop of Florida, and a popular bathing-resort. Pop. 3562.

Fernando Noronha (*Noron'ya*), a Brazilian volcanic island in the Atlantic, in 3° 50′ S. lat., and 32° 25′ W. long. Measuring 5½ by 1¼ miles, it is cultivated by 2000 Brazilian convicts.

Fernando Po, an island on the west coast of Africa, in the Bight of Biafra, and in 2° 39′ N. lat. Area, 739 sq. m. Its northern half is almost entirely occupied by the volcanic peak (9300 feet) known to the English as Mount Clarence, to the Spaniards as Pico Santa Isabel. The island is covered with luxuriant vegetation. The average annual temperature at Santa Isabel, the capital (pop. 1500), is 78° F. The island is inhabited by 25,000 Bubis, a Bantu tribe, and some negroes. Discovered by the Portuguese in 1472, the island has belonged successively to Spain (1777–1827), England, and Spain (since 1841).

Ferney, a village of 1104 inhabitants, in the French dep. of Ain, 4½ miles NW. of Geneva, and 2 miles W. of the lake. Here Voltaire spent the last twenty years of his life.

Ferniehirst, a castle on Jed Water, Roxburghshire, 2 miles S. of Jedburgh.

Fernilee. See FAIRNILEE.

Fern Isles. See FARNE.

Ferns, a Wexford village, on the Bann, 7 miles N. of Enniscorthy. Pop. 490.

Ferozabad, &c. See FIROZABAD, &c.

Ferrandina (*Ferrandee'na*), a town of Italy, 43 miles ESE. of Potenza by rail. Pop. 7325.

Ferrara (*Ferrâh'ra*), capital of the Italian province of the same name, in the marshy delta of the Po, 30 miles from the Adriatic, and 29 NE. of Bologna by rail. First made a walled city in 604, it still is fortified with walls, bastions, ditches, and a citadel. It has a cathedral, a small university (1264), and the old ducal palace of the Estes, built in the Gothic style in the 14th and 15th centuries. Under the patronage of the Dukes of Este, Ferrara produced a good school of painters; in literature it is closely associated with Tasso, Ariosto, and Guarini, who, as well as Savonarola, was born at Ferrara. At the height of its prosperity, Ferrara had 100,000 inhabitants. It was subject to the House of Este from the close of the 12th century until 1598, when it passed to Pope Clement VIII. In 1860 it was incorporated in the kingdom of Italy. Pop. 40,695.

Ferro, or HIERRO, the most westerly of the Canary Islands (q.v.), was selected as a first meridian by a scientific congress called together at Paris by Richelieu in 1630.

Ferrol, a Spanish seaport in Galicia, stands on a narrow arm of the sea, 11 miles by water and 33 by rail NE. of Corunna. A poor fishing-town until 1752, it is now one of the strongest fortified places in the kingdom, its large arsenal comprising dockyards, naval workshops, &c. The harbour is safe and capacious, and has a very narrow entrance, defended by two forts. The town manufactures naval stores, linen, cotton, and leather. In 1805 a French fleet was defeated by the English off Ferrol, which was taken by the French in 1809 and 1823, and in 1872 was the scene of a republican rising. Pop. 25,000.

Ferryden, a Forfar fishing-village, at the South Esk's mouth, opposite Montrose. Pop. 1382.

Ferryport. See TAYPORT.

Fesa, or FASA, a town of Persia, 60 miles SE. of Shiraz. Pop. 18,000.

Festiniog, a village of Merioncthshire, North Wales, 22 miles by rail WNW. of Bala, and 3½ S. of Blaenau-Festiniog. Standing amid waterfalls and mountains (the loftiest Moelwyn, 2529 feet), it is a great tourist centre. Blaenau-Festiniog, 27 miles SSW. of Llandudno Junction, and 13 NE. of Port Madoc by the 'Toy Railway' (1869), is a town of recent growth, inhabited chiefly by slate-quarrymen. Population (1851) 3460; (1881) 11,274; (1901) 11,435.

Fettercairn, a Kincardineshire village, 12 miles NNW. of Montrose. Pop. 358.

Fettes College (*Fet'tez*), a fine Gothic public school (1870), on the N. side of Edinburgh.

Fez, or more properly FAZ, the second capital of the sultanate of Morocco, lies in a hill-girt valley, 100 miles E. of Rabat on the Atlantic. With crumbling walls, and narrow, dirty, sunless streets, Fez has for over a thousand years been one of the sacred cities of Islam, renowned for its university and schools of learning. The university, attached to the venerated mosque of the Cherubim or of Muley Edris, is frequented by 700 pupils from all parts of the Mohammedan world, and has about forty professors. Attached to this mosque is a library, containing 30,000 MSS. The extensive palace of the sultan is now partly in ruins. Although thus falling into decay, Fez is nevertheless one of the busiest commercial towns of north-west Africa; its merchants import European manufactured wares, which they despatch by caravans to Timbuktu and the interior of Africa, and export fruits, gums, gold, morocco leather, fez caps, pottery, and gold and silver wares. The pop. is very variously estimated from 150,000 to 54,000. Fez was founded by Muley Edris in 808. From 1086 it was the capital of an Almoravid independent kingdom, and ranked, both as a sacred city and for its learning, as one of the first cities of Islam. But from the date of its incorporation with Morocco, in 1548, it began to decay.

Fezzan, a Turkish province (since 1842) to the south of, and politically attached to, Tripoli. Extending some 390 miles N. and S., and 300 E. and W., between 24° and 29° N. lat. and 12° and 18° E. long., Fezzan belongs to the desert region of North Africa. It consists of a huge depression, fenced in on all sides except the west by ranges of hills (2000 to 3000 feet high), and traversed by barren, stony, shelterless plateaus, between which lie long shallow valleys, containing numerous fertile oases. The entire region slopes gently towards the east. The oases, mostly depressions in the valleys, are the only cultivated spots, where a little grain and a few vegetables are raised, and where grows the date-palm, the principal source of food. The climate is on the whole uniform and healthy, although malarial fever is very frequent. Fezzan is both hotter in summer and colder in winter than Tripoli; its temperature ranges from 23° to 112°, the annual mean being 70° F. The atmosphere is very dry; rain scarcely ever falls. There is no export trade except in soda, obtained from extensive salt lakes north-west of Murzuk. The 50,000 inhabitants are a mixed race. They are immoral and idle, but honest and good-natured. In religion they are Sunnite Mohammedans. The principal town is Murzuk (pop. 6500).

Fichtelgebirge (*Fihh'tel-ge-beer'geh*, *g*'s hard), a mountain-system of NE. Bavaria, once covered with pines (*Fichte*, 'pine'), the watershed of the Elbe, Rhine, and Danube. It culminates in Schneeberg (3461 feet) and Ochsenkopf (3334).

Fidra, an islet with a lighthouse, 2½ miles WNW. of North Berwick.

Field Place. See HORSHAM.

Fiesole (*Fyay'zo-lay*; Lat. *Fæsulæ*), one of the most ancient of Etruscan cities, 3 miles NE. of Florence. It has a cyclopean wall, a Roman amphitheatre, a cathedral (1028), &c. Pop. 2000.

Fife, a peninsular Scottish county, washed by the Firth of Tay, the German Ocean, and the Firth of Forth. Its extreme length is 42 miles, its extreme breadth 21, and its area 513 sq. m. The surface offers a succession of cultivated vales and hills, the most prominent eminences being the East and West Lomonds (1471 and 1713 feet), Largo Law (965), and Burntisland Bin (632). Almost the only streams are the Eden (30 miles long) and the Leven (16); whilst of seven lakelets the chief are Kilconquhar Loch (4 by 3 furlongs) and Lindores Loch (7 by 3). Coal is largely mined, besides shale, ironstone, limestone, and freestone. The soil is some of it very fertile, especially in the Howe of Fife, or Stratheden; and whilst barely one-fourth of the whole of Scotland is in cultivation, in Fife the proportion is nearly three-fourths. Many towns and fishing-villages skirt its shores—Culross, Inverkeithing,

Burntisland, Kinghorn, Kirkcaldy, Dysart, Leven, Largo, Elie, St Monans, Pittenweem, the Anstruthers, Kilrenny, Crail, St Andrews, Ferryport, Newport, and Newburgh. Inland lie Cupar, Dunfermline, Falkland, Lochgelly, &c. Under those towns, as also under Balcarres, Balmerino, Cults, Leuchars, Lindores, and Magus Muir, are noticed the manufactures, the chief antiquities, the illustrious natives, and the outstanding points in the peaceful history of the 'Kingdom of Fife.' Fife returns two members to parliament. Pop. (1801) 93,743; (1841) 140,140; (1901) 218,840. See works by Sibbald (1710), Wood (1862), Æ. Mackay (1890), Geddie (1894), and A. H. Millar (1895).

Fife Ness, the eastmost point of Fife, is a low headland. A mile NNE. in the sea is the dangerous Carr Reef, with (since 1886) a lightship.

Figeac (*Fee-zhak'*), a town in the French dep. of Lot, 32 miles ENE. of Cahors. Pop. 5770.

Figueira (*Fee-gay'ee-ra*), a watering-place in the Portuguese province of Beira, at the mouth of the Mondego, 23 miles W. by S. of Coimbra. Pop. 5470.

Figueras (*Fee-gay'ras*), a town in the north-east corner of Spain, 25 miles N. of Gerona by rail, below the fortress of San Fernando. Pop. 12,170.

Fiji Islands (*Fee-jee*), a British crown colony of the South Pacific Ocean, in 15°—22° S. lat. and 176° E.—178° W. long. Their nearest neighbours are the Tonga or Friendly Islands, 200 to 300 miles to the south-east; and they are about 700 from New Caledonia, 1100 from Auckland in New Zealand, 1700 from Sydney, and 4700 from San Francisco. The island of Rotumah, 250 miles N. by W., has been since 1881 included in the colony. The islands were sighted in 1643 by Tasman; and Turtle Island (or Vatoa), in the extreme south-east, was discovered by Cook in 1773; but the Fiji or Viti Archipelago was little known before the 19th century. In 1804 some escaped convicts from Australia are said to have settled here; in 1835 Wesleyan missionaries first came over from Tonga; and trade in bêche-de-mer, sandalwood, &c., gradually led to a small white settlement. In 1858 the sovereignty of the islands was offered to Great Britain by the chief Thakombau; but it was not till 1874 that they were taken over. The governor is also H.M. Commissioner for the Western Pacific.

The Fiji Islands, over 200 in number, lie in a ring, open on the southern side. On the west and north are the two large islands of Viti Levu (4250 sq. m.) and Vanua Levu (2400), with a group of small islands and reefs outside them; and on the east there is a long string of small islands. The total area of the colony (including Rotumah) is 7435 sq. m., or about the same as Wales. Since 1882 the capital has been Suva, with a fine harbour, on the south coast of Viti Levu; till then Levuka, on the little island of Ovalau, off the east coast of Viti Levu, also possessing a good harbour, was the European capital. The Fiji Islands are of volcanic formation, the shape of the mountains (the highest of which attain 4500 feet) and the existence of hot springs testifying to volcanic agency; and they are surrounded by coral reefs, which act as natural breakwaters. They are well supplied with harbours, and have an abundant water-supply, a rich soil, and a climate which, though tropical and somewhat enervating to Europeans (who are subject to dysentery), is not unhealthy or extreme. They suffer, however, from the ravages of hurricanes, and earthquakes occasionally occur. Besides bananas, bread-fruit, cocoa-nut palms, &c., the products include sugar, grown with the help of Indian and Polynesian labour, maize, cotton, vanilla, tea, and coffee. The pop. in 1901 was 117,870, of whom 2440 were Europeans, and 94,000 native Fijians. They are in race akin to the Papuans, but an admixture of the lighter Polynesians has, especially in the eastern islands, leavened the native Melanesian breed. The Fijians were notoriously ferocious cannibals; but now the Christian religion is almost universal in the islands, the adherents of the Wesleyans being estimated at over 100,000, and of the Roman Catholics at more than 10,000. The revenue, derived mainly from customs duties and native taxation, has varied from £65,000 in 1867 to £132,513 in 1902, in which last-mentioned year the expenditure amounted to £113,341. The exports have a total annual value of from £350,000 to £550,000; of imports from £250,000 to £350,000. Sugar, in spite of the depression of the industry, is far the most important export, and next to it in value come cocoa-nuts (mainly in the dried form known as copra) and fruit. The export of cotton has greatly diminished, but that of tea has increased. The trade, both import and export, is almost entirely with New South Wales, New Zealand, and Victoria.

See works by Seemann (1862), Forbes (1875), Horne (1881), and Miss Gordon Cumming (1881).

Filey, a rising watering-place on the east coast of Yorkshire, 9 miles SE. of Scarborough by rail, occupies a picturesque site on cliffs overlooking Filey Bay. It has a spa and an ancient cruciform church. Pop. (1851) 1511; (1901) 3003, engaged mainly in fishing.

Finchley, a Middlesex urban district, 7¼ miles NNW. of London. Pop. 22,126.

Findhorn, (1) a beautiful Scottish river, rising among the Monadhliath Mountains at an altitude of 2800 feet, and running 62 miles north-eastward through Inverness, Nairn, and Elgin shires, till it enters the Moray Firth at Findhorn village by a triangular lagoon, 2 miles long and 2⅜ wide. Its waters abound in salmon and trout. At one place it rose nearly 50 feet in the disastrous floods of August 1829, known as the 'Moray floods.'—(2) An Elginshire seaport, 5 miles N. of Forres. Pop. 486.

Findlay, capital of Hancock county, Ohio, 37 miles SW. of Fremont, with foundries, flour-mills, &c. Pop. (1880) 4633; (1900) 17,613.

Findochty, a Banffshire fishing-village, 3½ miles W. by N. of Cullen. Pop. 1501.

Findon, a Kincardineshire fishing-village, 6 miles S. of Aberdeen. The well-known *Findon* (*Finnan*) *haddocks* were first cured here.

Fingal's Cave. See STAFFA.

Finhaven, a ruined castle, Forfarshire, 5¼ miles NNE. of Forfar.

Finistère (*Fee-nis-tair'*; Lat. *finis terræ*, 'land's end'), a western dep. of France, comprehending a part of the former duchy of Brittany, and washed on three sides by the English Channel and the ocean. Area, 2585 sq. m. Pop. (1872) 642,963; (1901) 773,014. It is divided into the five arrondissements of Brest, Châteaulin, Morlaix, Quimper (the chief town), and Quimperlé.

Finisterre, CAPE, a promontory at the north-western extremity of Spain, off which Anson defeated the French (1747).

Finland (Finnish *Suomi* or *Suomenmaa*, 'the land of fens and lakes'), a grand-duchy annexed to Russia in 1809, which, though nominally enjoying administrative autonomy, has (since 1890

especially) been deprived of many of its most cherished privileges. Finland, which from the 13th to the 19th century belonged to Sweden, lies between 60°–70° N. lat. and 20°–32° E. long. Area, 144,255 sq. m. (a sixth larger than the United Kingdom); pop. (1901) 2,744,952, of whom 2,353,000 were of the native Finnish race, 350,000 Scandinavians, 6000 Russians, and the rest Germans and Lapps. All but 50,000 Greek and 500 Roman Catholics are Lutherans. The inhabitants of Helsingfors, the capital (pop. 97,051), are mostly of Swedish descent, as is also the case at Abo (39,238), and all along the south and west coasts. About 80 per cent. are agriculturists, mostly peasant-proprietors. The coast is much indented, and studded with thousands of small islands, whilst the interior of the country is dotted with countless lakes, some of vast size, and mostly connected with each other naturally or artificially by means of canals. About 12 per cent. of the total area is occupied by lakes, and 15 per cent. by marsh and bog. The largest of the lakes—besides Lake Ladoga, of which part belongs to Russia—are Lakes Saima, Enare, Kemi, Uleå, and Päijänne. The Saima consists of 120 large lakes and several thousand smaller ones, all connected, and having a natural outlet into Lake Ladoga, over the famous Imatra Falls or Rapids—the finest in Europe both from the scenery and volume of water. Lake Saima is likewise connected with the Gulf of Finland by means of a splendid canal 36 miles long, with twenty-eight locks for a fall of 250 feet. The highest mountain is Haldefjäll, in Lapland (4126 feet high), near the frontier of Norway. From the lack of mountain-ranges, the rivers are unimportant, the principal being the Kemi and Uleå in the north, and the Kymmene in the south. In spite of rocks and rapids, they are well suited for floating logs from the forests of the interior, they drive many mills, and are also rich in fish. The forests cover three-fifths of the land-surface, and more than half of them belong to the state. Of cereals, rye is the most grown, then barley, oats, and wheat; this latter, however, rarely ripens beyond lat. 61°. The potato flourishes as far north as lat. 69°. Among wild animals we find the bear, wolf, fox, lynx, ermine, otter, and hare; the elk and beaver are now rare. Seals are plentiful along the coast, as also in the Saima and Ladoga lakes. Reindeer are employed in the far north. Finnish horses are remarkable for their speed, hardihood, and docility. Of birds there are 211 species, and of fish 80 species.

The climate of Finland is very rigorous in winter, even on the south coast, where 20° and 25° below zero (Fahrenheit) are often registered; but it is generally healthy, and, owing to the proximity of the sea, it is far milder than North Russia. The summer, though short, is occasionally very hot in June and July. The ground is generally covered with snow from the middle of November till April; then follows a brief spring, accompanied by a rapid growth of vegetation. The emperors of Russia are grand-dukes of Finland. The country is governed by the grand-duke, the senate, and the diet. The senate consists of 20 members, appointed by the grand-duke from among his Finnish subjects. The diet consists of four chambers—nobles, clergy, burgesses, and peasantry; the nobles having hereditary legislative rights, whilst the others are elected by constituents. In the end of 1905 the emperor restored Finnish autonomy and the powers that had been withdrawn from the native senate and diet; in 1899–1903 a series of edicts transferred some of the powers of the senate to the governor-general, introduced the Russian military system, and made Russian (to the general still a quite unknown tongue) an official language along with Finnish and Swedish (the latter the literary language of the educated). Education in Finland is, taking all things into consideration, very advanced, upwards of 90 per cent. of the population being able to read and write; the university of Helsingfors has about 2500 students.

The railways of Finland have a total length of 4723 miles. The revenue in 1903 was £3,858,157, whilst the expenditure left a large balance. The public debt of Finland amounted in 1903 to £5,367,300, nearly all expended on public works, education, and the like, and is more than balanced by the state property. Finland has a thriving commercial marine. The value of the exports (timber, butter, paper being the most important) in 1902 was £4,100,000. The imports amounted to £5,396,000, the chief items being cereals, iron and steel, coffee, textiles, and sugar. Nearly half of Finland's trade is with Russia; Germany being second, and Great Britain third on the list. Large quantities of iron are found in Finland, and copper, tin, silver, and gold exist. Physically the Finns proper are a strong, hardy race, with round faces, square shoulders, fair hair, and blue eyes, though intermarriage with Scandinavians and Russians has in many cases caused variations. Ethnographically they belong to the Ugro-Finnic (Mongolian) stock, and their language is akin to that of the Lapps, the Voguls and Ostiaks in Siberia, and the Magyars in Hungary. Their chief literary monument is the *Kalevala*, an ancient epic poem composed of innumerable popular traditions and songs in the rhythm imitated by Longfellow in *Hiawatha*.

See the *Kalevala* translated by J. M. Crawford (1888); J. C. Brown, *The People of Finland in Archaic Times* (1893); works on Finland in French or German by Koskinen (1863), Ignatius (1878), Jonas (1886), Fisher (1899), De Windt (1902), and Frederiksen (1902).

Finland, Gulf of, the eastern arm of the Baltic Sea, receives the waters of the great lakes Onega and Ladoga, and is shallow and only very slightly salt. The navigation on the northern or Finnish coast is very dangerous, on account of the numerous islands and shoals.

Finmarken, the most northern province of Norway. Area, 18,295 sq. m.; pop. 33,000, principally Lapps. The capital is Hammerfest.

Finnan. See Glenfinnan and Findon.

Finsbury, a parliamentary borough of north London, with three one-member divisions (Holborn, Central, East); the two latter form since 1899 the metropolitan borough of Finsbury.

Finsteraarhorn (*Finsterâhr'horn*), the highest peak (14,026 feet) of the Bernese Alps.

Finsterwalde (*Finsterval'deh*), a town of Prussia, 71 miles S. by E. of Berlin. Pop. 10,720.

Fintry Hills, Stirlingshire, 1676 feet high, and 17 miles N. by E. of Glasgow.

Fir'miny, a town in the French dep. of Loire, 9 miles SW. of St Etienne by rail. It has rich coal-mines, and manufactures nails, ribbons, buttons, &c. Pop. 18,000.

Firozabad, a decayed town of India, North-west Provinces, 24 miles E. of Agra. Pop. 16,023.

Firozpur, or Ferozepore, a town in the Punjab, 3½ miles from the left bank of the Sutlej.

Founded, it is said, by Firoz Shah (1351–87), it had sunk into insignificance before it became in 1835 a British possession; but since then it has regained much of its former consequence. It possesses the largest arsenal in the Punjab, and a church in memory of those who fell in the Sikh wars (1845–46). Pop. 50,000.

Firozshah, a battlefield in Firozpur district, 12 miles from the Sutlej's left bank, the scene of the capture by the British of the Sikh camp, December 21, 1845.

Fisherrow. See MUSSELBURGH.

Fisher's Hill, in the Shenandoah valley, Virginia, 30 miles S. of Winchester. Here Sheridan defeated the Confederates, 21st September 1864.

Fishguard, a Pembrokeshire (q.v.) seaport, one of the seven Pembroke boroughs, 14½ miles N. of Haverfordwest. The French made a small descent here in 1797. Pop. 1886.

Fishkill-on-Hudson, or FISHKILL LANDING, opposite Newburgh, and 58 miles N. of New York, was in 1776–86 a great military depôt. Pop. 3700.

Fitchburg, a city of Massachusetts, on the Nashua River, 50 miles WNW. of Boston. Pop. (1880) 12,429; (1900) 31,531.

Fitzroy, the largest river of Western Australia, flows 380 miles to the southern end of King Sound.

Fiume (pron. *Fū'mā;* Illyr. *Rika*, Lat. *Fanum Sti Viti ad flumen*), a great seaport of Hungary, at the mouth of the Fiumara, 142 miles WSW. of Agram by rail, and 35 miles ESE. of Trieste across the Istrian peninsula, stands at the head of the beautiful Gulf of Quarnero, in the Adriatic, where the Julian Alps end. Its extensive industries include manufactures of paper, torpedoes, tobacco (government factory, with over 2000 hands), sails, ropes, chemicals, starch, and liqueurs, besides a large petroleum-refinery, rice and flour mills, &c. The tunny-fisheries of the Gulf also are valuable. Fiume's chief importance, however, is as the entrepôt of a great and steadily increasing commerce. A free port from 1717 till 1891, it has a harbour with a lighthouse and several breakwaters, which was greatly improved by the Hungarian government in the years following 1872, when new moles and quays with warehouses, and petroleum and other docks, were added, at a cost of upwards of a million sterling, with the immediate effect of increasing the trade (mainly transit) fivefold within the next twelve years. Pop. 39,000.

Flamborough Head, a Yorkshire promontory, forming the northern horn of Bridlington Bay, 18 miles SE. of Scarborough (by road 24). It terminates a range of steep chalk-cliffs, 300 to 400 feet high, and pierced with many caverns. On the Head is a lighthouse, 214 feet above sea-level, and 80 feet high, seen 21 miles off. Across the peninsula runs the so-called Danes' Dyke, really an ancient British earthwork.

Flanders (Flemish *Vlaenderen*), the country of the Flemings, a territory lying adjacent to the North Sea, between the Scheldt and the Somme, which embraced the present Belgian provinces of East and West Flanders, the southern portion of Zealand in Holland, and the greater part of ancient Artois in France.

Flannan Islands, or THE SEVEN HUNTERS, a small group of uninhabited islets off the outer Hebrides, 20 miles NW. of Gallon Head in Lewis.

Flatbush, a former village of Long Island, adjoining (now part of) Brooklyn, with an asylum.

Flattery, CAPE, a headland of Washington state, U.S., washed NE. by the Strait of Juan de Fuca, and SW. by the Pacific.

Flèche, LA (*Flehsh*), a French town, in Sarthe, on the Loir, 60 miles NW. of Tours by rail. It manufactures paper, oil, leather, &c., and since 1764 has been the seat of a famous military school (*Prytanée*), founded in 1607 as a Jesuit college, where Prince Eugene and Descartes were educated. Here, too, are the heart and a statue (1857) of Henri IV.; and here David Hume spent three years (1734–37). Pop. 9375.

Fleetwood, a seaport and military station of Lancashire, at the mouth of the Wyre, 21 miles NW. of Preston by rail. Founded in 1836, it has an excellent harbour, and is a favourite resort for sea-bathing. A new dock was opened in 1877. Steamers ply daily to and from Belfast, and there is a regular service to the Isle of Man. Rossall School (q.v.) is 2 miles to the SW. Pop. (1851) 3121; (1901) 12,082.

Flensborg, a seaport in the Prussian province of Sleswick-Holstein, at the extremity of Flensborg Fjord, an inlet of the Baltic, 19 miles N. of the town of Sleswick. It has iron and machine works, copper and zinc factories, shipbuilding-yards, &c.; fishing and fish-curing are also carried on. Pop. 50,000.

Flers (*Flayr*), a French town, in Orne, 41 miles S. of Caen by rail, with large cotton and linen spinning, bleaching, and dyeing works. Its old castle, burned down in the Chouan war, has been restored. Pop. 14.000.

Fletching, a Sussex parish, 8 miles N. of Lewes. Gibbon is buried in the church.

Fleurus (nearly *Fleh-reece'*), a town (pop. 5084) of the Belgian province of Hainault, on the Sambre, 15 miles W. of Namur. Three great battles have been fought here: (1) in 1622, when the Germans defeated the Spaniards; (2) in 1690, when the French routed the allied Germans and Dutch; and (3) in 1794, when the French, under Jourdan, defeated the Austrians and their allies.

Flint, the county town of Flintshire, North Wales, on the left side of the Dee's estuary, 13 miles NW. of Chester. In the vicinity are extensive alkali-works, besides copper-works, collieries, and lead-mines. Pop. (1851) 3296; (1901) 4625. It unites with Caergwrle, Caerwys, Holywell, Mold, Overton, Rhuddlan, and St Asaph to return one member. Flint Castle, built by Edward I., was captured by the parliament in 1643, and dismantled in 1647. Here Richard II. surrendered to Bolingbroke, 19th August 1399. See Taylor's *History of Flint* (1873).

Flint, a maritime county of North Wales, bounded NE. by the river Dee, and N. by the Irish Sea. The main portion of the county is 26 miles long by 10 to 12 broad, and the detached hundred of Maelor, lying 8 miles SE. of the main part, measures 9 miles by 5. Area, 289 sq. m. The coast is low and sandy, but along the Dee estuary fertile. The county is bisected by a low range of hills stretching almost due north. Coal, iron, lead, copper, calamine, zinc, and limestone are the chief mineral products. There are numerous well-watered and picturesque valleys. The uplands afford good pasturage. The Dee in the east and the Clwyd in the west of the county are the principal rivers. Pop. (1801) 39,469; (1881) 80,587; (1901) 81,725. Flintshire returns one member to parliament. The chief towns are Flint, Mold, St Asaph, Holywell, and Hawarden.

Flint, capital of Genesee county, Michigan, on

the Flint River, 64 miles NNW. of Detroit by rail, with sawmills and manufactures of beer, flour, bricks, paper, machinery, &c. Pop. 13,100.

Flint River, in Georgia, U.S., rises 10 miles S. of Atlanta, and flowing southward 400 miles (150 navigable for steamboats), unites with the Chattahoochee to form the Appalachicola (q.v.).

Flintshire. See FLINT.

Flodden Field, a battlefield on the northern slope of Flodden Hill, one of the eastern and lowest of the Cheviots, 6 miles S. of Coldstream. Here, on 9th September 1513, the Scots met with a grievous defeat at the hands of the English under the Earl of Surrey. They lost from 5000 to 12,000 men, including King James IV. and the flower of his nobility.

Florence (Lat. *Florentia;* Ital. *Firenze*), a city of Italy, capital of the former duchy of Tuscany, 194 miles NW. of Rome, and 62 E. of Leghorn. Pop. (1881) of town, 132,039, of commune, 169,001; in 1901, 205,589. The Arno, spanned by four fine bridges, divides the city into two unequal parts, the chief on the northern bank of the river. Beyond the line of the ancient walls (now razed) are thickly peopled suburbs, and a lovely, fertile, and healthy neighbourhood, encircled by sloping hills, and studded with picturesque villas and fruitful vineyards and gardens. The massive and austere forms of Florentine architecture impart an air of gloomy grandeur to the streets, for the most part regular and well kept. The Duomo or Cathedral was founded in 1298, and built from the plans of Arnolfo di Cambio, Giotto, and Brunelleschi; the façade was completed in 1887. The church contains sculptures by Ghiberti, Luca della Robbia, Michael Angelo, Sansovino, Bandinelli, and other famous artists. At the side of the cathedral springs Giotto's famous Campanile; and in front is the octagonal Baptistery of San Giovanni, with the glorious bronze gates in basso-rilievo by Ghiberti. The church of the Santa Croce, the Pantheon of Florence (built in 1294—architect, Arnolfo), contains monuments to Galileo, Dante, Macchiavelli, Michael Angelo, Alfieri, &c. The church of San Lorenzo, consecrated in 393 by St Ambrose, and rebuilt by Brunelleschi in 1425, contains in its New Sacristy the two famous monuments by Michael Angelo to Julian and Lorenzo de' Medici. The Medicean chapel, gorgeous with the rarest marbles and most costly stones, agate, lapis lazuli, chalcedony, &c., stands behind the choir. Annexed to the church of San Lorenzo is the Laurentian Library, with its inexhaustible store of rare MSS., founded by Giulio de' Medici. The beautiful church of Santa Maria Novella, formerly Dominican, dates from 1278 to 1360, and has famous frescoes by Cimabue, Orcagna, Filippino Lippi, and Ghirlandajo. The church of San Marco dates from 1436; adjoining it is the former monastery of San Marco, now secularised as a museum. Fra Angelico, Savonarola, and Fra Bartolommeo were inmates, and it is still adorned with the famous frescoes of Fra Angelico. Amongst the numerous palaces *Il Bargello*, long a prison, now a national museum, was formerly the abode of the republican magistrate, the Podestà. The Palazzo Vecchio, the seat of the old republican government, is an imposing mass of building, surmounted by a lofty tower 260 feet high. Adjoining the palace is the Piazza della Signoria, a square with fine statues, and a noble arcade, the Loggia dei Lanzi, under the porticoes of which are magnificent groups of sculpture. The Palazzo degli Uffizi contains archives of public offices, also the Magliabecchi Library, now united with that of the Pitti Palace to form a national library of 300,000 volumes and 15,000 MSS. On the second floor, in a suite of twenty-three rooms, is contained the famous Florentine gallery of art, rich in paintings, engravings, sculpture, bronzes, coins, gems, and mosaics—one apartment, the Tribuna, containing the rarest treasures of the collection. The Palazzo Pitti, formerly the grand-ducal residence, boasts of a superb gallery of paintings; behind it are the beautiful Boboli Gardens. The Palazzo Riccardi is the residence of the prefect. The Palazzo Strozzi is a fine type of Tuscan architecture. The Instituto di Studi Superiori has adopted the ordinary university curriculum, and confers various degrees. The School of Social Science, the school of art, the musical institute, the hospital of Santa Maria Nuova with its ancient college of medicine and surgery, the Academy of the Fine Arts, the Museum of Natural History, deserve mention, as do the Accademia della Crusca and the Accademia dei Georgofili. There are nearly a dozen theatres. Florence is the see of an archbishop, the seat of a prefecture and of numerous provincial courts, as well as the military headquarters of the district. The chief industrial occupations of the Florentines are the fabrication of silk and woollen textures, and of straw-plaiting for hats, &c., jewellery, and exquisite mosaics in rare stones. The Florentines are famous for their caustic wit and natural gifts of eloquence, as well as for their shrewd thriftiness and unflagging labour. The beauty of the city and neighbourhood, her grand historical monuments, and her unique collections of art, attract many foreigners to fix their residence here.

Florence originated in the old Etrurian town of Fiesole (q.v.), on the hill behind, was a Roman military colony under Sulla, but was not an important place till the time of Charlemagne, when it was governed by a duke. By the 11th century the Florentines were wealthy traders, and the city had practically republican government—at first aristocratic, but gradually becoming more popular. In 1215 Florence became involved in the deadly feud of Guelphs and Ghibellines, and was never free from the contests of these and other factions, native or alien, till the family of the Medici secured supreme power at the close of the 15th century. Her liberty was extinguished, but under the Medici the city was the focus of literature and art. In 1569 the Medici became grand-dukes of Tuscany, with Florence as their capital; and Tuscany, after several changes of dynasty, became part of the Italian kingdom in 1860, Florence being the capital of Italy from 1864 till 1871. Among Florentine worthies have been Dante, Boccaccio, Machiavelli, Guicciardini, Amerigo Vespucci, and *Florence* Nightingale. Savonarola laboured and was executed here; to the Florentine school belong the painters Cimabue, Orcagna, Masaccio, Ghirlandajo, the Lippis, Andrea del Sarto, Carlo Dolci; the sculptors Luca della Robbia, Donatello, and Ghiberti; and the musicians Lully and Cherubini.

See works by T. A. Trollope (1865), Mrs Oliphant (1876), Yriarte (1882), A. J. C. Hare (5th ed. 1901), Villari (1895), Grant Allen (1897), E. G. Gardner (1900), and Goffe (1905).

Florence, a town in the Staffordshire Potteries, 2 miles SW. of Newcastle-under-Lyme.

Flores, (1) one of the Sunda islands in the East Indies, lying due south from Celebes. Area,

6026 sq. m.; pop. 250,000. It is heavily timbered, and mountainous in the interior. The western half, Mangarai, is subject to a native chief; the eastern half, known as Endeh, belongs to Holland. The trade is principally in tortoiseshell, cinnamon, sandalwood, and edible birds'-nests. —(2) An island of the Azores (q.v.), where in 1591 Sir Richard Grenville in the little *Revenge* held at bay fifteen Spanish war-ships till his own was a mere wreck—the subject of a noble poem by Tennyson.

Flor'ida, called the 'Everglade State' and 'Peninsula State,' lies in the extreme SE. of the United States, between the Atlantic and the Gulf of Mexico, and bounded N. by Georgia and Alabama. The state is nearly 400 miles long, 84 miles in mean breadth, and 58,680 sq. m. in area (about one-fifteenth water surface). Florida has nineteen navigable rivers (1000 miles in all), with many swamps, marshes, lakes, and ponds. Of the lakes the largest is Okeechobee, a shallow freshwater expanse of about 1000 sq. m.; the Everglades (q.v.) form a delta-like expansion of this lake. The long coast-line is dotted with innumerable islands and keys. In climate and products Florida is like a great tropical island. It is cooled by sea-breezes from the gulf, making the climate remarkably equable; and the state is a favourite winter-resort, both for tourists and invalids, although malarial fevers prevail in some parts, and yellow fever has occasionally, as in 1889, visited the seaports heavily. The range between the mean summer and winter temperature is only about 20°; the greatest recorded extremes are 105° and 10° F. The soil, while much of it seems a sterile sand, is helped to fertility by the moisture, the rainfall being about 54 inches annually. Large areas are devoted to orange orchards, while lemons, limes, grapes, pine-apples, bananas, pears, guavas, figs, &c. grow with equal luxuriance; and coffee, rice, cotton, and tobacco are natural products. Cocoa-nuts also are grown in the subtropical region. Market-gardening has become important. Florida is not rich in minerals. Mineral springs are numerous. Large tracts of alluvial swamp and shallow lake-lands are being reclaimed by drainage. Next to these are the low hummocks or bottom-lands, dry enough for cultivation, and producing large crops of cotton, sugar-cane, grain, fruits, and vegetables. The high hummocks have a dark, gray soil, very rich at first, but soon running out if not kept well fertilised. Then come first-class pine, oak, and hickory lands, sandy, but containing a good deal of lime. There is a second-class pine land that is barren, but supplies a tolerably good pasturage. Indian corn is largely raised. In the central and southern parts the black bear, the cougar, the panther, wild-cats, wolves, foxes, raccoons, opossums, fish-otters, deer, and smaller game are at home; alligators, turtles, and manatees are found in the waters. The lumber trade, the preparation of naval stores, turpentine, tar, rosin, pitch, and cigar-making are amongst the industries; all along the coast there are valuable fisheries, oysters abound in many parts, and the inland waters also teem with fish; and the evaporation of salt, the production of cotton-seed oil and meal, the manufacture of fertilisers, and sponge and coral fisheries are profitable pursuits. The chief towns are Key West, Jacksonville, Pensacola, Tampa, St Augustine, and Tallahassee (the capital). The State College is at Lake City. Pop. (1870) 187,748; (1880) 269,493; (1890) 391,422; (1900) 528,542, of whom 230,730 were negroes.

Florida was discovered on Easter Day (*Pascua Florida*), 1512, by Juan Ponce de Leon. In 1539 it was explored by De Soto, and in 1565 a body of French Calvinists were butchered or driven out by the Spaniards. Spanish till 1763, English from 1763 till 1781, and Spanish again till 1819, it was acquired by the United States and became a territory; it was admitted into the Union as a state in 1845. In 1835–42 it was the theatre of a desperate war with the aborigines (Seminoles). In the civil war the state took the Confederate side, and was not readmitted to the Union till 1868.

See Davidson, *The Florida of To-day* (1889); Whitehead, *The Camp-fires of the East* (1891); Powell, *The American Siberia* (in reference to the convict camps here, 1892).

Florida, capital of an Uruguayan dep., 67 miles N. of Montevideo by rail. Pop. 2500.—The dep. has an area of 4650 sq. m., and a pop. of 40,600.

Florida Strait, the channel separating the American state of Florida from Cuba and the Bahamas. It is 310 miles long, 50 to 100 miles wide, and 2220 to 5070 feet deep. The Gulf Stream flows through it.

Floors Castle. See KELSO.

Flüelen, a village at the southern end of the Lake of Lucerne, on the St Gothard Road and the St Gothard Railway.

Flushing (Dutch *Vlissingen*), a strong Dutch fortress and seaport, on the south coast of the island of Walcheren, at the mouth of the Western Scheldt, 87 miles SW. of Rotterdam. Formerly an important naval station, it was converted into a commercial harbour in 1865–73. A daily service of steamers connects Flushing with Queenborough in Kent (8 hours' passage). There is a royal dockyard here; and, since 1875, a large floating-dock. Pop. 18,565.

Flushing, since 1897 included in the City of New York, is in Long Island, on Flushing Bay, a branch of Long Island Sound.

Fly, a river of New Guinea, flowing to the west side of the Gulf of Papua, and forming at its mouth a wide delta. First ascended for 90 miles by MacFarlane and D'Albertis in 1875, it was explored in 1885 by Everill for 200.

Foch'abers, a village of Elginshire, on the Spey, 7 miles ESE. of Elgin. Milne's Free School (1846) is the chief edifice. A mile north is Gordon Castle, the old 'Bog of Gight,' the seat now of the Duke of Richmond and Gordon. Pop. 981.

Foggia (*Fodj'a*), capital of an Italian province, 76 miles NW. of Bari by rail. Supposed to have been built from the ruins of the ancient *Arpi*, it has a cathedral dating from 1172, but partially rebuilt after an earthquake in 1731. Pop. 53,852.

Föhr, a fertile island in the North Sea, off the west coast of Sleswick. Area, 28 sq. m.; pop. 4350, Frisians by race. The chief town is Wyk (pop. 1063).

Foix (*Fwah*), capital of the French dep. of Ariège, in a Pyrenean valley, 44 miles S. of Toulouse by rail. Of the ancient castle of the counts of Foix (1362) there remain only three towers. The town has iron and steel works. Pop. 6177.

Fokshani, a town of Roumania, on the Milkoff, a tributary of the Sereth, 123 miles by rail NE. of Bucharest. Pop. 25,290.

Földvar, DUNA, a town of Hungary, on the Danube, 48 miles S. of Pesth. Pop. 12,720.

Foligno (*Foleen'yo*), a cathedral city of central Italy, 25 miles SE. of Perugia. Pop. 9753.

Folkestone, a municipal borough, seaport, and watering-place of Kent, 7½ miles WSW. of Dover, and 71½ ESE. of London. Built on uneven ground, at the foot of hills 575 feet high, it has rapidly extended and improved since the opening of the railway (1844), and of a daily service of steam-packets to Boulogne. The harbour is much used by boats employed in the herring and mackerel fisheries. In the vicinity are the remains of Roman entrenchments. Harvey, the discoverer of the circulation, was a native, and a statue of him was erected in 1881. Folkestone is included in the parliamentary borough of Hythe (q.v.). Pop. (1851) 6726; (1901) 30,650.

Fond du Lac (*Fon^{g} dü Lac;* Fr., 'end of the lake'), capital of a Wisconsin county, at the southern end of Lake Winnebago, 63 miles NNW. of Milwaukee by rail. It carries on a large trade in lumber, and is supplied with water by numerous artesian wells. Pop. 15,024.

Fondi (*Fon'dee*), a walled cathedral city of Italy, 14 miles NW. of Gaeta. Pop. 6773.

Fonse'ca, a bay on the Pacific coast of Central America, the proposed terminus of a projected interoceanic railway through Honduras.

Fontainebleau (*Fon^{g}tehn-blō'*), a French town in Seine-et-Marne, near the Seine's left bank, 37 miles SE. of Paris. It is chiefly famous for its royal château, and the beautiful forest, 65 sq. m. in area, that surrounds it. The château, said to have been founded by Robert the Good towards the end of the 10th century, was rebuilt in 1169 by Louis VII., and enlarged by Louis XI. and his successors. After being allowed to fall into decay, it was repaired and embellished by Francis I., Henry IV., Napoleon I., and Louis-Philippe. Pop. 10,078.

Fontarabia, or Fuenterrabía, a picturesque old frontier town of Spain, at the mouth of the Bidassoa, opposite the French town of Hendaye, below the west extremity of the Pyrenees. It was long an important fortress, often taken and retaken. In the Roland legend, it is associated with the defeat at Roncesvalles (q.v.). Pop. 4713.

Fontenay-le-Comte (*Fon^{g}t'nay-le-kon^{g}t'*), a town in the French dep. of Vendée, on the river Vendée, 27 miles NE. of La Rochelle. It has a beautiful Romanesque church, with a Gothic spire 311 feet high; a fountain from which it is said to have derived its name; and manufactures of hats, woollens, linen, &c. Pop. 8369.

Fontenoy, a village (pop. 857) of Belgium, 5 miles SE. of Tournay. Here, on 11th May 1745, the French under Marshal Saxe, defeated the allies (English, Dutch, and Austrians) under the Duke of Cumberland. The victory was in great measure due to the courage of the 'Irish Brigade' in the French army.

Fontevrault (*Fon^{g}t-e-vro'*), a town in the French dep. of Maine-et-Loire, 8 miles SE. of Saumur. A celebrated abbey was founded here in 1099; the 12th-century church contains sepulchral monuments to Henry II. of England, his queen, Eleanor of Guienne, Richard Cœur-de-Lion, and Isabella, the queen of John. Since 1804 the monastic buildings have been used as a prison for 2000 convicts. Pop. 1571.

Foochow (*Fû-Châu*), capital of the Chinese province of Fû-chien, with suburbs extending to the river Min, 25 miles above its mouth. The town proper is surrounded with walls nearly 30 feet high, and 10 feet wide at the top. The river is thronged with floating houses, and is crossed by a great bridge, 329 yards long. The Min provides an easy communication with the interior, with which a large trade is carried on in timber, paper, and cotton and woollen goods; and the port, opened to foreign commerce in 1842, is one of the principal tea-markets and mission stations in China. The imports are chiefly opium, cotton goods, and lead. There are manufactories of silk and cotton fabrics and paper; and on an island 3 miles down the stream there is a large government arsenal managed by Europeans. The French bombarded Foochow in 1884. Pop. 630,000.

Forbach, a manufacturing town in Lorraine, 6 miles SW. of Saarbruck. Here, on 6th August 1870, the French had to retreat. Pop. 8842.

Fordoun, a Kincardineshire parish, 6 miles N. by E. of Laurencekirk.

Foreland, North and South, two promontories of England, on the east coast of Kent, between which are the Downs and Goodwin Sands.

For'far, the county town of Forfarshire, at the E. end of Forfar Loch, 14 miles NNE. of Dundee. It was a royal residence as early as the reign of Malcolm Canmore, whose son, David I. (1124–53), made it a royal burgh; but in 1308 Bruce razed the castle—its site is marked by the town-cross of 1684. The making of brogues by the 'Forfar souters' is a thing of the long past; and linen is now the leading manufacture. The Reid public hall (1869) may be noticed, and the Reid public park (1894). With Montrose and three other burghs it returns one member. Pop. of the royal burgh (1901) 12,117.

For'farshire, or Angus, a Scottish county, washed on the east by the German Ocean, on the south by the Firth of Tay. It has an utmost length and breadth of 36 and 36½ miles, and an area of 890 sq. m. The surface is finely diversified, the rich plain of Strathmore—the Howe of Angus—dividing the Sidlaw Hills (1399 feet) from the Grampian Braes of Angus in the north-west, which culminate in Cairn na Glasha (3484 feet) on the Aberdeenshire boundary, and exceed 2000 feet in twenty-two other summits. The chief streams are the North and South Esks and the Isla; and Loch Lee (9 by 2 furlongs) is the largest of several small lakes. Somewhat less than half of the entire area is in cultivation, and more than one-nineteenth under wood. Linen and jute are the staple manufactures of the towns. These include Dundee, Montrose, Arbroath, Brechin, Forfar, Broughty-Ferry, Kirriemuir, and Carnoustie. The county returns one member to parliament. Pop. (1801) 99,053; (1841) 170,453; (1901) 284,082. The antiquities include vitrified and other hill-forts, cairns and standing-stones, weems, Roman camps, the sculptured stones of Meigle, Aberlemno, St Vigeans, Glamis, &c., the ruins of Restennoth priory and Arbroath abbey, the round tower of Brechin, and the old castles of Glamis, Edzell, Finhaven, Airlie, &c. See Warden's *Angus or Forfarshire* (4 vols. 1880–83).

Forli (*For'lee;* anc. *Forum Livii*), an Italian city at the foot of the Apennines, 40 miles SE. of Bologna by rail. It has a cathedral, a citadel (1361, now a prison), and manufactures of silk, shoes, hats, and cloth. Pop. 39,442.

Formia (anc. *Formiæ;* formerly *Mola di Gaeta*), a seaport of Italy, on the Gulf of Gaeta, with the ruins of Cicero's villa. Pop. 8551.

Formosa (Chinese *Taiwan*), an island lying off the coast of China, from which it is separated by the Fû-chien Strait, 90 to 220 miles wide. It has a maximum length of 235 miles, a varying breadth of 70 to 90 miles, and an area

of 14,978 sq. m. The backbone of the island is formed of a range of densely-wooded mountains, which culminate in Mount Morrison (12,847 feet). Eastward of this range lies a narrow strip of mountainous country, presenting to the Pacific a precipitous cliff-wall with in many places a sheer descent of from 5000 to 7000 feet. West of the range is a broad alluvial plain. The rainfall of the northern, central, and eastern portions of the island is heavy. The mean temperature of summer is 80° to 90° F.; of winter, 50° to 60°. Malarial fever is prevalent in the north, and violent typhoons are very common at certain seasons. The island is famous for its rich vegetation. Of animal life there are at least forty-three species of birds peculiar to the island, whilst insects are scarce, and noxious wild animals few. The principal commercial products are tea, sugar, coal, turmeric, rice, sweet potatoes, groundnuts, bamboos, grasses, tobacco, timber, and sesamum-seed. In the south the staple crops are sugar and turmeric, and in the north tea. The imports consist principally of opium, cotton and woollen piece goods, and lead. Sulphur, iron, and petroleum also exist, but are not worked to any extent. Camphor, once the chief product, has again under Japanese rule become an important product; and since 1895, when Formosa was ceded by China to Japan, the Japanese have done marvels for the development of the island—in mining, roads, artesian wells, railways, post-offices, savings-banks, sanitation, hospitals, and education. The savage tribes of the interior have been reduced to order, not without some trouble. (See *Formosa Past and Present*, 1903, by J. W. Davidson.) Formosa forms a province of Japan under its Chinese name of Taiwan. Taiwan and Takow are ports on the south-west, and Tamsui and Kelung on the north. The inhabitants, 2,810,000 in 1905, consist of Chinese settlers and of aborigines, mainly of Malayan and Negrito descent, with some 25,000 Japanese. The Pescadores, a group of islands with 10,000 inhabitants, 20 miles to the west, were ceded to Japan at the same time as Formosa. In the 14th century the Chinese established several colonies in Formosa. Although Portuguese and Spanish navigators began to visit the island in the 16th century, the first European people to establish themselves on it were the Dutch, who in 1624 built Fort Zealandia, near the modern Taiwan. They were, however, expelled in 1661 by a Chinese adventurer, Koscinga, who retained possession of the island for twenty-two years. Some years later a regular Chinese colonisation of the western half of the island was carried through. Subsequently the island became notorious for piracy, and for its ill treatment of shipwrecked crews.

Formosa, a territory in the extreme north of Argentine Republic, formed in 1884. The capital is Formosa (1000 inhabitants), on the Paraguay, 100 miles NNE. of Corrientes.

For'res, a royal burgh of Elginshire, 5 miles S. of Findhorn village on the Moray Firth, and 25 ENE. of Inverness, with which and Nairn and Fortrose it returns a member. On its Castle Hill, a royal residence from 1189 to 1371, stands an obelisk (1857), 65 feet high, to the Crimean hero, Dr Thomson of Cromarty; on wooded Cluny Hill are a hydropathic and the Nelson tower (1806), 70 feet high. Sueno's Stone is a sculptured monolith ascribed to the year 900; the Witch's Stone recalls Macbeth's meeting with the weird sisters near Forres. Pop. 4313.

Forst, a town of Prussia, 80 miles SE. of Berlin by rail, with manufactures of buckskins, cloth, and leather. Pop. 33,539.

Fortaleza, the official name of Ceara (q.v.), an important seaport of Brazil.

Fort Augustus, a village on the Caledonian Canal, at the head of Loch Ness, 33 miles SW. of Inverness. In 1730 General Wade named a fort here after the Duke of Cumberland. Sold to Lord Lovat (1857), it was presented to the Benedictines, and in 1876–90 converted into a stately abbey. Pop. 611.

Fort de France (formerly *Fort Royal*), capital of Martinique (q.v.), in the French West Indies, on the west coast. Pop. 8000.

Fort Dodge, capital of Webster county, Iowa, 85 miles NW. of Des Moines. It has important manufactures and coal-mines. Pop. 12,170.

Forteviot, the ancient capital of the Picts. Its site is 7 miles SW. of Perth.

Fort Garry. See WINNIPEG.

Fort George, a fortress 12 miles NE. of Inverness, on a low sandy projection into the Moray Firth, here only 1 mile broad. Built in 1748 at a cost of £160,000, it covers 12 acres, and can accommodate 2180 men.

Forth, a river and firth of Scotland. The river is formed by two head-streams, Duchray Water and the Avondhu, which, rising on and not far from Ben Lomond, at altitudes of 3000 and 1900 feet, run 14 and 9 miles to a confluence near Aberfoyle, the Avondhu traversing Lochs Chon and Ard. From their confluence, 80 feet above sea-level, the Forth itself winds 39 miles to Stirling, then 12⅔ (the 'Links of Forth') to Alloa, the distances in a straight line being only 18¼ and 5¾ miles. It receives the Teith, Allan Water, and Devon, and traverses or divides Stirling, Perth, and Clackmannan shires. The Firth of Forth extends 51 miles eastward from Alloa to the German Ocean, between Clackmannanshire and Fife on the north, and Stirlingshire and the Lothians on the south. It has a width of ½ mile at Kincardine, 3 miles above Bo'ness, 1½ at Queensferry, 5 between Granton and Burntisland, 17 at Prestonpans, and 8¼ at Elie. Its waters, 3 to 37 fathoms deep, encircle the islands of Inchkeith (fortified 1878–81), Inchcolm (with a ruined abbey), Cramond, &c., whilst at the entrance are the Bass Rock (q.v.) and the Isle of May, on which last and on Inchkeith are lighthouses. Rivers falling into it are the Carron, Avon, Almond, Water of Leith, Esk, and Leven. White fish are plentiful. In 1882–90 a great cantilever railway bridge was erected across the firth at Queensferry. It consists of two main spans of 1700 feet each, and two of 675, its total length, inclusive of piers, being 8296 feet, or a little over 1½ mile. The clear headway under the centre of the bridge is 152 feet at high-water, and the highest part of the bridge is 361 feet. Designed by Fowler and Baker, the bridge with approaches cost £3,368,000. Above the bridge is the roadstead of St Margaret's Hope, and Rosyth, the new naval base (1904).

Fort Madison, capital of Lee county, Iowa, on the Mississippi, 19 miles SW. of Burlington, with manufactures of chairs, boots, &c. Pop. 9300.

Fortrose, a watering-place of Ross-shire, on the inner Moray Firth, 10 miles NNE. of Inverness by a railway (1894). With capital links and good bathing, it is one of the Inverness burghs; and its two portions, Chanonry and Rosemarkie, were constituted a royal burgh in 1590. The seat of a Columban monastery in the 6th century, of the

bishopric of Ross from 1124, it retains the south aisle and chapter-house of a fine cathedral, demolished to furnish materials for Cromwell's fort at Inverness. Pop. 1065.

Fort Royal. See FORT DE FRANCE.

Fort Scott, capital of Bourbon county, Kansas, on the Marmiton River, 98 miles S. of Kansas City. It has foundries, machine-shops, &c. Pop. 11,946.

Fort St David, a ruined fortress (British from 1690) on the coast of Madras presidency, 100 miles S. of Madras, on the outskirts of Cuddalore. Clive became its governor in 1756.

Fort St George. See MADRAS.

Fort Sumter. See SUMTER.

Fortunate Islands. See CANARIES.

Fort Wayne, capital of Allen county, Indiana, at the confluence of the St Joseph and St Mary's rivers, which form the Maumee, and on the Wabash and Erie Canal, 148 miles ESE. of Chicago. It is an important railway centre, and manufactures organs, woollens, engines, &c. It is the seat of a Catholic bishop, and has Methodist (1846) and Lutheran (1850) colleges. Pop. (1870) 17,718; (1890) 35,392; (1900) 45,115.

Fort William, a police-burgh and great tourist centre of Inverness-shire, near the head of salt-water Loch Linnhe, the west base of Ben Nevis, and the south end of the Caledonian Canal, 66 miles SSW. of Inverness. A fort, built here by Monk in 1655, and rebuilt in 1690, was vainly besieged by the Jacobites in 1746. It was dismantled about 1860, and in 1890 made room for the station of the West Highland Railway from Glasgow. Pop. 2087. See also CALCUTTA.

Fort Worth, capital of Tarrant county, Texas, on the west fork of the Trinity River, 33 miles W. of Dallas by rail, with several mills, and a trade in cotton. Pop. (1880) 6663; (1900) 26,688.

Fossa'no, a town of North Italy, 15 miles NE. of Cuneo by rail. It has a cathedral and a 14th-century castle. Pop. 7959.

Fossombro'ne (anc. *Forum Sempronii*), a cathedral city of Italy, on the Metauro, 10 miles E. of Urbino. Pop. 4266.

Fotheringhay, a village of Northamptonshire, on the Nen, 9 miles SW. of Peterborough. Its castle, founded shortly after the Conquest, in which Mary, Queen of Scots, was beheaded in 1587, was allowed to fall into decay after James I.'s accession to the English throne.

Fougères, a town in the French dep. of Ille-et-Vilaine, 23 miles by rail N. of Vitré. It has a picturesque old castle, granite-quarries, and manufactures of sailcloth, leather, &c. Here the Vendeans defeated the republicans in November 1793. Pop. 20,000.

Foula, a lonely island of Shetland, 16 miles WSW. of the nearest point of the mainland. Measuring 3¼ by 2½ miles, it is 5 sq. m. in area, and culminates in the Sneug (1372 feet). The Old Red Sandstone cliffs on its north-west side, rising 1220 feet almost sheer from the sea, are denizened in the breeding season by myriads of sea-fowl—puffins, kittiwakes, and the rare great skua or 'bonxie,' which formerly was preserved by the islanders to keep down the eagles. The only landing-place is at the fishing-hamlet of Ham, on the south-east. Foula was the last island where the old Norse tongue lingered on into the 19th century. Pop. 230.

Fountains Abbey, one of the largest and best-preserved monastic edifices in England, in the West Riding of Yorkshire, 3 miles SW. of Ripon. Founded for Cistercians in 1132, it was not completed till the 16th century.

Fourchambault (*Foor-shong-bo*), a town in the French dep. of Nièvre, 5 miles NNW. of Nevers, near the Loire, here crossed by a suspension bridge. There are large iron-foundries, nail-works, and wire-works. Pop. 6126.

Four Lakes, a chain of deep lakes (Mendota, Menona, Waubesa, and Kegonsa) in Dane county, Wisconsin, connected by short outlets. Madison, the state capital, stands on an isthmus between Mendota and Menona.

Fourmies, a town in the French dep. of Nord, 12 miles SE. of Avesnes by rail, with mines, iron-works, and mills. There were great labour riots here in 1891. Pop. (1861) 3422; (1901) 13,828.

Fowey, or FOY, an old Cornish town, on the right bank of the river Fowey, 11 miles SSE. of Bodmin. It is the 'Troy Town' and the home of Quiller-Couch. Pilchards are cured, and 'china-stone' and iron ore exported from its harbour. Pop. 2657.

Fox Channel, the northern portion of Hudson Bay, washing the western shores of Baffin Land, and named from Luke Fox, an English navigator, who explored Hudson Bay in 1631.

Fox Islands. See ALEUTIAN ISLANDS.

Foyers (*Fi'ers*), a stream of Inverness-shire, running 9 miles N. to the east side of Loch Ness, 10½ miles NE. of Fort Augustus. During the last 1½ mile it descends 400 feet, and forms two magnificent cascades, 40 and 165 feet high.

Foyle, LOUGH, an inlet of the Atlantic, on the north coast of Ireland, between Londonderry and Donegal counties. It is 15 miles long, 1 mile wide at its entrance, and 10 miles along its south side. Vessels of 600 tons ascend the lough, and also as far as Derry, its principal tributary the Foyle, which, formed near Lifford by the Finn and the Mourne, has a NNE. course of 72 miles.

Fraga, a town of Spain, on the Cinca, 63 miles ESE. of Saragossa. Here, in 1134, the Moors defeated Alfonso I. of Aragon. Pop. 7110.

Framingham, a town of Massachusetts, on the Sudbury River, 24 miles W. by S. of Boston by rail. The township includes Saxonville and South Framingham, with manufactures of blankets and straw goods. Pop. 11,300.

Framlingham ('strangers' town'), a Suffolk market-town, 22 miles NNE. of Ipswich by a branch line. The fine flint-work church, restored in 1888–89, has a tower 90 feet high, and contains noble altar-tombs of the Howards (the third Duke of Norfolk, the poet Earl of Surrey, &c.). Separated by the Mere from the red-brick Albert middle-class college (1864) rises the great Edwardian castle, the stronghold successively of Bigods, Mowbrays, and Howards, and Queen Mary's refuge after Edward VI.'s death. Pop. 2515. See Hawes's *History of Framlingham* (1798).

Francavilla, a town of Italy, 22 miles WSW. of Brindisi. Pop. 18,559.

France, occupying a most advantageous position between the Atlantic and the Mediterranean, is a compact hexagonal mass, bounded N. by the Channel and the Strait of Dover, NE. by Belgium and Luxemburg, E. by Lorraine, Alsace, Switzerland, and Italy, S. by the Mediterranean Sea and Spain, from which it is separated by the Pyrenees, and W. by the Atlantic. Its utmost extremities are comprised between 51° 5′—42° 20′ N. lat. and the 4° 42′ W.—7° 39′ E. long.; its greatest dimensions being 606 miles from N. to S., 556

miles from W. to E., and 675 miles from NW. to SE. As diminished in 1871 by the loss of Alsace and part of Lorraine (5590 sq. m.), France covers, by the measurement of 1894, an area of 206,381 sq. m.—one-eighteenth part of Europe. Pop. (1872) 36,102,921 ; (1901) 38,961,945, or about one-tenth of the population of Europe.

France, formerly divided into some 30 provinces (Normandy, Brittany, Champagne, Burgundy, Auvergne, Languedoc, Provence, &c.—see the separate articles), was at the Revolution re-distributed into deps. named generally after the rivers. These deps., mostly between 1500 and 2500 sq. m. in area, are, including Corsica and the territory of Belfort, 87 in number, and each is separately discussed in this work. Except the island of Corsica, which, geographically and ethnologically, belongs rather to Italy, France has no islands of importance. The islands off the Mediterranean coast, as well as those off Brittany, are practically but small detached fragments of the mainland ; while the Channel Islands, situated between Brittany and the Cotentin peninsula, belong to Great Britain.

The possessions of France outside of Europe, both colonies and protected countries, cover an aggregate of 4,000,000 sq. m., and have a pop. of more than 51,000,000 inhabitants. Of them Algeria (q.v.) is rapidly becoming a part of France proper, and is considered as such for nearly all administrative purposes. The large territory of Tunis has since 1881–83 been under French protection. By a treaty signed in 1885 Madagascar was placed under the protection of France, which also now holds a large area in West Africa, in Guinea, the Ivory Coast, and on the Gaboon and Congo. In Asia, Tonkin was annexed to France in 1884, and Annam placed under its protectorate, and portions of Siam acquired in 1893. The details of the French colonies and protectorates are given in the subjoined table :

	Area in sq. m.	Pop.
In Asia—		
French India	196	273,000
Cochin-China	22,000	2,968,600
Tonkin and Laos	144,400	7,641,900
Annam	52,100	6,124,000
Cambodia	37,400	1,500,000
In Africa—		
Algeria	184,474	4,739,300
Tunis	51,000	1,900,000
Western Sahara	1,544,000	2,550,000
Senegal	80,000	1,800,000
Senegambia and Niger	210,000	3,000,000
French Guinea	95,000	2,200,000
Ivory Coast	116,000	2,000,000
Dahomey	60,000	1,000,000
Congo	1,160,000	10,000,000
Somali Coast	45,000	200,000
Réunion	966	173,200
Comoro Isles	620	47,000
Mayotte	140	11,640
Madagascar	227,950	2,505,240
In America—		
Guiana	30,500	32,910
Guadeloupe, &c.	688	182,110
Martinique	380	203,780
St Pierre and Miquelon	92	6,250
In Oceania—		
New Caledonia, &c.	7,650	51,410
Establishments, Oceania	1,520	29,000
Total	4,072,076	51,139,340

A general idea of the leading geographical features of France can be given in a few words. Its territory embodies highlands in the south and south-east only : in the south it comprises the northern slopes of the Pyrenees, and towards the south-east frontier part of the Alps. The remainder of the territory is nearly equally divided between extensive lowlands in the north-west and a great plateau, which covers the south-eastern half, but is separated from the Alps by the broad and deep valley of the Lower Rhone. The climate of France, its vegetation, the distribution of its population, and its very history have been determined by these leading features of its orography.

The extensive mass of elevated plains which rises between the lowlands of the Mediterranean coast and those sloping towards the Atlantic reaches a height of from 3000 to 4000 feet in its higher central parts only ; several chains, partly of volcanic origin, piled over its surface, attain from 5000 to 6000 feet ; while the river-valleys are dug so deeply into the plateau that it often assumes a hilly aspect. The whole slopes gently towards the north-west, gradually melting into the lowlands of the Garonne, the Loire, and the Seine ; but the plateau has a short steep slope towards the valley of the Rhone and the Mediterranean coast, and the southern part of that slope is fringed by the Cévennes Mountains, which raise their granitic and crystalline summits to more than 5000 feet above the sea (Mont Mézenc, 5754 feet). This lofty chain separates two entirely different worlds—the fertile, sunny, and warm plains of the Lower Rhone and Languedoc from the plains of the Rouergue, dreary, cold, and 3000 feet high, upon which only rye is grown, and flocks of sheep find rich grazing-grounds. The sunny slopes of the Monts du Beaujolais, turned towards the Saône, are covered with rich vineyards ; while the plateau to the west of them is dotted with iron-works, coal-mines, and manufacturing cities. The Vosges, although making a steep descent to the valley of the Rhine, rise but gently over the plateau, their highest points being not more than from 3300 to 4000 feet above the sea (the Ballon de Soultz, 4579 feet, is now on German territory). The Massif Central of Auvergne, the highest part of the plateau, covers nearly one-seventh of France's total area, and is a region of granites, gneisses, and crystalline slates fringed by Jurassic deposits, and dotted on its surface with extinct volcanic cones surrounded by wide sheets of lava. The heights of the Massif Central, suffering as they do from a protracted winter, have but a poor, rapidly-diminishing population. The forests which once covered them have mostly been destroyed, save in the picturesque Margeride chain, and only flocks of sheep graze on their meagre pasture-grounds. The Causses receive rain in abundance, but are exceedingly dry—the water rapidly disappearing in the numberless crevices of the soil. A narrow passage near Belfort (la Trouée de Belfort), utilised by both the canal which connects the Saône with the Rhine and the railway which leads from Paris to Switzerland, separates the Vosges from the limestone plateaus of the Jura, part of which belongs to France. Since the annexation of Savoy in 1860 the Alps of Savoy, as well as a portion of the main chain, including Mont Blanc (15,780 feet), belong to France. The Pyrenees, a wild complex of lofty chains, extends for a length of 260 miles between the Atlantic Ocean and the Mediterranean Sea. A plateau, from 1600 to 2000 feet high (Lannemezan), spreads out at the northern foot of the Pyrenees. Its limestone soil is exceedingly dry, and its grazing-lands have to be irrigated.

The whole of north-western France, with the

exception of a few hilly tracts in La Vendée, Brittany, and Normandy, is occupied by wide plains which constitute the real wealth of the country. Taking them in order from the south-west, we have first the Landes—a wide triangular space between the Bay of Biscay, the Adour, and the Loire, covered with Pliocene sands, which would be an immense marshy fever-den, bordered by shifting sands on the sea-coast, if it were not intersected by canals, and the sands were not fixed by plantations of trees. The Adour River fringes the Landes. The Dordogne and the Garonne join to form the Gironde, which is a true marine estuary, with the left bank bordered by the low hills of Médoc, covered with vineyards yielding every year not less than 2,200,000 gallons of the finest wines. The monotony of the rich plains between the Gironde and the Loire, which include the old province of Poitou, is broken by the dreary hills of the Gatine, a link between the chains of Margeride and Limousin and the hilly tracts of Brittany. Next we have the immense plains watered by the Loire, which becomes a great river after receiving the Allier, and has a drainage area covering one-fifth of the area of France. The peninsula of Brittany is formed by two ridges of granitic hills, from 1000 to 1200 feet high, separated by a region of crystalline slates. Its scenery and moist climate, as well as those of the Cotentin peninsula, remind one of England. The plateaus of Normandy (Le Perche), which rise from 1000 to 1300 feet above the surrounding plains, are also covered with beautiful meadows, cornfields, and forests, and French agriculture reaches there its highest development. The Seine separates them from the cretaceous chalky plains of the Caux, which raise their cliffs over the Channel, and are deeply cleft by valleys of a remarkable fertility. The wide Tertiary basin which the Seine and its tributaries water has from remote antiquity been the dominant portion of historical France. Numerous large cities, as Auxerre, Sens, Troyes, Châlons, Rheims, Laon, Rennes, and Paris, are situated either on the Seine or on its right-bank tributaries which water the fertile plains of Champagne. Hâvre is the great port at the mouth of the river. Artois and French Flanders are low tracts of land to some extent conquered from the sea. They have a flourishing agriculture, vast coalfields, and a great industry in their chief cities. At the other extremity of France the lowlands of the south occupy the sea-coast and the broad valley of the Rhone, along which they extend between the Alps and the plateau, as far north as Lyons, to be continued farther north by the valley of the Saône. The littoral of Provence has no great fertility, and, except the stony or marshy plains in the neighbourhood of the Rhone, there is but a narrow strip of land left between the mountains and the sea-coast, which is utilised for vineyards and fruit-gardens. The eastern part of the coast, acquired from Italy in 1860, is well known for its mild climate and rich vegetation, which render Nice, Villefranche, Cannes, and Mentone the chief resort of the invalids of Europe.

France enjoys on the whole a very fine climate; not so continental as that of central Europe, nor so maritime as that of England. If we omit the high hilly tracts of the Alps and the Pyrenees, the coldest region of France is evidently that of the high plateau with its cold winters, though it has hot summer days. The climate of Brittany is very much like that of the south-west of England; while that of the plains on the Bay of Biscay is warm and dry, and Pau, on the slopes of the Pyrenees, has the deserved reputation of a sanitary station. The climate of Languedoc and Provence assumes to some extent an African character—a temperate winter is succeeded by a burning hot summer, moderated from time to time by the *mistral*.

The dominant language of France is French, a Romance tongue developed out of the *lingua Romana rustica* of the Roman conquerors, which displaced the native Celtic tongues, and was afterwards modified in vocabulary and phonetics (but not in structure) by the invading Teutonic Franks, who gave their own name both to the language and to the country. In the south the Provençal, another Romance type, is still the popular dialect. In the north-west the ancient Celtic Breton tongue survives; and in the south-west the distinct and peculiar Basque language is spoken in the dep. of Basses Pyrénées. Flemish is spoken in French Flanders; the Walloons speak their own Romance dialect in the north-east of France; and German is still spoken in some districts of those parts of Alsace and Lorraine still left to France. The character of the French people combines the impressionability, the vivacity, the rapidity of conception, and the artistic feeling of the men of the south with the persistence, laboriousness, and rationalism of the men of the north.

Pop. (1801) 27,349,003; (1831) 32,569,223; (1861) 37,382,225; (1872) 36,102,921—the decrease being mainly due to the war with Germany and loss of territory; (1881) 37,672,048; (1891) 38,343,192; (1901) 38,961,945. But between 1886 and 1891 there was an actual decrease in 55 of the departments. The annual increase throughout France is notably slower than in the other chief countries of Europe, and its low rate is due to the relatively small number of married people, and to the small proportion of children in each family—21·7 births per 1000 inhabitants (1902), as against 29 in Great Britain, and over 40 in Germany. This low birth-rate does not hold good for all France: the small yearly increase of the total population is chiefly due to the more numerous births in the north and centre. Frenchmen emigrate but little. Still, the last census showed 300,000 Frenchmen in Algeria; besides, there are 200,000 in the Argentine Republic and Uruguay, 110,000 in the United States, 54,000 in Switzerland, 45,000 in Belgium, and more than 20,000 in Spain. On the other hand, no less than 1,037,800 foreigners (chiefly Belgians, Italians, Germans, Spaniards, and Swiss) were returned in the census of 1901 as living in France. In 1850, 75 per cent. of the population lived in the country, and 25 only in the cities; but at present some 37·4 per cent. live in the cities. Migration is especially active into Paris and its neighbourhood, and to the seaports. In 1901 over 7,500,000 people lived in the seventy-one chief cities having each more than 30,000 inhabitants; and fifteen cities have pops. of more than 100,000: Paris (2,715,000), Marseilles (491,000), Lyons (459,100), Bordeaux (257,600), Lille (210,700), Toulouse, St Étienne, Roubaix, Nantes, Le Havre, Rouen, Rheims, Nice, Nancy, and Toulon. Nearly one-half of the population still live by agriculture.

The land-holdings are subdivided into small plots of less than five acres apiece on an average, and this subdivision is the source of many drawbacks. Cereals cover about 25 per cent. of the territory. Beet-root for sugar covers about 850,000 acres. The terrible ravages of the

phylloxera have reduced the area under vineyards from 6,382,000 acres in 1875 to little more than 4,000,000 in 1901. One of the most promising features of French agriculture is the high development of nursery-gardening, which achieves most remarkable results in variety and richness of crops. The exports of cattle, butter, eggs, cheese, and poultry, especially to England, are very large. The fisheries are of great importance for France, both the deep-sea fishery (especially about Newfoundland) and also the coast fisheries. There are over 600 mines of all kinds at work in France, and the total annual value of the products is over £22,000,000. The metal ores raised annually suffice to turn out in all about 5,000,000 tons of iron, 61,500 tons zinc, 20,600 tons lead, 10,000 tons antimony, and 3500 tons copper. Ores to the value of over £3,000,000 are imported annually into France. The coal-mines scattered over the north, the region of the Upper Loire, and in Languedoc, doubled their produce between 1870 and 1900, and now produce over 32,000,000 tons annually, while over 11,000,000 tons are imported.

Manufactures have made rapid progress during the 19th century. The textile industry gives occupation to at least 2,000,000 persons. In silks France has no longer the monopoly she formerly had; but she still occupies the first rank, especially with regard to the finer stuffs and the production of new ones. Then there are also sugar-works, chemical industries, potteries, paper-mills, and industries connected with furniture, dress, carriages, and all possible articles of luxury. In the small industries, which occupy two-thirds of the French industrial workers, the artistic taste and inventive genius of the nation are especially apparent. Paris is the world's emporium for such small industries.

The highways in France as a rule are kept in an excellent state, and no less than 120,000 miles of *routes nationales*, and twice as many miles of district roads, are the feeding-arteries of the network of railway lines, which covered an aggregate length of 24,250 miles in 1902. The navigable rivers and canals have a length of 6510 miles. The French mercantile marine is behind not only those of Britain, the United States, and Norway, but even of Germany and Italy. Nevertheless, three-fourths of the French coasting and foreign trade is carried on under the flag of the republic. France is an illustration of the fact that a country having a well-developed agriculture may be very wealthy without having a great foreign trade. During the years 1881–1902 the annual foreign trade varied in value from £161,040,000 to £240,000,000 for the imports, and from £123,524,000 to £224,000,000 for the exports. The chief import is raw produce, and the chief item of export is manufactured goods. Raw silk, cotton, and wool are imported both for home use and for re-exportation in the shape of stuffs. Hides are imported to be manufactured into fine leather, gloves, or shoes; timber leaves France in the shape of artistic furniture, &c. France imports, as already said, a good deal of coal and iron ore, as well as of colonial wares, cattle, cereals, and other alimentary substances. None of the French colonies is a source of enrichment to the mother-country.

The unit of French administration is the commune, which administers its own local affairs by means of an elected municipal council and an elected mayor. Every ten to fifteen communes constitute a *canton*, and next comes the *arrondissement*, or district, composed of not more than nine *cantons;* this has its own elected council, entrusted with the assessment of the local taxes, and subject to the sub-prefect. Four arrondissements on an average compose a *department*. Each dep. has a 'general council' elected by universal suffrage—each canton electing one councillor. The general councils have wide powers as regards taxation and the promotion of institutions of public utility; but their decisions are jealously controlled by the prefect (*préfet*), who is the representative of the state in the dep. The legislative functions of the central government are vested in the Chamber of Deputies and the Senate; and the executive power in the ministry and the President of the Republic. A formidable army of functionaries stands under the central government, in subjection to the prefects, who themselves are wholly under the authority of the Ministry of the Interior, and exercise a powerful influence on the results of the elections through their subordinates.

There is complete religious toleration in France, but till the separation of church and state, in 1905, three faiths were supported by the state—the Jewish as well as the Roman Catholic and Protestant, in proportion to numbers. There has been no religious census in France since 1872, but it is estimated that about three-fourths of the population are (nominally at least) Roman Catholic; the Protestants are estimated at 2,000,000, chiefly Calvinist, and the Jews at about 80,000. The statistics for 1903 show an aggregate of 42,000 priests, besides 4376 teachers and 8500 pupils in ecclesiastical seminaries. Compulsory and free primary education has been introduced under the control of the state; the privileges of the church have been abolished; and, instead of religious teaching, the teaching of 'civic morality' from handbooks issued by the state has been introduced. But there is constant controversy on the relation of the schools to the church. Private schools of all degrees are permitted, provided the teachers pass the obligatory examinations. France is divided into seventeen educational districts called *académies*, the rectors of which are entrusted with the administration of higher and secondary education, as also with the inspection of the primary schools. Each educational district has an academic council, and each dep. has a council. Nearly one-tenth of the recruits are still illiterate. Secondary education, which may be classical, scientific, or technical, is provided for in upwards of 110 *lycées* and 250 *collèges* for boys, and 71 *lycées* and *collèges* for girls, the latter of quite recent introduction. Under the law of 1901 (which caused much debate), about 14,000 clerical schools had been closed in 1904, but more than one-half of these had been re-opened under private direction. Higher education, given in the *facultés* (universities), is of a high standard, and almost quite free. The chief centres are at Paris, Lyons, Bordeaux, Toulouse, Montpellier, Nancy, Lille, Nantes, and Grenoble; but most of these have only three, two, or even one of the four separate *facultés* (law, medicine, natural science, literature). Indeed, there is but one University of France, officially so called, which comprises the *facultés* at all the various centres. Altogether, these have 1600 professors and about 18,000 students. The clergy have their own 'free universities.' Various special institutions, such as the Collége de France, the Museum of Natural History, the Polytechnic School, and many others, have a high reputation of long standing.

At the outbreak of the German war of 1870–71

France met the invaders with less than 400,000 men and 1250 guns; and it was not till after the fall of Napoleon that 700,000 men, mostly untrained and very badly provisioned, could be brought into the field. The whole system was totally reorganised in 1872–89. Every Frenchman twenty years old, if not infirm, or exempted from service for educational reasons, must enter the army and serve three years in the active army, ten in the reserve, six in the territorial army, and six in the territorial reserve. Nearly 300,000 young men are called out every year, and more than 200,000 enter the ranks. The army numbers 600,000 men and has 643,000 horses in time of peace. But in war it can be raised to 2½ million men; and 1½ million more, all having received military training, may be added to the number. The French navy is second only to that of Great Britain. It consists of 43 ironclad battle-ships (first, second, and third class), 65 cruisers (armoured or protected), over 200 gunboats and destroyers, and 50 submarines, with a total strength of over 51,000 men.

The chief source of revenue is indirect taxation (excise, registry, customs, and stamps), which forms about 62 per cent. of the revenue; the direct taxation (land, trade licenses, personal property, and doors and windows) comes next and makes 15 per cent. of the revenue; the monopolies (such as tobacco) and the remunerative services (e.g. the post-office) supply 20 per cent. of the yearly income, and all these sources together have yielded annually during the ten years 1898–1903 over 3500 million francs (£140,000,000). But, as the expenditure usually exceeds the income, extraordinary sources of revenue—chiefly loans—have frequently to be resorted to. Between 1869 and 1905 the ordinary revenue had more than doubled, irrespective of these 'comptes spéciaux' or budgets for special purposes. The French debt is now heavier than that of Great Britain, and the more so as France pays much higher interest on it. In 1903 the total debt was calculated at 30,345 million francs (£1,213,825,200), and the interest and annuities at 1216 million francs (£48,677,400). The aggregate debts of the separate municipalities reach about 3800 million francs. Paris is one of the most heavily indebted cities of Europe.

At the dawn of history what is now France was occupied by a multiplicity of tribes, belonging to several different races; but the Celtic Gauls were the dominant people, and held the greater part of the country. The Ligurians occupied the neighbourhood of the Mediterranean shores; the Iberians or Basques held the south-west; and in the north-east were the Belgæ, who seem to have been Germanic immigrants who had adopted a Celtic tongue, or Celts who had been in some respects Germanised or mixed with Germans. The Gauls were sufficiently energetic to have conquered North Italy and terrorised Rome from the 5th century B.C. to the middle of the 3d century B.C., and even pushed victorious armies into Thrace and Galatia. But the Romans conquered the Cisalpine Gauls about 225 B.C., and by 150 had conquered the south of Transalpine Gaul (Provence); and in 58–50 B.C. Julius Cæsar conquered the sixty-four different states in Gaul, and from that time the Gauls rapidly adopted the Roman polity, the Latin speech, and Roman manners. From the 4th century A.D. on, Romanised Gaul—now Christian—was invaded by swarms of Teutonic barbarians, of whom the Visigoths founded a state in the south-west of Gaul, the Burgundians in the valleys of the Saône and Rhone, and the Franks in the north-east. Chlodwig or Clovis, the Frank, laid the foundations of the future kingdom of France, and established the Merovingian dynasty; but the Franks, like the other German invaders, speedily adopted the language, laws, manners, and Christian religion of their Celtic subjects. Charlemagne established a military monarchy from the Ebro to the Elbe and the North Sea, which fell to pieces under his Carlovingian successors. In the 10th century the Rhine became the eastern boundary of France, and Paris its capital; and the Northmen occupied Normandy, now called after them. In the 12th century the kings of England, dukes also of Normandy, acquired by inheritance or marriage Brittany, Maine, Touraine, Poitou, Guienne, and Gascony, and were more powerful in France than the native kings. Philippe Auguste (1180–1223) recovered much of this area from the English John, and at the end of the Hundred Years' War (1451) only Calais remained to England of all her continental possessions. Under Louis XI. and Charles VIII. (1461–98), last of the Valois kings in the direct descent, the hold of France on Maine, Anjou, Provence, and part of Burgundy (the dukedom) was definitely established. Francis I., of the Valois-Angoulême house, secured all Burgundy for France. The horrors of the Huguenot wars were put an end to by Henry IV. of Navarre, first of the Bourbons, who passed the Edict of Nantes (1598)—to be revoked by Louis XIV., whose minister Richelieu crushed the Fronde insurrection, and put all powers and classes under the heel of the monarch. Wars disastrous to France in the middle of the 18th century deprived her of her power in India, which fell to Britain; and by the peace of Paris in 1763, she ceded to Britain Nova Scotia, Cape Breton, Canada, and the Mississippi Valley (New France), as well as the islands of Grenada, St Vincent, Dominica, and Tobago. The *ancien régime* disappeared in the Revolution (1789–99); as First Consul (1799) Napoleon paved his way to the Empire (1804) with its military glories and the extension of French domination over Italy, Spain, the Netherlands, and parts of Germany. After the disastrous Russian campaign (1812) the empire fell, and the Bourbons were restored in the person of Louis XVIII. (1814). The 'Hundred Days' of Napoleon's recovered popularity and power ended with Waterloo (1815) and his abdication, and the renewed restoration of the Bourbons. The elder line of Bourbons was superseded by Louis-Philippe, the citizen king, at the 'July Revolution' of 1830. The Second Republic commenced with the 'February Revolution' of 1848, and was succeeded in 1852 by the *coup d'état* and the second empire of Napoleon III., which fell in the disasters of the Franco-German war of 1870–71. The Third Republic had to suppress the Commune, pay the milliards to Germany, and cede Alsace-Lorraine. Since then the Republic has been on the whole confirmed in the affections of the nation. The colonial possessions of France in Indo-China and in Africa were greatly extended in the last decades of the 19th century. The alliance with Russia (1895) was followed in 1905 by the *entente cordiale* with Britain; and 1905 saw the disestablishment of the Roman Catholic Church.

See *France as It is*, by Lebon and Pelletier (1888); *French and English*, by Hamerton (1889); *Modern France*, by Bodley (1898); *France of To-day*, and *The French at Home*, by Miss Betham Edwards (1892–1905); *La France Coloniale*,

by Rambaud (6th ed. 1893). For the history of France, besides the French works by Michelet, Martin, Guizot, Thierry, Thiers, Lamartine, Louis Blanc, and Taine, dealing with the whole or with periods (several of them translated), see Kitchin's *History of France* (1873–77), and the short works by Mrs Brook and Miss Yonge; Carlyle's *French Revolution* (1837), and Morse Stephens's *French Revolution* (2 vols. 1886–92).

France, Isle de. See Mauritius.

Franche Comté, an old French province in the basin of the Rhone, comprising the present deps. of Doubs, Haute-Saône, and Jura. Its capital was Besançon.

Francisco, San. See San Francisco.

Franconia, a loosely connected aggregate of districts and territories lying chiefly within the basins of the Rhine, Main, and Neckar. The name was officially disused from 1806 to 1837, when the three northern divisions of Bavaria were called Upper, Middle, and Lower Franconia.

Fra'neker, a town of the Netherlands, 9 miles WSW. of Leeuwarden by rail. It was the seat of a university from 1585 to 1810. Pop. 6920.

Frankenberg, a town of Saxony, 32 miles SW. of Dresden. It manufactures cottons, woollens, silk-stuffs, &c. Pop. 12,898.

Frankenhausen, a town of Germany, in Schwarzburg-Rudolstadt, on the Wipper, 27 miles NNW. of Weimar. It has brine-springs and a hospital for scrofulous children; and in the vicinity are the Kyffhäuser and Falkenburg with Barbarossa's Cave. Pop. 5985.

Frankenstein, a town of Prussian Silesia, 37 miles SSW. of Breslau. Pop. 8117.

Frankenthal, a town of the Bavarian Palatinate, 7 miles SW. of Worms by rail, and 3¼ W. of the Rhine by a canal. It manufactures sugar, machinery, corks, &c. Pop. 16,942.

Frankfort, the capital of Kentucky, on the Kentucky River, 29 miles NW. of Lexington by rail. It contains a state-house built of Kentucky marble, the state library, penitentiary, distilleries, flour-mills, and a cotton-factory. Pop. 9892.

Frankfort-on-the-Main (Ger. *Frankfurt-am-Main*), a wealthy commercial city in the Prussian province of Hesse-Nassau, long a free city, the place of election of the German emperors, and seat of the Diet (1816–66), is situated on the right bank of the Main, 22 miles from its confluence with the Rhine at Mainz, and 112 SE. of Cologne by rail. Pop. (1800) 40,000; (1875) 103,315; (1900) 288,989. The fortifications have given place to ornamental promenades; the river is bordered by broad quays; and the ancestral house of the Rothschilds is now the solitary relic of the famous Juden-Gasse, the ghetto of Frankfort. The Gothic Römer or town-house (1405–16) contains the Kaisersaal or imperial hall. The coronation took place in the cathedral of St Bartholomew (13th to 16th centuries). The palace of the Prince of Thurn and Taxis (1730) was the meeting-place of the North German Diet, while the Constituent Assembly of 1848–49 met in the church of St Paul. The Saalhof stands on the site of an earlier palace of the Carlovingian kings; the chapel dates from the 12th century. The new exchange was opened in 1879, the opera-house in 1880, and there are several other imposing new public buildings. One of the squares is adorned with a statue of Goethe, a native; in another is the elaborate Gutenberg monument, commemorating the invention of printing. Frankfort is connected with the suburb of Sachsenhausen, on the left bank of the Main, by seven bridges (three railway bridges), the oldest of which was built in 1342. The city lies at the junction of seven railways, which since 1888 have converged in the new Central Station, one of the largest and handsomest in Europe. Its commerce has at all times been considerable; and in the 16th century its spring and autumn fairs were among the most important in Europe. The chief articles of trade are colonial wares, iron and steel goods, leather, hides, skins, coals, wine, and beer. The manufacturing industry has largely developed since the town became Prussian. Sewing-machines and other machinery, chemicals, soap and perfumery, iron goods, straw and felt hats are among the chief manufactures. Its chief importance, however, is due to its position as one of the leading money-markets of the world.

The capital from 843 till 889 of the eastern Frankish kingdom, and the place of election of the German emperors from 1152, Frankfort in 1257 was made the first free city of the German empire, and it also became the most important. The city embraced the Reformation in 1530; for awhile lost its independence (1810–13); and in 1866, having espoused the Austrian cause in the seven weeks' war, was seized by the Prussians, and incorporated with Prussia. The peace of Frankfort, which ended the Franco-German war of 1870–71, was signed 10th May 1871 at the Swan Hotel by Prince Bismarck and Jules Favre. See works by Horne and Grotefend (1882–84).

Frankfort-on-the-Oder, a town of Prussia, 51 miles ESE. of Berlin, is a handsome, well-built town, with three suburbs, one of which lies on the right bank of the Oder, and is connected with the remainder of the town by a wooden bridge. The university, founded in 1506, was in 1811 incorporated with that of Breslau. The manufactures embrace machines, hardware, organs, chemicals, stoneware, sugar, tobacco, spirits, leather, paper, &c. Pop. (1875) 47,176; (1900) 61,852. A flourishing member of the Hanseatic League in the 14th and 15th centuries, Frankfort since then has been several times besieged. At Kunersdorf, 4½ miles E., on August 12, 1759, Frederick the Great suffered a great defeat from the Russo-Austrian forces.

Franklin, capital of Venango county, Pennsylvania, on the Alleghany River, 123 miles by rail (65 direct) N. of Pittsburgh, with machine-shops, flour-mills, and oil-refineries. Its chief trade is in petroleum, obtained in the vicinity. Pop. 7221.

Franzensbad, or Franzensbrunn, a watering-place on the north-west frontier of Bohemia, 3 miles NW. of Eger by rail. There are a number of mineral springs. Pop. 2308, increased by 7000 visitors during the season.

Franz-Josef Land, an archipelago in the Arctic Ocean, north of Nova Zembla, between 80° and 83° N. lat. It consists of two large masses of land, Wilczek Land to the east, and Zichy Land to the west, separated by Austria Sound and its north-east arm, Rawlinson Sound. Between these sounds lies Rudolf Land, whilst to the north of this again comes Petermann Land, and to the north-west King Oscar Land. The southern shores are deeply indented with fjords; and the whole archipelago, which rises into isolated flat-topped or dome-shaped mountains of basalt, 5000 feet high, is sheeted with ice. Owing to the open water round its shores in summer, and the comparative abundance of its animal life—bears, walruses, foxes, and numerous

birds occurring—Franz-Josef Land is regarded as a favourable base whence to reach the North Pole. It was discovered and partly explored by Payer and Weyprecht in 1873–74; and its southern shores were explored by Leigh Smith in 1880–82.

Frasca'ti, a town of Italy, with many splendid villas, 15 miles SE. of Rome by rail, stands on the slope of the Alban Hills, not far from the site of ancient Tusculum. Cardinal York was bishop of Frascati, and his brother, Charles Edward, died here in 1788. Pop. 7134.

Fraser or **Great Sandy Island** lies off the east coast of Queensland, in Australia.

Fraserburgh, a fishing-town of Aberdeenshire, 47 miles N. of Aberdeen by a branch line (1865). It stands on a bay, 2½ miles wide, immediately south of Kinnaird Head, on which are the Frasers' old castle, a lighthouse now, and the mysterious 'Wine Tower,' with a cave below. It was founded as Faithlie in 1569 by Alexander Fraser of Philorth, Lord Saltoun's ancestor, and in 1601 was erected into the free port of Fraserburgh. There are a handsome town-house (1855), a restored market-cross, a public hall, &c.; but hardly a trace remains of an abortive university (1592). The harbour has been much extended since 1855, and the rapid growth of the place is due to the development of the herring-fishery. Pop. (1861) 3472; (1901) 9105.

Fraser River, the principal stream of British Columbia, is formed by two branches, which unite near Fort George, in 54° N. lat. and 122° 45′ W. long.; thence the river flows 800 miles southward to the Georgian Gulf, just north of the international boundary of 49° lat. Its chief affluent is the Thompson River. The rich alluvial deposits of gold along the Fraser's lower basin first attracted emigration to British Columbia; the lower valley contains some of the best farming land in the province. The salmon-canneries are also important. Steamboats can ascend for 100 miles.

Fraserville, or Riviere du Loup, a town and watering-place of Quebec, on the Riviere du Loup at its confluence with the St Lawrence, 127 miles from Quebec. Pop. 4570.

Fratta-Maggiore, a town of Italy, 9 miles by rail N. of Naples. Pop. 10,848.

Fraustadt (Polish *Wszowa*), a town of Prussia, 14 miles NE. of Glogau by rail. Near here Charles XII. of Sweden routed the Saxons, 13th February 1706. Pop. 7378.

Fray Bentos (officially *Independencia*), capital of the Uruguayan dep. of Rio Negro, on the Uruguay River, 72 miles SSW. of Paysandú. Here is the great Liebig meat-factory. Pop. 5500.

Fredericia, a Danish seaport on the east coast of Jutland, at the northern entrance to the Little Belt. Founded by Frederick III. in 1652, in 1657 it was stormed and razed by the Swedes, nor was it refortified until 1709. It suffered during the wars of 1848–49 and 1864. Pop. 13,042.

Frederick, a city of Maryland, 61 miles W. by N. of Baltimore by rail, with a college (1797), foundries, tanneries, flour-mills, &c. Pop. 9193.

Fredericksburg, a town of Virginia, on the Rappahannock, 61 miles N. of Richmond, with flour, paper, and sumach mills, &c. Pop. 5528.

Fredericton, capital of the province of New Brunswick, Canada, stands on the St John River, 58 miles NNW. of the port of St John. It is the seat of an Anglican bishop and of a university. Pop. 7218.

Frederikshald, a fortified seaport of Norway, on the Idde Fjord, near the Swedish border, 85 miles by rail SSE. of Christiania. It was burned down in 1826. To the south-east stands the never-captured fortress of Frederiksteen (1661), before which Charles XII. of Sweden was killed (1718). Pop. 12,000.

Frederikshavn, a port of Jutland, on the Cattegat, 52 miles NE. of Aalborg. Pop. 6891.

Frederikstad, a seaport of Norway, at the mouth of the Glommen, 58 miles S. of Christiania by rail. Pop. 14,217.

Freeport, capital of Stephenson county, Illinois, on the Pecatonica River, 121 miles WNW. of Chicago by rail. Pop. 13,189.

Free-town, capital of Sierra Leone (q.v.), on the north side of the peninsula, 5 miles from the Atlantic. Founded as Granvilletown in 1787, it is enclosed by a range of wooded hills. The climate is unhealthy, especially for Europeans. Pop. 35,000, almost all negroes.

Freiberg, a mining-town of Saxony, on the northern slope of the Erzgebirge Mountains, 20 miles SW. of Dresden. Its cathedral, successor to one burned in 1484, contains tombs of the Saxon electors of the Albertine line, and has a Romanesque portal called the Golden Gate. The town owes its origin to its silver-mines, discovered about 1163, and has a famous school of mines (1765). The mineral ores extracted near Freiberg are silver, bismuth, nickel, cobalt, zinc, arsenic, &c. The manufactures comprise gold and silver ware, wire, chemicals, machines, leather, and cigars. Pop. (1875) 23,559; (1890) 28,955; (1900) 30,175. [*Fri-berg.*]

Freiburg, or (*French*) Fribourg, a Swiss canton, bounded N. and E. by Bern, and S. and W. by Vaud and the Lake of Neuchâtel, with three enclaves in Vaud. Area, 644 sq. m.; population, 128,000, principally French-speaking and Catholic. —The capital is Freiburg, or Fribourg, 19 miles by rail SW. of Bern, on the Sarine or Saane, here spanned by a suspension bridge (1834), 870 feet long. St Nicholas Church, dating from 1283, has one of the finest-toned organs in Europe, and a lofty belfry. Since 1889 there is here an academy with faculties, like a university. Pop. 16,840.

Freiburg in Breisgau, a town of Baden, on the western edge of the Black Forest, 32 miles NNE. of Basel. It is an open, well-built town; the walls and ditches with which it was formerly surrounded have been converted into promenades and vineyards. The beautiful Gothic cathedral (1122–1513) has a western steeple, 381 feet high. The university (1455) has 106 professors and teachers and over 800 students. The chief manufactures are sewing silk, cotton and thread, buttons, artificial beads, chicory, paper, parquetry, &c. Population, over 61,500, of whom more than one-half are Protestants. Founded in 1091 by the Duke of Zähringen, and created a town in 1115, Freiburg has repeatedly changed masters; twice it was given over to France (1679–97 and 1744–48). In 1806 it fell to Baden; and in 1848 the Baden revolutionists were defeated here by the troops of the German confederation.

Freising, a town of Bavaria, on the Isar, 22 miles NNE. of Munich by rail. It has a beautiful cathedral (1160) and a former episcopal palace (now a theological seminary); whilst close by is a Benedictine abbey (725–1803), now a royal model-farm. Pop. 9550.

Freistadtl (Hung. *Galgócz*), a market-town of

Hungary, 40 miles NE. of Presburg by rail, on the Waag, opposite the fortress and prison of Leopoldstadt. Pop. 8409.

Frejus (*Frā-zhüs'*; anc. *Forum Julii*), a town in the French dep. of Var, a mile inland from the Mediterranean, and 22 miles SW. of Cannes by rail. The birthplace of Agricola, it has traces of a lighthouse, walls, an amphitheatre (restored 1869), and other Roman remains. The old harbour, in which Augustus stationed the 300 galleys captured at Actium, is silted up. Here, or rather at the new harbour of St Raphael, 1½ mile off, Napoleon landed on his return from Egypt in 1799, and embarked for Elba in 1814. Pop. 4634.

Fremantle, the principal seaport of Western Australia, at the mouth of the Swan River, 12 miles SW. of Perth by rail. It was named after Captain Fremantle, R.N. (1829). Pop. 20,450.

Fremont', (1) capital of Dodge county, Nebraska, on the Platte River, 42 miles WNW. of Omaha by the Union Pacific Railway. Population, about 7500.—(2) Capital of Sandusky county, Ohio, at the head of navigation on the Sandusky River, 30 miles SE. of Toledo by rail. It manufactures flour, iron, lime, &c. Pop. 8500.

French Congo. See GABOON.

French Guiana. See GUIANA.

French River, a stream of Ontario, flowing 60 miles from Lake Nipissing to Georgian Bay in Lake Huron.

Frendraught, Aberdeenshire, 11 miles ENE. of Huntly, an old mansion, the treacherous burning of whose tower in 1630 cost the lives of Viscount Aboyne and five others.

Freshwater, a parish at the western extremity of the Isle of Wight. See FARRINGFORD.

Fresnillo, a mining-town of Zacatecas state, Mexico, 7200 feet above sea-level. Pop. 15,000.

Fresno, capital of Fresno county, California, in the centre of an irrigated raisin-growing district, 207 miles SE. of San Francisco by rail. Pop. (1880) 1113; (1900) 12,470.

Freston, a Suffolk parish, on the Orwell, 3½ miles S. of Ipswich. Here is Freston Tower.

Friars Carse, a mansion near the Nith, 6½ miles NNW. of Dumfries.

Fribourg. See FREIBURG.

Friedland, (1) a town of East Prussia, on the Alle, 26 miles SE. of Königsberg, with 3182 inhabitants. Here Napoleon, on 14th June 1807, defeated the Russian and Prussian forces.—(2) A town in the north-east of Mecklenburg, with 5502 inhabitants.—(3) A manufacturing town in the north of Bohemia, on the Wittig, 16 miles N. of Reichenberg by rail, with a pop. of 4817. From the last Wallenstein took his ducal title.

Friedrichroda, a town of Thuringia in the charming Schilfwasser valley, 13 miles SW. of Gotha by rail, is a summer-resort for some 7000 visitors. Here is the Duke of Gotha's beautiful country seat, Reinhardsbrunn. Pop. 4146.

Friedrichsdorf, a town of Hesse-Nassau, on the southern slope of the Taunus, 3 miles NE. of Homburg. Pop. 1189—French-speaking descendants of a Huguenot colony (1687).

Friedrichsruh (*Frē'driks-roo*), the castle and estate of Bismarck, in Lauenburg, Sleswick-Holstein, 16 miles SE. of Hamburg.

Friendly Islands, or TONGA GROUP, lie 250 miles ESE. of Fiji, number 32 inhabited and about 150 small islands, and consist of three sub-groups, with a collective area of only 385 sq. m. Tonga-tabu (130 sq. m.) is the largest; and next in importance are Eooa, Vavu, Namuka and Lefuka, Tofoa, Late, and Kao. The great majority are of coral formation; but some are volcanic; there are several active volcanoes, such as Tofoa (2781 feet) and Late (1787); and earthquakes are frequent. A treaty was concluded with Germany in 1876, with Great Britain in 1879; and a Berlin convention (1886) provides for the neutrality of this archipelago. The Friendly Islands were discovered by Tasman in 1643, but named by Cook, who visited them in 1777. Both these navigators found the soil highly cultivated, and the people apparently unprovided with arms. Among the products of the islands are copra, tropical fruits, coffee, sponges, cocoa-nuts, and arrowroot. The flora resembles that of the Fiji group; but the native animals are very few. The Friendly Islands were first visited by missionaries in 1797; in 1827 the work of evangelisation fell into the hands of the Wesleyan Methodists; and now almost all the islanders (who, unlike the Fijians, belong to the fair Polynesian stock) are Wesleyans. Many can speak English, and schools are numerous. In mental development, skill in house-building, and in the preparation of weapons, dress, &c., they are superior to other South Sea islanders. They are, however, decreasing in numbers; once estimated at 50,000, they had dwindled to 18,960 in 1900. The various islands in 1845 were brought under the rule of one chief, King George (1818–93), and in 1899 recognised as practically a British dependency. See Basil Thomson's *Savage Island* (1902).

Friesland, or VRIESLAND (*Frēs'land*; anc. *Frisia*), in its widest sense, as the country of the Frisian race, included the provinces of Zealand, North and South Holland, part of Utrecht, Friesland proper (1280 sq. m.; pop. 342,290), and Groningen in Holland, together with Prussian East Friesland (1200 sq. m.; pop. 239,960) and a part of Oldenburg, the western coast of Sleswick between the Eider and the Tondern, and the islands of Sylt, Föhr, Nordstrand, and others.

Frisches Haff ('Fresh-water Bay'), a Prussian lagoon, SE. of the Gulf of Danzig, 50 miles long, 4 to 11 broad, and 332 sq. m. in area.

Friuli (*Frē-oo'lē*; Lat. *Forum Julii*), a once independent duchy at the head of the Gulf of Venice. With a total pop. of about 700,000, and a total area of 3470 sq. m., it is divided between Austrian Friuli (the districts of Görz, Gradisca, and Idria) and Italian Friuli (the province of Udine and the district of Portogruaro).

Frobisher Bay, an inlet opening westward near the mouth of Davis Strait, into the territory called by Frobisher *Meta Incognita*, at the southern end of Baffin Land. It is 200 miles long by above 20 wide, with rugged mountainous shores.

Frodsham, a market-town of Cheshire, near the confluence of the Weaver and Mersey, 10 miles NE. of Chester. Pop. 2333.

Frogmore, in the Little Park, Windsor, Berks, with the mausoleum of the Prince-Consort.

Frohsdorf, a village in Lower Austria, on the Leitha, 30 miles S. of Vienna. Its splendid castle from 1844 till 1883 was the residence of the Comte de Chambord.

Frome, a market-town of Somerset, on the Frome, a branch of the Avon, 12 miles S. of Bath (19 by rail). Its parish church is a fine Decorated building, with a spire 120 feet high, stations of the cross, and the grave of Bishop Ken. Frome's specialties are broadcloths and other fine wool-

lens, and it also produces cards for dressing cloth, ale, silk, &c. Population, a little over 11,000. Till 1885 Frome returned one member. The forest of Selwood was in the vicinity.

Frontignan (*Frong-teen-yong*), a town of the French dep. of Hérault, 12 miles SW. of Montpellier, famed for its muscatel wine. Pop. 4744.

Frosino'ne (anc. *Frusino*), a town of Italy, 60 miles SE. of Rome. Pop. 9018.

Frozen Strait, a passage, 15 miles wide, separating Southampton Island, in the north of Hudson Bay, from Melville Peninsula.

Fuca, or JUAN DE FUCA, **Strait**, a passage separating Washington state from Vancouver Island, and connecting the Pacific Ocean with the Gulf of Georgia. It contains several islands, one of which, San Juan, was awarded in 1872 by the emperor of Germany to the United States; and it and several neighbouring islands now form a county of Washington state.

Fû-chau. See FOOCHOW.

Fucino (*Foo-chē'no*), LAKE OF (anc. *Fucinus Lacus*), or LAGO DI CELA'NO, a lake of Italy, in the province of Aquila, 61 sq. m. in area, and 2172 feet above sea-level. Being only 75 feet deep and having no constant outflow, it was subject to sudden risings, which inundated the surrounding regions. In 44–54 A.D. the Emperor Claudius cut a subterranean channel, nearly 3 miles long, through Monte Salviano. This tunnel, however, soon became obstructed; and as the lake had been steadily rising from 1783, a new canal was made (1852–62). By 1875 the lake was dry; it is now under cultivation.

Fuego, TIERRA DEL. See TIERRA DEL FUEGO.

Fuente Alamo, a town of Spain, 20 miles S. of Murcia. Pop. 8167.

Fuente Ovejuna, a small walled town of Spain, 45 miles NW. of Cordova. Pop. 9698.

Fuenterrabia. See FONTARABIA.

Fuentes de Oñoro, a village of Salamanca, Spain, on the Portuguese frontier, 15 miles WSW. of Ciudad Rodrigo. Pop. 1342. Here, on 5th May 1811, Wellington defeated Massena.

Fühnen. See FÜNEN.

Fuji-san. See FUSIYAMA.

Fu-kian, or FÛ-CHIEN, an eastern maritime province of China.

Fukui, an important town in the main island of Japan, about 75 miles NNE. of Kioto, noted for its silk manufactures. It is a clean and cheerful city, and has several Christian missions. Pop. 45,000.

Fukuoka, a town on the NW. coast of Kiu-shiu Island, Japan, 65 miles NNE. of Nagasaki, with considerable commerce in silk, &c. Pop. 67,000.

Fukushima, a town in the main island of Japan, about 75 miles E. of Niigata. It is an important centre for trade in silkworms' eggs and raw silk. Pop. 21,000.

Fulda, a town of the Prussian province of Hesse-Nassau, on the river Fulda, 67 miles NE. of Frankfort-on-the-Main. Its famous Benedictine abbey was founded by St Boniface, the 'Apostle of Germany,' in the 8th century; from the 10th century it had a primacy over all the abbeys of Germany. The cathedral, six times destroyed by fire, was rebuilt in 1704–12. In 1734–1804 Fulda had a university. Pop. 17,000.

Fulham, one of the metropolitan and parliamentary boroughs (returning one member) of London, in the south of Middlesex, on the left bank of the Thames, 4½ miles SW. of Charing Cross. Here since 1141 has been the palace of the bishops of London, but the present building is mostly not more than a century old. The church is ancient, and contains the tombs of many of the bishops. Fulham also has memories of Bodley, Florio, Richardson, Hallam, Crotch, and Albert Smith.

Fullarton, a suburb of Irvine (q.v.).

Fullarton House, 1½ mile ESE. of Troon, a seat of the Duke of Portland.

Fulnek, a town of Moravia, 10 miles NNW. of Neutitschein. Pop. 3692. Fulnek was formerly a principal seat of the Moravian Brethren, and gave its name to *Fulneck* in Yorkshire, 5½ miles E. of Bradford, where a Moravian settlement was established in 1748.

Funchal (*Foon'tchal*), the capital of Madeira, on the south side of the island, is, in spite of its exposed harbour and roadstead, the chief port and commercial town of the island. Pop. 37,606.

Fundy, BAY OF, an arm of the Atlantic, separating Nova Scotia from New Brunswick, and branching at its head into Chignecto Bay and Minas Basin. It has an extreme breadth of 45 miles and a length up to Chignecto Bay of 140 miles; it receives the St John, the principal river of New Brunswick, and the St Croix, which separates that province from Maine. The tides rush in with impetuous force, rising 60 to 70 feet.

Fünen, or FÜHNEN (Dan. *Fyen*), the largest of the Danish islands after Zealand, is separated from Sleswick and Jutland on the W. by the Little Belt, and from Zealand on the E. by the Great Belt. Area, 1135 sq. m.; pop. 206,528. The coast is flat and sandy, indented on the north by the deep Odense Fjord. The interior is flat, except towards the south and west, where a range of hills rises to 420 feet. The principal towns are Odense, Svendborg, and Nyborg.

Fünfhaus, a south-western suburb of Vienna.

Fünfkirchen ('Five Churches,' from the five mosques built during the Turkish occupation, in the 16th century; Hungarian *Pecs*), a free town of Hungary, on the vine-clad southern slope of the Mecsek Mountains, 139 miles S. by W. of Pesth by rail. It has a Romanesque cathedral (1136), and manufactures of leather, woollens, flannels, majolica, &c. Pop. (1881) 28,801; (1900) 42,730.

Furneaux Islands, a group of barren islands in Bass Strait, between Australia and Tasmania, Flinders Island being the largest. About 300 inhabitants, of mixed breed, capture seals and sea-birds. The group takes its name from Furneaux, who discovered it in 1773.

Furnes, a town of Belgium, 16 miles by rail E. by N. of Dunkirk. Pop. 5322.

Furness, a district in the north-west of Lancashire, forming a peninsula between Morecambe Bay and the Irish Sea. The chief town is Barrow-in-Furness (q.v.). The ruin of Furness Abbey, 2 miles from Barrow, is a fine example of transition Norman and Early English. Founded in 1127 for the Benedictines, it afterwards became a Cistercian house. See J. Richardson's *Furness, Past and Present* (Barrow, 1880).

Furruckabad. See FARUKHABAD.

Fürstenwalde, a town of Prussia, on the Spree, 30 miles SE. of Berlin. It has breweries, a large malting-house, &c. Pop. 16,664.

Fürth, a town of Bavaria, at the confluence of the Rednitz and Pegnitz, 5 miles NW. of Nuremberg by the earliest German railway (1835). It is famous for its mirrors, tinsel, lead pencils, combs, optical instruments, metal toys, &c. Pop. (1875) 27,360; (1900) 54,820, mainly Protestants. Burned to the ground in 1634 and 1680, Fürth fell to Bavaria in 1806.

Fury and Hecla Strait, in 70° N. lat., separates Melville Peninsula from Cockburn Island, and connects Fox Channel with the Gulf of Boothia. It was discovered by Parry in 1822, and named after his ships.

Fusan, one of the ports of Corea, on the south-east shore of the peninsula, has long been practically a Japanese settlement, under a treaty of 1876. The imports include Manchester goods, salt, and Japanese wares; the exports, rice, beans, hides, &c.

Fusaro, Lake of (anc. *Acherusia Palus*), a small brackish lake of Italy, 11 miles W. of Naples. It is near the site of the ancient Cumæ, and during the Roman empire its banks were studded with villas. Oysters have been cultivated here since Roman times.

Fusiyama (properly *Fuji-san*), a sacred volcano, the loftiest mountain of Japan, stands on the main island, 60 miles SW. of Tokio, and rises 12,365 feet above sea-level, with a crater 500 feet deep. Its last eruption was in 1707.

Futa Jallon, a large area under French protection lying NE. of Sierra Leone, and forming the 'hinterland' to the coastal region of French Guinea (with which it is sometimes included). The area is 30,000 sq. m., and the pop. (who are of the Fulah stock) some 600,000. It is a hilly, healthy country, lying round a lofty mountain mass, and contains some of the head-streams of the Gambia, the Senegal, and the Niger.

Futehgunge, &c. See Fatehganj, &c.

Fyne, Loch, an Argyllshire sea-loch, running 40 miles N. and NE. from the Sound of Bute to beyond Inveraray. It is 1 to 5 miles broad, and 40 to 70 fathoms deep. On the west side it sends off Loch Gilp ($2\frac{5}{8} \times 1\frac{3}{4}$ miles) leading to the Crinan Canal. The herrings of Loch Fyne are held in high estimation.

Fyzabad (better *Faizabad*), a city of Oudh, on the Gogra, 78 miles E. of Lucknow by rail. Built on part of the site of Ajodhya (q.v.), it was the capital of Oudh from 1760 to 1780, but is now greatly fallen from its old-time splendour. It maintains, however, an active trade. Pop. 54,927. —For the capital of Badakhshan, see Faizabad.

Gablonz, a town of the north of Bohemia, 6 miles SE. of Reichenberg. Its glass manufactures employ some 12,000 men. Pop. 21,100.

Gaboon and French Congo, a French colony on the west coast of Africa between the Atlantic and the middle Congo. Its north boundary touches the German colony of the Cameroons; from below Brazzaville to the entrance of the Ubangi (Mobangi), the Congo is the boundary on the south-east and east, and the Ubangi for an indefinite distance; below Brazzaville to the sea, the south boundary is formed by the river Tshiloango and the water-parting between the Congo and the Kwilu. Its area is estimated at 250,000 sq. m., and the population—very loosely—at 5,000,000. The coast is tolerably uniform, the principal indentations being Corisco Bay and the estuaries of the Gaboon and Ogowé in the north-west. These last are with the Kwilu the principal rivers. The Gaboon, not a river, but an estuary, 10 miles wide at its entrance, penetrates 40 miles inland, with a width of from 6 to 12 miles. On the north bank is the settlement of Libreville. The climate on the coastal strip is extremely unhealthy; mean annual temperature, 83° F. On the inland plateau (2600 feet above sea-level) it is better. Amongst the exports figure timber, gum, ivory, gutta-percha, palm oil and kernels, earth-nuts, sesamum, and malachite; other products are brown hematite, quicksilver, sugar-cane, cotton, and bananas. The principal imports are salt, spirits, gunpowder, guns, tobacco, cotton goods, and iron and brass wares. The people belong for the most part to tribes of the Bantu stock. This part of Africa was discovered by the Spaniards in the 15th century. The French made their first settlement on the Gaboon estuary in 1842; twenty years later they extended their sway to the Ogowé. But they seem never to have attached any importance to the colony until after De Brazza began to explore it in 1876-86. The principal towns are Libreville (the capital), Franceville, Loango, and Brazzaville.

Gad'ames, or Ghadames (the *Cydamus* of the Romans), an oasis and town of Africa, on the northern border of the Sahara, in 30° 9′ N. lat. and 9° 17′ E. long. The gardens owe their fertility to a hot spring (89° F.). The town is an entrepôt for manufactures and foreign goods from Tripoli to the interior, and for ivory, beeswax, hides, ostrich-feathers, gold, &c., from the interior to Tripoli. Pop. 10,000.

Gad'ara, a ruined town of Syria, in the Decapolis, a few miles SE. of the Sea of Galilee. For its exploration by Schumacher, see his *Northern 'Ajlûn* (1890).

Gades. See Cadiz.

Gadshill, 3 miles NW. of Rochester, commands a splendid prospect, and was the scene of Falstaff's famous encounter with the 'rogues in buckram suits.' Gadshill Place, an old-fashioned red-brick house here, which Dickens coveted as a boy, was bought by him in 1856, and was his home from 1860 till his death in 1870.

Ga'eta (Lat. *Caieta*), a strongly fortified maritime town of Italy, picturesquely situated on a lofty promontory, 50 miles NW. of Naples. On the summit of the promontory stands the circular Roland's tower, said to be the mausoleum of Plancus, the friend of Augustus. The beauty of the Bay of Gaeta, which almost rivals that of Naples, has been celebrated by Virgil and Horace. Often besieged, Gaeta in 1848-49 was the refuge of Pope Pius IX.; in 1860-61 of Francis II. of Naples. The citadel contains the tomb of the Constable Bourbon, killed at the taking of Rome in 1527. Pop. 17,848.

Gaeta, Mola di. See Formia.

Gaillac, a town in the French dep. of Tarn, 32 miles by rail NE. of Toulouse. Pop. 7910.

Gaillard, Château. See Andelys.

Gainesville, a town of Texas, 34 miles W. of Sherman. Pop. 7563.

Gainsborough, a market-town of Lincolnshire, on the Trent's right bank, 21 miles above its

embouchure in the Humber, and 16 miles by rail NW. of Lincoln. It has a parish church, rebuilt in 1736, with the exception of a fine 12th-century tower; a manor-house, built by John of Gaunt, and now forming part of the corn exchange; and a grammar-school (1589). Vessels drawing 12 feet of water can ascend the Trent to Gainsborough, which manufactures linseed cake and oil, malt, cordage, and machinery. Pop. (1851) 7506; (1901) 17,660. See the history by Stark (2d ed. 1843).

Gairloch, an inlet of the sea on the west coast of Ross-shire, 6 miles in length, which gives name to a parish and village. See J. H. Dixon, *The Gairloch* (1888).

Gairney Bridge, a place 1¾ mile SSE. of Kinross, where the first Secession presbytery met in 1733. An obelisk marks it.

Galabat, a settlement or state of Negroes from Dar-Fûr and Wadai, situated just beyond the western frontiers of Abyssinia. Pop. 20,000.

Galacz. See GALATZ.

Galapa'gos (Span. *Galápagos*, 'tortoises'), a group of volcanic islands, lying on the equator, 600 miles W. of Ecuador, to which they belong. The islands all possess English names—probably bestowed by the buccaneers. The group consists of seven principal islands, with about half-a-dozen of lesser size, and innumerable islets and rocks; the area is estimated at 2940 sq. m., of which Albemarle Island embraces over half. Rising to a height of nearly 5000 feet, the islands are covered with a dense vegetation on the south side; on the northern they are barren and forbidding in aspect, the lower parts covered entirely with ashes and lava or with prickly scrub. Darwin puts the number of craters in the group at 2000; some appear to be not yet extinct. The archipelago was annexed by Ecuador in 1832. Charles Island and Chatham Island are now occupied by agricultural colonists, the chief crop being sugar. Pop. 400.

Galashiels, a town of Selkirkshire, the chief seat in Scotland of the Scotch tweed manufacture, occupies 2½ miles of the narrow valley of the Gala, immediately above its junction with the Tweed. It is 33½ miles SSE. of Edinburgh, and 4 WNW. of Melrose. In the 15th century it is spoken of as 'the forest-steading of Galashiels;' and its tower, demolished about 1814, was then occupied by the Douglases. In 1599 it was made a burgh of barony, having then 400 inhabitants. As early as 1581 cloth was manufactured here, but so great has been the progress of the tweeds trade of the town during the 19th century, that the annual value of its woollen manufactures rose from £1000 in 1790 to £1,250,000 in 1890. The town has also dyeworks, iron-foundries, engineering works, and boot-factories. In 1868 Galashiels was made a parliamentary burgh, with Hawick and Selkirk returning one member. Pop. (1831) 2209; (1871) 10,312; (1891) 17,367; (1901) 13,615.

Galata, a suburb of Constantinople (q.v.).

Galatia, in ancient geography, a country in the heart of Asia Minor.

Galatina, a town of Italy, 13 miles SW. of Lecce. Pop. 8720.

Galatz, a river-port of Moldavia, the commercial centre of the Roumanian kingdom, on the Danube's left bank, 85 miles from its Sulina mouth, and 166 by rail NE. of Bucharest. It has a dockyard, grain-stores, and manufactures of iron, copper, wax candles, and soap. Pop. (1869) 36,000; (1900) 62,850.

Gala Water, a Scottish stream rising among the Moorfoot Hills, and winding 21 miles SSE., past Stow and Galashiels, till, after a total descent of 800 feet, it falls into the Tweed, a little below Abbotsford, and 2½ miles W. of Melrose. In its valley, the ancient Wedale, Skene localises one of Arthur's battles; its 'braw, braw lads' are famous in song.

Galena, a city of Illinois, on the Fevre River, 6 miles above its junction with the Mississippi, and 133 WNW. of Chicago by rail. Pop. 5035.

Galesburg, a city of Illinois, 53 miles WNW. of Peoria by rail. It has foundries, machine-shops, and agricultural manufactories, and is the seat of the Lombard University (Universalist, 1857) and of Knox College (Congregational, 1841). Pop. (1860) 4959; (1900) 18,600.

Galesville, a post-village of Wisconsin, 15 miles ENE. of Winona, with a Methodist university (1855). Pop. 810.

Galicia, formerly a kingdom and afterwards a province in the north-west of Spain. With an area of 11,340 sq. m., it has been divided since 1833 into the minor provinces of Coruña, Lugo, Orense, and Pontevedra, whose joint pop. is now close on 2,000,000.

Galicia (Polish *Halicz*), an Austrian province lying between the Carpathians and Russian Poland. Area, 30,300 sq. m.; population, 7,300,000, almost all of Slavonic race, the western part being occupied mainly by Poles, the eastern by Ruthenians. In religion about 2½ millions, mostly Ruthenians, belong to the Greek Church, and nearly 2¾ millions, chiefly Poles, to the Roman Catholic Church. The southern portion of the country is a high terrace, flanking the northern face of the Carpathians. Thence the land slopes away northwards, through a low hilly region, to the deep plains of the Dniester and the Vistula. There are many large rivers—those in the west being feeders of the Vistula, those in the east of the Danube and Dniester. One-fourth of the surface is covered with forests. Salt is the most important mineral; but coal, iron ore, sulphur, lead, zinc, and petroleum are also extracted. There are about thirty-five mineral springs, most of them containing sulphur. Lemberg (the capital) and Cracow are the chief towns. The western portion of the country belonged from 1382 till 1772 to Poland; in 1846 Cracow, with its territory, was given up to Austria, and annexed to Galicia.

Galicz. See HALICZ.

Galilee, SEA OF, called also *Lake of Gennesaret* and *Sea of Tiberias* (in O. T. *Sea of Chinnereth* or *Cinneroth*), a lake in north Palestine, 13 miles long by 6 broad. Its surface lies 682 feet below sea-level, at the bottom of a volcanic basin; its maximum depth, heretofore given at 820 feet, was in 1890 fixed at 148 feet by M. Barrois. Although the Jordan runs into it red and turbid from the north, and many warm and brackish springs also find their way thither, its waters are cool, clear, and sweet. The shores on the east and north sides are bare and rocky; on the west they are covered with luxuriant vegetation.

In the time of our Lord, Galilee (Heb. *Galil*, 'circle') embraced the whole northern portion of Palestine from the Mediterranean to the Jordan. It was divided into Upper and Lower Galilee, the former hilly and well wooded, the latter level and very fertile. At that time it was mainly inhabited by Syrians, Phœnicians, Arabs, and Greeks, with a few Jews. The principal towns

were Tiberias and Sepphoris; those that figure in the gospels are Cana, Capernaum, Nazareth, and Nain. After the destruction of Jerusalem the despised Galilee became the refuge of the proud doctors of Jewish law, and the city of Tiberias the seat of Rabbinical learning. Galilee now forms part of the pashalic of Damascus, in the Turkish province of Syria, and is remarkable for its beauty and fertility. See Dr S. Merrill, *Galilee in the Time of Christ* (new ed. 1885).

Galion, a town of Ohio, 58 miles N. by E. of Columbus, with cigar-factories, machine-shops, railroad-shops, &c. Pop. 7326.

Galla Country, a region south of Abyssinia and west of Somaliland, inhabited by two or three millions of fierce, energetic, mainly heathen Gallas, some of whom have been Mohammedanised, and others, on the Abyssinian frontiers, profess a corrupt Christianity. Many parts of southern Abyssinia are held by Gallas, who belong probably to the Hamitic stock.

Galle, or POINT DE GALLE, a fortified seaport of the south-west extremity of Ceylon, stands on a low rocky promontory, and has a good harbour. It has lost its former importance as a coaling and transhipping station for the great lines of ocean-steamers since the completion of the breakwater at Colombo. Pop. 40,000.

Galle'go, a principal affluent of the Ebro.

Gallip'oli (Greek *Kallipolis*), a cathedral city of southern Italy, on a steep insulated rock in the Gulf of Taranto, connected with the mainland by a bridge, 59 miles by rail S. of Brindisi. It has a fortified harbour protected by a mole, and exports olive-oil. Pop. 11,000.

Gallipoli (anc. *Kallipolis*), a seaport of Turkey, on the peninsula of the same name (the ancient Thracian Chersonesus), at the north-eastern extremity of the Dardanelles, 90 miles S. of Adrianople, and 130 WSW. of Constantinople. It is the headquarters of the Turkish fleet. Pop. 25,000.

Galloway, an extensive district of south-west Scotland, once somewhat larger, but now entirely comprised in the shire of Wigtown and stewartry of Kirkcudbright. It is 70 miles long by 40 at its utmost breadth, and contains the greatest diversity of scenery—mountain, lake, and stream, as well as dreary waste and almost pathless moor. The province owes its name to the fact that the natives were called Gall-Gael, or foreign Gaels, at first because of their falling under the foreign rule of the Anglians; but as the Picts of Galloway they continued to be known so late as the Battle of the Standard in 1138. See works by Sir Andrew Agnew (2d ed. 1893) and M'Kerlie (1870–91).

Galloway, MULL OF, a bold headland, the southern extremity of the peninsula called the Rhinns of Galloway, in Wigtownshire, and the most southern point of Scotland, 23 miles S. of Stranraer. It is 1½ mile long, and ¼ mile broad, and rises to 210 feet at its eastern extremity, on which stands a lighthouse, 60 feet high, whose light is visible 23 nautical miles.

Galston, an Ayrshire village, 5 miles SE. of Kilmarnock by rail. It manufactures muslins and lace, and has neighbouring coal-pits. Pop. 4885.

Galt, a town of Ontario, Canada, on the Grand River, 25 miles by rail E. by N. of Hamilton. It manufactures flour, machines, cast-iron, paper, leather, &c. Galt was founded in 1816. Pop. 8000, mostly of Scotch descent.

Galtee Mountains, a range of Tipperary and Limerick, attaining 3008 feet in Galteemore.

Galveston, a seaport of Texas, on Galveston Island, at the opening of Galveston Bay into the Gulf of Mexico, 214 miles ESE. of Austin by rail. The island is a low strip of land, 30 miles long by 3 broad; the bay extends northward from the city to the mouth of the Trinity River, a distance of 35 miles, and has a breadth of from 12 to 18 miles. The city contains a Catholic cathedral, the Catholic University of St Mary, and the Texas Medical College; and it has foundries, mills, and machine-shops. Since the hurricane and flood of 1900, its harbour is protected by a sea-wall and other works. The foreign trade (£21,000,000 in 1901) is mainly the export of cotton and cotton-seed oil. Pop. (1850) 4177; (1900) 37,790.

Galway, a maritime county of Ireland, in the province of Connaught, and, after Cork, the largest of all the Irish counties. Area, 1,569,505 acres, of which a little more than one-half is arable. Pop. (1831) 414,684; (1871) 248,458; (1881) 241,662; (1901) 192,549 (187,220 Catholics). It is watered in the east by the Shannon, the Suck, and their feeders; and in the west by Loughs Mask and Corrib, and by the streams which fall into them and Galway Bay. In the south are the Slieve-Baughta Mountains; and in the west are the Maam-Turk Mountains, and the Twelve Pins (2395 feet). South-west from Lough Corrib to the sea is the district called Connemara, which contains vast bogs, moors, lakes, and morasses. North-east of Connemara is Joyce's Country, and south-east of it is Iar-Connaught, or Western Connaught. The shore is much broken, with many islands and bays. Agriculture and fishing are the chief pursuits. Raths and cromlechs are numerous; there are seven round towers; whilst of many monastic ruins the finest is that of Knockmoy, near Tuam. Since 1885 Galway county has returned four members to parliament.

GALWAY BAY is an inlet of the Atlantic, on the west coast of Ireland, between the counties of Galway and Clare. It is a noble sheet of water, 30 miles long from W. to E., and 10 in average breadth, and is sheltered by the Aran Isles.

Galway, a municipal and parliamentary borough of Ireland, a seaport, and county of itself, at the mouth of the Corrib, on the north shore of Galway Bay, 50 miles NNW. of Limerick, and 127 W. of Dublin by rail. The old town is poorly built and irregular. In the wall of a house here is the 'Lynch Stone,' where in 1493 'Mayor Lynch' had his own son hanged for the murder of a Spaniard. The new town consists of well-planned streets, and is built on a rising-ground which slopes gradually toward the sea and the river. A suburb, called Claddagh, is inhabited by fishermen. Galway is the see of a Catholic bishop. The principal buildings are the cruciform church (Episcopal) of St Nicholas (1320), St Augustine's Catholic Church (1859), the county court-house, &c. Queen's College (1849) has eighteen professors and about a hundred students; its quadrangular buildings are spacious and handsome. Galway has flour-mills, a distillery, a foundry, extensive salmon and sea fishing, a good harbour, with docks that admit vessels of 500 tons, and a lighthouse. The exports consist mainly of agricultural produce, wool, and black marble. Galway returns one member to parliament. Pop. (1851) 20,686; (1881) 15,471; (1901) 13,426 (nine-tenths Catholics). Galway was taken by Richard de Burgh in 1232, by Sir Charles Coote in 1652, and in 1691 by General Ginckell. See Hardiman's *History of the Town and County of Galway* (Dublin, 1820).

Gambia, a river of western Africa, the more southerly of the two great streams of Senegambia, enters the Atlantic after a course of over 1400 miles, by an estuary which in some parts measures nearly 27 miles across, but contracts to little more than 2 at the mouth. It is navigable from June to November for vessels of 150 tons up to Barraconda, 400 miles from the sea.—The British settlement of Gambia occupies the banks of the river as far up as Georgetown. Its actual area is about 69 sq. m.; but an additional protected area, consisting of a strip on both sides of the river, was added in 1890, making, after concessions to the French in 1904, a total area of over 3000 sq. m. Pop. of settlements, 14,000 (some 200 Europeans); with protectorate, 90,000. The climate is 'fairly healthy during the dry months.' The staple product is the ground-nut; other products being hides, rice, cotton, beeswax, kola nuts, and india-rubber, and there is an active entrepôt trade with the neighbouring French settlements in cotton goods, spirits, rice, kola nuts, and hardware. Formerly a dependency of Sierra Leone, the settlement was created an independent colony in 1843, a portion of the West African Settlements in 1876, and a separate government in 1888. It is now practically shut in by French territory. The settlement is connected with Europe by telegraph cables, and the Liverpool mail-steamers call fortnightly. In February 1894 a small British expedition to punish a slave-raiding Mandingo chief received a check, an event which led to decisive measures.

Gambier Islands, or MANGARÉVA, a Polynesian group of six larger and several smaller islands, under a French protectorate, in 23° 8′ S. lat. and 134° 55′ W. long. Area, 15 sq. m.; pop. 445.

Gamrun. See GOMBROON.

Gand. See GHENT.

Gandak, a river of India, rises in the Nepal Himalayas, and flows SE. between the North-west Provinces and Bengal, to the Ganges at Patna.

Gandamak, an Afghan village, between Kabul and Peshawar, where in 1842 the last remnant of the British force from Kabul was massacred. Here a treaty was signed with Yakub Khan in 1879.

Gandersheim (*Gan'ders-hīm*), a town of 2507 inhabitants in Brunswick, 30 miles N. of Göttingen by rail. Its famous abbey (852) gave the title of abbess to the daughters of German princes, and until 1803 was itself a principality.

Gandia, a town of Spain, near the mouth of the Alcoy, and 47 miles SSE. of Valencia by rail. Pop. 10,000.

Gando, a Fulah state of the western Soudan, lying west of Sokoto, and on both sides of the Niger north of Borgu; most of it is now, since 1900, within (British) Northern Nigeria, while the western part is in the French Sahara.—GANDO, 50 miles SW. of the town of Sokoto, is the capital; the trading town on the Niger is Egga (q.v.).

Gandolfo. See CASTEL GANDOLFO.

Ganges, the great river of northern India, rises in Garhwal in 30° 56′ 4″ N. lat. and 79° 6′ 40″ E. long., issuing, under the name of the Bhagirathi, from an ice-cave 8 miles above Gangotri and 13,800 feet above sea-level. A few miles below Gangotri it receives the Jahnavi, and 133 miles from its source the Alaknanda, from which point the united stream is known as the Ganges. From Sukhi, where it bursts through the Himalayas, it flows south-west to Hardwar, and thence winds south-east to Allahabad, where it is joined by the Jumna. Hence the great river rolls on, past the holy city of Benares, and across the plains of Behar, fed by the Son, the Gandak, and the Kusi. It then turns sharply to the southward, and begins to throw out the branches which enclose the level delta, at a point 220 miles from the Bay of Bengal. The main channel, called the Padma or Padda, runs south-east to Goalanda, where it is met by the main stream of the Brahmaputra, and the vast confluence of waters flows in a broad estuary, the Meghna, into the Bay of Bengal near Noakhali. Between this most easterly mouth, and the Hugli or Hooghly (q.v.), the most westerly and the great channel of navigation, lies the delta, with a multitude of mouths and channels. The delta in its upper angle is very fertile, but in the south, towards the sea, the country is a desolate waste of swamps (see SUNDARBANS), intersected by a network of canals. The Ganges has a total length of 1557 (by the Hugli mouth, 1509) miles; its drainage basin embraces over 390,000 sq. m. In spite of the shoals and rapids that lie above Allahabad, it is in some sense navigable from the point where it enters the lowlands, near Hardwar; and its stream, which never fails in the hottest summer, distributes fertility throughout its course, and even its inundations spread over the fields a rich top-dressing of alluvial silt. The ruined or decayed cities near its banks, however, bear mute witness to the loss inflicted by the constant changes which take place in the river-bed. The Ganges excels all the great rivers of India in sanctity; from the source down to the sea every foot of 'Mother Gangá's' course is holy ground, to bathe in her waters will wash away sin, to die and be buried on her banks secures free entry to eternal bliss.

The GANGES CANAL, opened in 1854, is an important irrigation work and navigable channel, extending, on the right of the Ganges, from Hardwar to Cawnpore, with a long branch to Hamirpur on the Jumna. The main canal is 445 miles in length. The Lower Ganges Canal, planned in 1866, and begun in 1873, is a southward extension of the main line to Allahabad.

Gangi, a town of Sicily, 18 miles SSE. of Cefalù. Pop. 11,935.

Gan-hwuy, or AN-HUI, an eastern inland province of China, crossed by the Yang-tsze-Kiang.

Ganjam, a town of Madras presidency, at the mouth of the Rishikuliya, 18 miles NE. of Berhampur. Pop. 5037.

Gannat, a town in the French dep. of Allier, 245 miles SSE. of Paris by rail. Pop. 5187.

Gantang Pass, 18,295 feet high, leads eastward from the Bashahr hill state, across the Himalayas into Chinese territory.

Gantur. See GUNTUR.

Gap (anc. *Vapincum*), the capital of the French dep. Hautes Alpes, on the Luye, 2424 feet above sea-level, 47 miles SE. of Grenoble. It has a cathedral (rebuilt since 1866). Pop. 8898.

Garabit, a point on the railway from Marvejols (Lozère) to Neussargues, 10 miles S. of St Flour, in the French dep. of Cantal, where the line crosses a gorge through which the waters of the Truyère run, 401 feet below the rails. The Eiffel viaduct here is 1852½ feet long, and crosses the river by an arch, with a span of 541½ feet.

Garamantes. See FEZZAN.

Garaye, LA, a ruined château in Brittany, 2 miles from Dinan. Its last owners, Claude Toussaint and his countess, in the first half of the

18th century converted it into a hospital, which forms the theme of the Hon. Mrs Norton's poem, 'The Lady of La Garaye' (1862).

Gard, a French dep. on the Mediterranean, and bounded E. by the Rhone, with an area of 2245 sq. m., one-third arable. It is divided into the arrondissements of Alais, Nîmes (the capital), Uzès, and Vigan. Pop. (1861) 422,107; (1901) 418,470.

Garda, Lago di (Roman *Lacus Benacus*), a beautiful, clear lake, the largest of Italy, lies between Lombardy and Venetia, its northern end extending into the Austrian Tyrol. Situated 226 feet above sea-level, it has an area of 115 sq. m., a greatest length of 35 miles, a breadth of 2 to 11 miles, and a maximum depth of 967 feet; the surface is studded with many islands. It is drained by the Mincio, a tributary of the Po. The mild climate and the beauty of the vicinity have caused its shores to be lined with villas.

Gardaia, or Ghardaïa, a town in the Algerian Sahara, stands on a conical hill, in an oasis-valley full of date-palms, 82 miles WNW. of Wargla. In 1882 a garrisoned fort was established here by the French. Pop. 38,782.

Gardelegen, an old town of Prussian Saxony, on the Milde, 28 miles (53 by rail) NNW. of Magdeburg. Pop. 7358.

Garden City, in Long Island, now part of Queens borough, New York, was laid out as a town of model villas by the New York millionaire, A. T. Stewart (1803–76).—Garden City is the name given to a model city planned on an estate acquired at Letchworth, near Hitchin in Herts, the amenities of country life being specially secured.

Gardenstown, a Banffshire fishing-village, 8 miles ENE. of Banff. It was founded in 1720 by A. Garden, Esq., of Troup. Pop. (1861) 507; (1891) 1109.

Gardiner, a port of Maine, on the Kennebec River, 56 miles NNE. of Portland. Pop. 5491.

Gardner, a town of Massachusetts, 70 miles WNW. of Boston by rail, with manufactures of wooden wares. Pop. 10,820.

Gareloch. See Dumbartonshire.

Garelochhead, a Dumbartonshire village at the head of the Gareloch, 7½ miles NNW. of Helensburgh by rail. Pop. 577.

Gargano (anc. *Gargānus*), a mountainous peninsula, the 'spur' of Italy, in the province of Foggia, jutting out 30 miles into the Adriatic, and attaining 5110 feet in Monte Calvo.

Garhmukhtesar, a town in the North-west Provinces, on the Ganges, 26 miles SE. of Meerut, with four shrines of Gangā, and a fair, which attracts 200,000 pilgrims. Pop. 6305.

Garhwal, a native state in the United Provinces of Agra and Oudh, on the borders of Tibet; area, 4164 sq. m.; pop. 270,000. Also an adjoining British district in the United Provinces; area, 5629 sq. m.; pop. 450,000.

Gariep. See Orange River.

Garigliano (anc. *Liris; Liri* still in its upper course), a river of Italy, rises in the Abruzzi, and flows 90 miles S. to the Gulf of Gaeta. It is navigable below Pontecorvo. On its banks in 1503 the Spaniards defeated the French.

Garioch, a district of mid-Aberdeenshire.

Garleton Hills, a range (590 feet), 1½ mile N. of Haddington, crowned with a column to the Earl of Hopetoun, the Peninsular hero. Ruined Garleton or Garmylton Castle, at its N. base, was perhaps Sir David Lyndsay's birthplace.

Garliestown, a Wigtownshire seaport, 9¼ miles by rail SSE. of Wigtown. It was founded about 1760 by Lord Garlies (the seventh Earl of Galloway). Pop. 532.

Garmouth, an Elginshire seaport, 5 miles N. by W. of Fochabers. Charles II. landed here in 1650. Pop. 535.

Garmylton. See Garleton.

Garnkirk, a Lanarkshire village, with fireclay-works, 4 miles WNW. of Coatbridge. Pop. 871.

Garnock, an Ayrshire stream flowing 21 miles southward to the Firth of Clyde at Irvine.

Garnqueen, a Lanarkshire village, 2½ miles N. by W. of Coatbridge. Pop. 1660.

Garo Hills, a mountainous district forming the SW. corner of Assam, with an area of 3270 sq. m., and a pop. of 138,300.

Garonne (anc. *Garumna*), the principal river of south-west France, rises within the Spanish frontier in the Val d'Aran, at the base of Mount Maladetta, in the Pyrenees, 6142 feet above sea-level. About 26 miles from its source it enters the French territory in the dep. of Haute Garonne, and flows NE. and NW. until, joined by the Dordogne, 20 miles below Bordeaux, and widening afterwards into the Gironde estuary, it enters the Atlantic at the Pointe de Grave. The estuary, the largest in France, is nearly 50 miles long. The total length of the river is 346 miles; it drains an area of 22,020 sq. m. Its navigation, which, however, is much impeded above Toulouse, commences for small craft at Cazères; ocean steamers go up to Bordeaux. Its principal affluents are the Tarn, Lot, and Dordogne, on the right; and on the left, the Save, Gers, and Baise. At Toulouse it is joined by the Canal du Midi, running eastward to the Mediterranean; and the river's own *canal latéral*, starting also from Toulouse, runs 120 miles along the right bank.

Garonne, Haute, a dep. in the south of France, embracing portions of ancient Gascony and Languedoc. Area, 2428 sq. m.; pop. (1872) 479,362; (1901) 439,769. It is divided into the four arrondissements of Toulouse (the capital), Muret, St Gaudens, and Villefranche.

Garry. See Glengarry.

Garscadden, a Dumbartonshire village, 3 miles WNW. of Maryhill. Pop. 524.

Garstang, a Lancashire market-town, on the Wyre, 10½ miles S. of Lancaster. Pop. 800.

Garston, a Lancashire town, on the Mersey, 4 miles SE. of Liverpool, to which it was added in 1902 (pop. in 1901, 17,289).

Gartsherrie. See Coatbridge.

Gasconade, a river of Missouri, winding 200 miles north-eastward to the Missouri River, 35 miles below Jefferson City.

Gascony, an ancient district of SW. France, now included in the deps. of Landes, Gers, Hautes-Pyrénées, and the south portions of Haute-Garonne, Tarn-et-Garonne, and Lot-et-Garonne.

Gask, a Perthshire parish, 8 miles WSW. of Perth. Its lairds were the Jacobite Oliphants, to whom belonged Lady Nairne, the song-writer.

Gaspé, a peninsula of Quebec province, projecting into the Gulf of St Lawrence, between the river St Lawrence on the N. and the Bay of Chaleurs on the S.—Gaspé Basin, where Cartier

landed in 1584, is a port in Gaspé Bay, now the seat of fisheries. Pop. 426.

Gastein, a romantic valley (pop. 4000) in the south of the Austrian duchy of Salzburg, 28 miles long, with many small villages. The chief, Wildbad-Gastein, is visited every summer by some 5000 guests to drink of its seven warm springs. Here, on 14th August 1865, a convention was signed between Austria and Prussia for the partition of Sleswick-Holstein.

Gatchina, a town of Russia, 30 miles by rail SSW. of St Petersburg. It has porcelain manufactures, barracks, and a palace long the favourite residence of Alexander III., and guarded with extraordinary care. Pop. 15,063.

Gatehouse-of-Fleet, a pretty Kirkcudbrightshire river-port, on the Fleet, 9 miles WNW. of Kirkcudbright. Pop. 1026.

Gateshead, a town on the northern verge of the county of Durham, and on the south bank of the Tyne, opposite Newcastle. Governed for centuries by a chief bailiff appointed by the prince-bishop of the palatinate, aided by popularly elected burgesses, Gateshead became a parliamentary borough (sending one member) in 1832, a municipal borough in 1835, and a county borough in 1888. Pop. (1831) 15,177; (1851) 25,568; (1881) 65,855; and (1901) 109,888. The two towns are intimately connected by a splendid suspension bridge (1871) at Redheugh; by Stephenson's celebrated high-level road and railway bridge (1849); and by a swing-bridge (1876), which opens to allow the passage of ships. Engine-works, shipyards, electric cable, hempen and wire rope manufactories, chemical works, cement-works, glass-works, and ironworks employ many of the inhabitants. The town-hall and free library are among the architectural ornaments of the borough, which also has a grammar-school (1700), King James's Hospital (1611) for poor brethren, a public park at Saltwell (1874), public libraries (1886), high schools, swimming-baths, &c. St Mary's Church in 1080 was the scene of the murder of Bishop Walcher; and at Gateshead Defoe wrote *Robinson Crusoe*. The quarries yielding the world-famous Newcastle grindstones are worked at Gateshead Fell. See Welford's *History of Newcastle and Gateshead* (2 vols. 1884–85).

Gath, one of the five chief cities of the Philistines, was situated on the frontiers of Judah. Its site is probably the Blanche Garde of the Crusaders, who built a castle here.

Gatineau, a river of Quebec, Canada, issuing from a chain of lakes just N. of 48° N. lat., flows 400 miles SSW. to the Ottawa River, a mile below Ottawa City.

Gatschina, Gatshina. See GATCHINA.

Gattonside, a Tweedside village, opposite Melrose, famous for its fruit.

Gauhátí. See ASSAM.

Gaul. See FRANCE.

Gaur, or LAKHNAUTI, the mediæval capital of Bengal, whose ruins still cover a space of seven miles by two, on a branch of the Ganges, and include Hindu buildings and interesting 15th-century mosques, besides extensive reservoirs, channels, and embanked roads.

Gaya, a town of Bengal, on the Phalgu, 57 miles S. of Patna by rail. It is a place of the greatest sanctity, from its associations with Buddha, and is annually visited by 100,000 Hindu pilgrims. Pop. 72,350.

Gaya, the wine suburb of Oporto (q.v.).

Gaza, one of the five chief cities of the ancient Philistines, situated in the south-west of Palestine, 3 miles from the sea, on the borders of the desert which separates Palestine from Egypt. In 333 B.C. it was taken after a five months' siege by Alexander the Great, and from then to 1799, when the French captured it, it witnessed the victories of the Maccabees, Calif Abu-bekr, the Templars, and the heroic Saladin. Constantine the Great, who rebuilt the town, made it the seat of a bishop. The modern Guzzeh is a collection of mere villages, its only building of interest the great mosque. Pop. 25,000.

Gebweiler (Fr. *Guebwiller*), a town of Alsace-Lorraine, at the foot of the Vosges, 15 miles SSW. of Colmar, has cotton-spinning, dyeworks, machine-factories, and vineyards. Pop. 13,395.

Gedrosia. See BELUCHISTAN.

Geelong (*g* soft), a city of Victoria, on the south side of Corio Bay, 45 miles SW. of Melbourne by rail. The river Barwon forms the southern boundary of the city, and 3 miles farther spreads into the Connewarre Lakes, falling into the sea at Point Flinders. The gold discoveries in 1851 added to the prosperity of Geelong, which had been incorporated as a town in 1849, and became a principal seat of the wool trade—the first woollen mill in Victoria being erected here. Alongside of the railway jetty the largest ships can load and discharge, and through the bar at the entrance to Corio Bay a channel has been dredged for steamer traffic. The industries include the manufacture of woollen cloths and paper, meat-preserving, tanning, rope-making, fishing, &c. The Exhibition Hall and general produce exchange, theatre, and assembly-rooms combined, stands in the market-square. The city has two parks, botanical gardens, government buildings, a town-hall, a post-office (1889), an excellent hospital, a chamber of commerce, &c. Corio Bay is a favourite bathing-resort. Pop. (1871) 22,618; (1901) 25,000.

Geelvink Bay penetrates 125 miles southward into the western arm of New Guinea. Islands protect its entrance, 155 miles wide.

Geestemünde, a Prussian seaport, at the Geeste's confluence with the Weser, just SE. of Bremerhaven. Its docks and wharves were constructed in 1857–63. Pop. 20,120.

Gefle, a town of Sweden, on an inlet of the Gulf of Bothnia, 71 miles by rail N. by W. of Upsala. Rebuilt since its destruction by fire in 1869, it has a castle (16th and 18th c.), shipbuilding yards, and manufactures of sailcloth, cotton, and tobacco, and fisheries. It ranks third among Sweden's commercial towns, exporting iron, timber, and tar, and importing corn and salt. Pop. (1874) 16,787; (1900) 29,522.

Gelderland. See GUELDERLAND.

Gellivara, a great Swedish iron-mining centre, 145 miles by rail NW. of Luleå, at the head of the Gulf of Bothnia. Pop. 13,000.

Gelnhausen, a town of Prussia, on a hill, 26 miles NE. of Frankfort-on-Main. Pop. 5000.

Gelsenkirchen (*g* hard), a modern manufacturing town of Westphalia, 4 miles NW. of Bochum. It owes to coal and iron its rise from a mere village since 1860. Pop. (1880) 14,615; (1900) 36,935.

Gemmi Pass (*g* hard), a narrow Alpine path, nearly 2 miles long and 7553 feet high, connecting the Swiss cantons of Bern and Valois.

Genazza'no, a town 27 miles E. of Rome, containing an old castle of the Colonnas, and a far-famed pilgrimage-chapel. Pop. 4008.

Genesee, a river rising in Pennsylvania, and flowing nearly 200 miles north through western New York into Lake Ontario, 7 miles N. of Rochester. Three of its extraordinary falls occur within 1½ mile; two being 68 and 90 feet high, and the Portage Falls 110 feet. The river has also a sheer fall of 95 feet at Rochester, utilised for water-power; and another cascade, a few miles below, is almost as high.

Geneva (Fr. *Genève*, Ger. *Genf*, Ital. *Ginevra*), a canton in the south-west of Switzerland, bounded S., E., and W. by the territories of France. Area, 108 sq. m.; pop. (1900) 131,674, about half being Catholics, and 85 per cent. French-speaking. It is watered by the Rhone and Arve, which unite 2 miles from the south-west extremity of the Lake of Geneva. The surface is hilly, chief eminences being the steep Salève (4528 feet) and the Reculet (5631).

Geneva, the capital, is situated at the exit of the Rhone from the Lake of Geneva, 388 miles by rail SE. of Paris. A Gallic town originally, Geneva acknowledged Roman supremacy in 120 B.C.; passed backwards and forwards from and to Burgundy; was made a bishop's seat in the 4th century; and having secured Freiburg (1519) and Bern (1526) for allies, finally won its complete independence from Savoy, a few years later accepting Protestantism. In 1535 Calvin arrived at Geneva, and began his reconstitution of the political and social life of the republic, which created it one of the chief strongholds of Protestantism in Europe. Formerly Geneva was walled, and consisted of clusters of narrow streets; but since the accession of the radical party to power in 1847 the town has been almost entirely rebuilt in modern style. The ancient ramparts have been removed, streets widened and well paved, and new and commodious quays constructed along the lake and river. In its course through the town the Rhone forms two islands, on one of which still exists an antique and picturesque cluster of buildings; on the other, laid out as a public pleasure-ground, is a statue of Rousseau. In the Place des Alpes is a sumptuous monument to Duke Charles XI. of Brunswick, who, dying here in 1873, left 16,500,000 francs to the city. Famous as a theological, literary, and scientific centre, Geneva has given birth to Rousseau; to the physicist De Saussure; to the naturalist Bonnet and the Pictets; to Necker, the French minister of finance; to the humorist Toepffer; and to the sculptor Pradier. The principal edifices are the Transition cathedral of St Peter (1124); the town-hall, in which the Alabama arbitrators met in 1872; the academy, founded by Calvin in 1559, with a library of 110,000 volumes, and in 1873 converted into a university (with over 700 students); the magnificent theatre (1879); the Rath Museum (1824–26); the Fol Museum, with Greek, Roman, and Etruscan antiquities; the Athenæum, devoted to the fine arts; and the museum of natural history, &c. The staple manufactures of the town are watches, musical-boxes, and jewellery. Pop. (1870) 61,486; (1901) 105,139.

Geneva, a town of New York, at the north end of Seneca Lake, 26 miles W. of Auburn by rail, with flouring-mills and manufactures of engines, boilers, &c. It is the seat of Hobart College (Episcopal, founded in 1824). Pop. 10,450.

Geneva, Lake of, or Lake Leman (*Lacus Lemanus*), situated between Switzerland, to which the larger portion belongs, and France. It lies 1218 feet above sea-level, and curves 45 miles westward, in the form of a crescent. Its greatest breadth is 9 miles, its area 223 sq. m., and its maximum depth 1092 feet. The lake abounds in fish. The Pays de Vaud shore is celebrated by Rousseau and Byron, while the names of Voltaire and Madame de Staël are connected with Ferney and Coppet at the Geneva extremity, Gibbon's with Lausanne. The southern French shore rises solemn and stern, with the mountains of Savoy in the background; Mont Blanc, though 60 miles distant, is often reflected in the water. The tidal phenomenon called *seiches* has been studied in the lake. The Rhone enters it at the upper end, turbid and yellow, and leaves it at the town of Geneva as clear as glass, and of a deep blue tint.

Gennesaret, Sea of. See Galilee.

Genoa (Ital. *Genova*, Fr. *Gênes*, anc. *Genua*), a city of Italy, situated on the Mediterranean gulf of the same name, at the foot of the Apennines, is the capital of a province and the most important seaport. By rail it is 801 miles SE. of Paris, 171 NE. of Marseilles, and 93 SSW. of Milan. Pop. (1900) 237,490. The slopes of the hills behind the city down to the shore are covered with buildings, terraced gardens, and orange and pomegranate groves; while the bleak summits of the loftier ranges rising still farther back are capped with strong forts, batteries, and outworks. The fine semicircular harbour, with a diameter of rather less than a mile, is protected seawards from the south and south-east winds by two piers. In front of this inner harbour another one has been made by the construction of two outer moles. In 1889 graving-docks and other works were completed. On the north side of the port is a naval harbour and a marine arsenal; and on the east side the warehouses of the former (until 1867) free port. Genoa is the commercial outlet for a wide extent of country, of which the chief exports are rice, wine, olive-oil, silk goods, coral, paper, macaroni, and marble. The imports are principally raw cotton, wheat, sugar, coal, hides, coffee, raw wool, fish, petroleum, iron, machinery, and cotton and woollen textiles. The annual exports (by sea) of Genoa are valued at nearly £4,000,000, while the imports are returned at more than £15,000,000. About 5800 vessels, of 2,970,000 tons burden, enter annually, and about 5750 of 2,979,000 tons clear. The principal industrial establishments of the city embrace ironworks, cotton and cloth mills, macaroni-works, tanneries, sugar-refineries, and vesta match, filigree, and paper factories. Genoa benefited greatly by the opening of the St Gothard Railway. From 70,000 to 200,000 emigrants sail every year from Genoa for South America.

While strikingly grand as viewed from the sea, and so far worthy of being entitled *Genova la Superba*, Genoa is in reality built awkwardly on irregular rising ground, and consists of a labyrinth of narrow and intricate lanes. Of the palaces the most famous are the former palace of the doges, now the meeting-place of the senate; and the Doria, presented in 1529 to the great Genoese citizen Andrea Doria. Foremost amongst the churches stands the cathedral, a grand 12th-century pile in the Italian Gothic style. The marble municipal palace and the palace of the Dogana must also be mentioned. The university (with nearly 1000 students), originally built in 1623, reorganised in 1812, has a library of 116,000 volumes. To Columbus, Genoa's most famous son, there is a fine monument (1862) by Lanzio. A great mediæval republic, the rival of Pisa and

Venice, Genoa in 1768 ceded Corsica to France, and in 1802 was made a French dep., in 1815 a province of Piedmont. See works by Bent (1880) and W. W. Johnson (1892).

Genoa, Gulf of, a large indentation in the northern shore of the Mediterranean, north of Corsica, has between the towns of Oneglia on the west and Spezia on the east a width of nearly 90 miles, with a depth of about 30 miles.

Gensan, or Wŏnsan, a town and port of Corea, at the head of an arm of Broughton Bay, near the middle of the east coast of the peninsula. Pop. 20,000, including 3000 Japanese.

Gentilly (*Zhang-tē-yē*), a southern suburb of Paris, at the foot of Bicêtre hill. Pop. 7450.

Genza'no, a town of Italy, on the Via Appia, 16 miles SE. of Rome. Pop. 5800.

George, a division of the western province of Cape Colony, on the south coast, east of Capetown. Area, 2600 sq. m.; pop. 11,000. The town of George stands 6 miles N. of the coast, and has a pop. of over 2000. On the coast is the port of Mossel Bay.

George, Lake, or Horicon, a beautiful lake, 32 miles long, near the eastern border of New York state. It discharges to Lake Champlain, is studded with hundreds of islands, and on its shores has several favourite summer-resorts, especially the village of Caldwell or Lake George. In the battle of Lake George the French and Algonquins were utterly defeated by the English and Iroquois, 8th September 1755.

Georgetown, a port of entry in the District of Columbia, on the Potomac, 2 miles above Washington, at the head of navigation. Here the Chesapeake and Ohio Canal crosses the Potomac by a great viaduct 1446 feet long. Containing many educational institutions, one of them a Roman Catholic college (1789), it is now included within the limits of Washington, and is regularly styled West Washington.

Georgetown (formerly the Dutch *Stabroek*), capital of British Guiana, on the right bank of the Demerara River, near its mouth. It consists of wide, clean streets, intersecting at right angles; the brightly painted wooden houses, with their verandas, are generally raised on piles a few feet above the unhealthy soil, and embosomed in trees, of which the cabbage-palm and cocoa-nut are the chief. Some of the streets are traversed by canals, with bridges at the cross streets. The principal public edifices are the government building, the cathedral, the Queen's College, and a museum and library. There are botanical gardens, two markets, a short railway to Mahaica, a good harbour, a lighthouse, and fortifications; the foreign trade is virtually that of the colony. Population, 54,000, of whom only about 5500 are whites.

Georgetown. See Penang.

Georgia, the most southerly of the original thirteen states of the American Union, is bounded by Tennessee, North and South Carolina, the Atlantic Ocean, Florida, and Alabama. It has an area of 59,475 sq. m.—a little more than the area of England and Wales; and its low-lying and sandy coast is bordered with islands. The state falls into five physical divisions: (1) The Sea Islands, famous for their cotton, and covered with a growth of oak, palmetto, magnolia, cedar, pine, and myrtle; (2) the Swamp Region, consisting of rich alluvial lands and deltas, verdant with a dense and semi-tropical vegetation, and admirably fitted for rice-culture; (3) the Pine Barrens, with a thin soil, sheltered by vast forests of pitch-pine; (4) Middle Georgia, fertile, salubrious, hilly, crowned with forests of oak and hickory, the home of the short-staple cotton-plant, a fine fruit region, and yielding Indian corn, oats, wheat, and other cereals; and (5) Cherokee Georgia, abounding in mountains, with fertile valleys, streams, and waterfalls. Rivers emptying into the Atlantic Ocean are the Savannah, the Great Ogeechee, and the Altamaha, with the Oconee and the Ocmulgee. Belonging to the Gulf system are the Chattahoochee, the Flint, and the Alapaha.

With the exception of the swamp-region in the south and south-east of the state, the climate is salubrious and agreeable. The mean temperature is 78° in summer and 47° in winter; the annual rainfall nearly 50 inches. In the lowlands oranges and other semi-tropical fruits readily mature, whilst in the uplands peaches, apples, pears, &c. flourish; and fruits and market vegetables are exported to the North. Game is still plentiful. Sea-fowl throng the coast and estuaries, alligators are numerous in the rivers, and food-fishes, oysters, clams, turtle, &c. are abundant. Food-fishes have largely disappeared from the streams, and the pearl-bearing unio is now seldom seen. The mineral wealth includes gold, coal, iron, copper, silver, and lead ores, marble, granite, slate, gypsum, limestone, &c., and occasional diamonds and other precious stones. Prior to the civil war, the inhabitants were almost exclusively engaged in agriculture and commerce; but more recent industries are the lumber, iron, and steel trades, and extensive cotton, woollen, and other manufactures. The chief agricultural products of Georgia are cotton (about 1,300,000 bales yearly), rice, Indian corn, wheat, oats, sweet potatoes, sugar, and tobacco. From the ports of Savannah, Darien, Brunswick, and St Mary shipments of lumber and naval stores are annually increasing. Atlanta is the capital, and Savannah the commercial metropolis; Augusta, Macon, Columbus, and Athens are other cities. Pop. (1790) 82,548; (1860) 1,057,286; (1880) 1,542,180; (1900) 2,216,000, slightly more than one-half whites. The colony of Georgia, named from George II., was founded by James Oglethorpe in 1733, as a refuge for poor debtors and religious refugees. It has long been regarded as the Empire State of the South.

Georgia, the name formerly applied to the central portion of what is now Russian Transcaucasia (q.v.), bounded by the Caucasian mountains on the north, and on the south by the Armenian mountains. The Russian name is Gruzia; the Persian Gurjestan, from which form the name Georgia probably arose, it being perhaps a corruption of Guria, the name of one of the western provinces. An independent kingdom from the time of Alexander the Great, and earlier, Georgia was united with Russia between 1799 and 1829. It now is mainly included in the governments of Kutais, Tiflis, and Elizabethpol. The Georgians, who speak agglutinative languages, form the southern group of Caucasian peoples. Their numbers are variously estimated at something over or under a million. See Wardrop, *The Kingdom of Georgia* (1888).

Georgia, Gulf of, an arm of the Pacific, 30 miles broad and nearly 250 long, between Vancouver's Island and British Columbia, communicating with the ocean by Queen Charlotte's Sound and the Strait of Juan de Fuca.

Georgian Bay. See Huron (Lake).

Georgswalde, a town of Bohemia, 112 miles N. of Prague, with a mineral spring. Pop. 9604.

Gera (*Gā-ra*), the capital of the small German principality of Reuss-Schleiz, on the White Elster, 42 miles E. by S. of Weimar by rail. Nearly destroyed by fire in 1780, it has broad and regular streets; its older buildings include a castle and a fine town-hall. There are woollen factories, cotton-works, dyeing and printing works, manufactures of machinery, leather, tobacco, beer, &c. Pop. (1843) 11,300; (1880) 27,118; (1900) 45,650, nearly all Protestants.

Gerace (*Jā-rā-chā*), a town of southern Italy, 4 miles from the sea, and 37 (58 by rail) NE. of Reggio. It has a cathedral, rebuilt after the earthquake of 1783, and a trade in wine. Pop. 5265.

Gérardmer ('Queen of the Vosges'), a holiday resort much frequented by Parisians, and famous for its cheeses, in the French dep. of Vosges, 32 miles SE. of Épinal by rail. Pop. 9197.

Ger'asa, a ruined city of Palestine, among the mountains of Gilead, 20 miles E. of the Jordan.

Gerizim and Ebal, the two highest mountains in the central Palestine chain, are separated from each other by a deep narrow valley, in which stands the town of Nâbulus, the ancient Shechem, the metropolis of the Samaritan sect. The tops are about 3000 feet above sea-level, with a fertile valley between 1500 feet deep.

German Ocean. See NORTH SEA.

Germantown, a former borough of Pennsylvania, included since 1854 in the limits of Philadelphia. Here an attack by Washington on the British camp, 4th October 1777, was repulsed.

Germany (from Lat. *Germania*) is the English name of the country which the natives call Deutschland, and the French L'Allemagne. The word is sometimes used to denote the whole area of the European continent within which the Germanic race and language are dominant. In this broad sense it includes, besides Germany proper, parts of Austria, Switzerland, and perhaps even of the Netherlands; but in the present article the name is to be understood as denoting the existing Germanic empire, of which Prussia is the head. Germany occupies the central portions of Europe, and is bounded on the N. by the North Sea, the Danish peninsula, the Baltic, Russia, Austria, Switzerland, France, Belgium, and the Netherlands. Its area is 211,168 sq. m., or about $\frac{1}{13}$th of that of all Europe—slightly larger than France, but not twice as large as Great Britain and Ireland. Germany is composed of a federation of twenty-five states, with one imperial territory (*Reichsland*), which vary enormously in area and influence. Thus, while Prussia alone exceeds the British Islands in area, Bavaria is almost as large as Scotland, Würtemberg is larger than Wales, and Baden and Saxony are neither of them equal to Yorkshire. Waldeck is about equal to Bedford, and Reuss-Greiz is smaller than Rutland, the smallest English county. The Duke of Sutherland's estates (1838 sq. m.) are larger in area than all Mecklenburg-Strelitz, or than all Brunswick, respectively tenth and ninth in size of the German states. The Duke of Buccleuch's Scottish estates alone (676 sq. m.) exceed in area Saxe-Altenburg or any of the eleven smaller states. In 1901 Berlin, the capital of the empire, had 1,888,848 inhabitants; next come Hamburg, 705,738; Munich, Dresden, Leipzig, and Breslau, with over 400,000; Cologne, 372,529. There are 26 other towns with between 100,000 and 200,000; and 175 towns between 20,000 and 100,000. The population of the German empire at the census of 1871 was 41,058,792; in 1880, 45,234,061; in 1885, 46,855,704; in 1901, 56,367,178.

States.	Area in sq. m.	Pop. in 1901.
KINGDOMS—		
1. Prussia	136,073	34,472,509
2. Bavaria	29,632	6,176,057
3. Saxony	5,856	4,202,216
4. Wurtemberg	7,619	2,169,480
GRAND-DUCHIES—		
5. Baden	5,891	1,867,944
6. Hesse	3,000	1,119,893
7. Mecklenburg-Schwerin	5,197	607,770
8. Saxe-Weimar	1,404	362,873
9. Mecklenburg-Strelitz	1,144	102,602
10. Oldenburg	2,508	399,180
DUCHIES—		
11. Brunswick	1,441	464,333
12. Saxe-Meiningen	964	250,731
13. Saxe-Altenburg	517	194,914
14. Saxe-Coburg-Gotha	765	229,550
15. Anhalt	917	316,085
PRINCIPALITIES—		
16. Schwarzburg-Sondershausen	337	80,898
17. Schwarzburg-Rudolstadt	367	93,059
18. Waldeck	438	57,918
19. Reuss-Greiz	123	68,396
20. Reuss-Schleiz	323	139,210
21. Schaumburg-Lippe	133	43,132
22. Lippe-Detmold	475	138,952
FREE-TOWNS—		
23. Lubeck	116	96,775
24. Bremen	100	224,882
25. Hamburg	160	768,349
REICHSLAND—		
26. Alsace-Lorraine	5,668	1,719,470
	211,168	56,367,178

Germany presents two very distinct physical formations. (1) A range of high tableland, occupying the centre and southern parts of the country, interspersed with numerous ranges and groups of mountains, the most important of which are the Harz and Teutoburgerwald, in the north; the Taunus, Thüringerwald, Erzgebirge, and Riesengebirge, in the middle; and the Black Forest (Schwarzwald), Rauhe Alb, and Bavarian Alps in the south (with the Zugspitz, the highest point in Germany, 9665 feet high); and containing an area of 110,000 sq. m. (2) A vast sandy plain, which extends from the centre of the empire north to the German Ocean, and from the Netherlands into Russia, contains an area of about 98,000 sq. m., and is varied by slight terrace-like elevations marked by summits of 500 to 800 feet high. A large portion of the plain is occupied by sandy tracts interspersed with deposits of peat; but other parts are moderately fertile, and admit of successful cultivation.

The surface of Germany may be regarded as belonging to three drainage basins. The Danube (q.v.) from its source in the Black Forest to the borders of Austria belongs to Germany; and through its channel the waters of the greater part of Bavaria are poured into the Black Sea. By far the greater part of the surface has a northern slope, and belongs partly to the basin of the North Sea, partly to that of the Baltic. The chief German streams flowing into the North Sea are the Rhine (q.v.), with its tributaries the Neckar, Main, Lahn, Sieg, Wupper, Ruhr, and Lippe on the right, and the Ill and Moselle on the left; the Weser and the Elbe. Into the Baltic flow the Oder, Vistula, Memel, and Pregel. The natural and artificial waterways of Germany are extensive, especially in the northern plain, and connect the rivers flowing into the Baltic and the North Sea with those flowing into the English Channel and the Black Sea. The North Sea and Baltic Ship Canal, from Bruns-

büttel at the mouth of the Elbe to Kiel (1887–95), is intended chiefly for war-ships. Numerous lakes occur, but few of them are of any great size. The so-called 'Haffs' of the north coasts are landlocked salt-water lagoons or coast-lakes. Mineral springs occur principally in Nassau, Würtemberg, Baden, Bavaria, and Rhenish Prussia. The climate of Germany presents less diversity than a first glance at the map might lead one to infer, for the greater heats of the more southern latitudes are considerably modified by the hilly character of the country in those parallels, while the cold of the northern plains is mitigated by their vicinity to the ocean.

The mineral products of Germany are very rich and varied, and their exploitation forms a most important industry. The chief mining and smelting districts are in Silesia, on the Lower Rhine, in the Upper Harz, and in Saxony. Silver is found in the Upper Harz and Saxony. Iron occurs in numerous mountain-ranges, especially in Upper Silesia and in Rhenish Westphalia. Alsace and Lorraine contain a great part of perhaps the largest iron-deposit in Europe, which stretches into France and Luxemburg. The iron of the Thüringerwald is fine, though not abundant. The chief coalfields are in Silesia, Westphalia (on the Ruhr), and Saxony—the first containing the largest coalfield in Europe. Prussia yields nearly one-half of the zinc annually produced in the world. Lead is found in the Harz, in other parts of Prussia, and in Saxony. A little copper is mined at Mansfeld. Tin and tungsten are yielded by the Erzgebirge; manganese at Wiesbaden; quicksilver in Westphalia; antimony in Thuringia. Salt is produced at Halle, Stassfürt, and other parts of Prussia. Germany is rich in clays of all kinds, from the finest to the coarsest: the porcelain of Meissen, the pottery of Thuringia, and the glass of Silesia and Bavaria are celebrated. Building-stone is well distributed; marble, alabaster, slates, and lithographic stones also occur; and cobalt, arsenic, sulphur, saltpetre, alum, gypsum, bismuth, pumice-stone, Tripoli slate, kaolin, emery, ochre, and vitriol are all among the exports of Germany. The average value of the total production of the chief minerals is over £65,000,000 a year. All the ordinary cereals are extensively cultivated in the north, and potatoes are exported. Hemp and flax, madder, woad, and saffron grow well in the central districts, and the vine is cultivated in suitable localities as far north as 51°. Tobacco and chicory are largely grown. Magdeburg is the centre of a large beet-root growing industry. About 50 per cent. of the total area is arable ground; 15 per cent. is occupied by heath, meadow, and pasture; and 26 per cent. is forest, 9 per cent. being unproductive. The most extensive forests are found in central Germany, while the deficiency of wood in the north-west parts of the great plain is in some degree met by the abundance of turf.

The forests of northern and central Germany abound in small game; some still shelter wild boars. The Bavarian Alps shelter the chamois, the red deer and wild goat, the fox and marten. Wolves are still found in Bavaria, eastern Prussia, and Lorraine. In the plains of the north storks, wild geese, and ducks are abundant. Both fresh and salt water fisheries are diligently taken advantage of. Forestry receives almost as much attention in Germany as agriculture. The oldest and most important of the German industrial arts are the manufactures of linen and woollen goods. The chief localities for linen production are the mountain-valleys of Silesia, Lusatia, Westphalia, and Saxony (for thread-laces); while cotton fabrics are principally made in Rhenish Prussia and Saxony. The same districts, together with Pomerania, Bavaria, Alsace, Würtemberg, and Baden, manufacture the choicest woollen fabrics, including damasks and carpets. The silk industry has its central point in Rhenish Prussia, specially about Düsseldorf. Germany rivals France in the production of satins. Jute-spinning is carried on in Brunswick, at Meissen, and at Bonn; thread is manufactured in Saxony, Silesia, and the Rhine provinces; and hosiery is most largely produced in Saxony and Thuringia. The making of toys and wooden clocks, and wood-carving, which may be regarded as almost a speciality of German industry, flourish in the hilly districts of Saxony, Bavaria, and the Black Forest. Paper is made chiefly in the districts of Aix-la-Chapelle, Arnsberg, and Liegnitz, and in Saxony. Tanning is prominent in the south-west. The best iron and steel manufactures belong to Silesia, Hanover, and Saxony. Silesia probably possesses the finest glass-manufactories, but those of Bavaria are also important; while Saxony and Prussia stand pre-eminent for the excellence of their china and earthenware. Augsburg and Nuremberg dispute with Munich and Berlin the title to pre-eminence in silver, gold, and jewellery work, and in the manufacture of scientific and musical instruments; while Leipzig and Munich claim the first rank for typefounding, printing, and lithography. The trading cities of northern Germany nearly monopolise the preparation of beet-root sugar, tobacco, snuff, &c., and the distillation of spirits from the potato and other roots; while vinegar and oils are prepared in central and southern Germany. Prussia and Bavaria produce most beer.

In 1898–1903 the total annual value of German imports fluctuated from £271,983,800 (in 1898) to £316,057,300 (in 1903). The exports for the same years varied from £200,528,250 (in 1898) to £256,518,550 (in 1903). Great Britain, Russia, Austria, Belgium, the Netherlands, and France contributed more of the German imports than any other countries; Great Britain, Austria, the Netherlands, and France took more of the exports. In 1893–1903 German exports to Britain varied from £26,364,849 to £34,533,390 a year, according to British Board of Trade returns; but, as much German produce comes through Holland and Belgium, from 10 millions to 14 millions have to be added to the figures given. The German mercantile fleet is the fourth in the world, being excelled only by those of Great Britain, the United States, and Norway. In her commercial policy Germany has of late years committed herself more and more to protection. The silver mark, superseding guldens and thalers, is almost exactly equal to a shilling in value, and gold is now the monetary standard. Since 1872 the metrical system of weights and measures has been in use. The length of railways in the empire in 1904 was 34,314 miles, of which total all but 3111 belonged to the state. The postal and telegraphic systems of all the German states, except Bavaria and Würtemberg, are now under a central imperial administration.

The German-speaking inhabitants of the empire number upwards of 51,500,000; but a considerable proportion of these are not of the Germanic stock. Among the peoples retaining their own language (about 4¼ millions) are Poles (exclusively in eastern and north-eastern Prussia), 3,329,000; Wends (in Silesia, Brandenburg, and Saxony),

93,000; Czechs (in Silesia), 107,000; Lithuanians (in eastern Prussia), 103,000; Danes (in Sleswick), 141,000; French (in Rhenish Prussia, Alsace, and Lorraine) and Walloons (about Aix-la-Chapelle in Rhenish Prussia), 224,000. The Germans are divided into High and Low Germans; the language of the former is the cultivated language of all the German states; that of the latter, known as *Platt-Deutsch*, is spoken in the north and north-west. It is computed that there are about 25,000,000 persons of German race and language beyond the boundary of the empire, of whom 9 millions are in Austria, 2½ in the United States, 2¼ in Switzerland, 400,000 in Poland (besides 800,000 German Jews). There are also many in the Volga country, in middle and south Russia, Roumania, and Turkey. The average density of the population of Germany is 269·9 per sq. m. The most densely populated country of the empire is Saxony, with 743·4 per sq. m.; the most sparsely populated is Mecklenburg-Strelitz, with 90·7 per sq. m. The concentration of the population in large towns has not gone so far in Germany as in some other countries. After 1830 emigration from Germany steadily swelled; the highest total (220,798) was reached in 1881. Between 1830 and 1892, 4,750,000 emigrants left the country, five-sevenths of whom were bound for the United States of North America. In the succeeding ten years to 1903 the total number of emigrants was 347,618, of whom 303,201 went to the United States. There are about 50,000 persons of German birth in England and Wales. To balance this efflux of native blood there were, in 1900, 778,698 foreigners in the German empire, of whom 371,023 were Austrians, and 16,173 British subjects. In the last decade of the 19th century there were large extensions of German territory abroad. In 1884–99 the following regions became German possessions or came under German protection: In Africa, Togoland, Cameroon, German South-west Africa, and German East Africa; total area, 931,460 sq. m.; total pop. 13,047,000. In Asia, Kiao-chau Bay; area, 200 sq. m.; pop. 32,000. In the Pacific, German New Guinea (Kaiser Wilhelm Land, Bismarck Archipelago, Caroline Islands, Pelew Islands, Marianne Islands, Solomon Islands), Marshall Islands, &c., Samoan Islands; total area, 96,160 sq. m.; total pop. 443,000.

Education is more systematically cultivated in Germany than in any other country of Europe. Besides the Lyceum at Braunsberg, there are 21 universities: Heidelberg, Würzburg, Leipzig, Rostock, Greifswald, Freiburg, Munich, Tübingen, Marburg, Königsberg, Jena, Giessen, Kiel, Göttingen, Erlangen, Berlin, Breslau, Halle, Bonn, Strasburg, and Münster. Berlin had 356 professors and teachers and 5371 students in 1891–92. Of the universities, 14 are Protestant in the theological faculty, four are Roman Catholic, and three are mixed. There are also 9 polytechnic institutions; nearly 1400 gymnasia, realschulen, &c.; numerous special schools of technology, agriculture, forestry, mining, commerce, military science, &c.; seminaries for teachers and preachers; and about 60,000 elementary schools. Among the military recruits only ·05 per cent. are illiterate. Public libraries, museums, botanical gardens, art-collections, picture-galleries, schools of music and design, and academies of arts and sciences are to be met with in most of the capitals, and in many of the country towns, upwards of 200 of which possess theatres. The chief centres of the book and publishing trade are Leipzig and Stuttgart. Protestantism predominates in the north and middle, and Roman Catholicism in the south, east, and west, although very few states exhibit exclusively either form of faith. The Protestants belong chiefly to the Lutheran confession, except in Hesse, Anhalt, and the Palatinate, where the Reformed or Calvinistic Church predominates. A union between these two churches has taken place in Prussia. The total number of Protestants in 1900 was 35,231,104, of Catholics 20,321,441, of Jews 586,948, the rest being 'other Christians' or 'unclassified.'

In 1871 the Prussian military system was extended to the whole empire; and alterations have since been introduced, especially (in the way of strengthening the army) in 1893. Every German who is capable of bearing arms must be in the standing army for seven years (generally his twenty-first to his twenty-eighth year). Three (in some cases two) of these years must be spent in active service, and the remainder in the army of reserve. He then spends five years in the first class of the *Landwehr*, after which he belongs to the second class till his thirty-ninth year. Besides this, every German, from seventeen to twenty-one, and from thirty-nine to forty-five, is a member of the *Landsturm*, a force only to be called out in the last necessity. Those who pass certain examinations require to serve only one year with the colours. The whole of the land forces of the empire form a united army under the command of the emperor in war and peace. The imperial army, on its peace footing, consisted at the end of 1904 of 24,374 officers, 582,498 rank and file, and 105,885 horses. On its war footing, 3,000,000 trained men would be available. In 1905 the imperial fleet comprised 126 vessels, with a total tonnage of 509,460 tons. Of these 21 were sea-going ironclads, 8 armoured guardships, 12 armoured gunboats, 10 first-class cruisers, 32 smaller cruisers, and over 120 torpedo-boats. This fleet was manned by 37,889 officers and men. The seafaring population of Germany are liable to service in the navy instead of in the army.

The revenue of the German empire is derived (1) from the customs dues on tobacco, salt, and beet-root sugar, which are entirely made over to it by all the states; from those on brandy and malt, which are also assigned by most of the states; from taxes on playing-cards and stamps, from posts, telegraphs, and railways, the imperial bank, and various miscellaneous sources; (2) from extraordinary sources—as votes for public buildings and loans; and (3) from the proportional contributions of the various states. The chief items of expenditure are the maintenance of the Reichstag and various government offices, the army and navy, posts and telegraphs, railways, justice, pensions, and other miscellaneous claims. The revenue and expenditure in the year 1903–4 balanced at a little over £120,000,000. The public debt of the empire in the year 1905 was just about £150,000,000.

The empire, as reconstituted in 1871, possesses the exclusive right of legislation on all military and naval affairs; on civil and criminal law for general application; on imperial finance and commerce; on posts, telegraphs, and railways in so far as the interests of the national defence and general trade are concerned. In all disputes that arise among the individual states, the imperial jurisdiction is supreme and final. There are two legislative bodies in the empire—the *Bundesrath*, or Federal Council, the members of which are annually appointed by the govern-

ments of the various states; and the *Reichstag*, the members of which are elected by universal suffrage and ballot for a period of three years. The former deliberates on proposals to be submitted to the latter, and on the resolutions received from it. The Reichstag contains approximately one member for every 131,600 inhabitants; in 1905 there were 397 members. They are unpaid, but enjoy various privileges and immunities. The Reichstag at present falls into no fewer than sixteen parties or groups (conservatives, national liberals, social democrats, &c.).

When first in the 4th century B.C. the Romans heard of new peoples of common kin whom they called Germani, the German tribes were living between the Elbe and Rhine and to the north of the Main. In 58 B.C. Cæsar drove back the Germans who had crossed the Rhine. Successful Roman incursions were made into Germany under Augustus; but in 6 A.D. the German tribes rose under Arminius (Hermann) and utterly destroyed Varus and his legions. Henceforth the Romans were in the main content to hold a strip of territory from the Lower Rhine to the Upper Danube, and to guard the frontiers of the empire against German raids. From the 3d century on this became impossible, and in the 4th, the Germans continued to force their way into Roman territory. The settlement of the Franks in the north of Gaul founded the French nation and the German empire, or rather the 'Holy Roman Empire,' or Germany. Charlemagne, who received the imperial crown from the pope in 800, extended his dominions north over the heathen Saxons and as far east as Hungary. Under his successors France and Germany fell apart, and in 911 the national diet of the Germans claimed and secured the right of electing their emperor, who could not assume the imperial title till crowned by the pope. At this period there were in Germany five nations—the Franks, Saxons, Bavarians, Swabians, and Lorrainers. A duke of Franconia was emperor 911–918; his rival and successor, Henry, Duke of Saxony, and Henry's son Otho extended the empire over northern Slavs, Magyars, and into Lombardy. Burgundy was added by Conrad II., first of a new Franconian dynasty, in 1030, and his successor temporarily annexed Denmark, Bohemia, and Hungary. Henry IV., of this line, was constantly at feud with Pope Gregory VII.; but it was under Conrad III., first of the Hohenstaufen dynasty, that the wars of Guelphs and Ghibellines, between pope and emperor, so disastrously weakened the empire. His nephew Barbarossa was more concerned about his interests in Italy and the Crusades than about the internal well-being of Germany. From the accession in 1273 of Rudolf, first of the Hapsburgs, till 1806, the Austrian princes were emperors almost without break, and the imperial crown was all but hereditary (see AUSTRIA). The emperor Charles V. was also king of Spain, and lord of the Netherlands and of great part of Italy. The influence of the Reformation and the Thirty Years' War was to weaken the imperial power, and cut up the empire into a crowd of petty factions and almost independent states: at one time there were as many as 300 states in the empire. Alsace and Lorraine were lost to the empire in 1648–97. The Napoleonic wars reconstructed the map of Germany. In 1806 the emperor resigned the German crown and contented himself with being Emperor of Austria; and the Confederation of the Rhine was formed under French influence, to be succeeded in 1815 by the German Confederation, which comprised virtually all Germany, including German Austria, in 35 states, with a diet at Frankfort. The political discontents of 1848 and 1849 led to not a few local insurrectionary movements which were swiftly crushed, and followed by a period of severe reaction and repression. The rivalries of Austria and Prussia for pre-eminence in the Confederation, ended at Königgrätz (1866) with the exclusion of Austria from Germany. The great Franco-German war of 1870–71 led to the re-annexation of Alsace-Lorraine and the constitution of the new German empire, with the kings of Prussia as hereditary emperors. German colonial extension began in 1884. Commerce has vastly developed. The alliance of Germany with Austria and Italy (to balance Russia and France), the strengthening of the army (in spite of the Socialists, who polled 3,000,000 votes in 1903), diplomatic energy at Constantinople and Peking, and the great increase of the fleet are keynotes of recent policy.

See books on Germany by Baring-Gould (1881), Whitman (1889), Dawson (1893), 'Veritas' (1902), Schierbrand (1904); histories by Sime (1874) and E. F. Henderson (1904); Bryce's *Holy Roman Empire* (20th ed. 1905) and Herbert Fisher's *Mediæval Empire* (1898); and *The Franco-German War*, by German officers (trans. 1900).

Germersheim (*Ger'mers-hīm; g* hard), a town of the Bavarian Palatinate, on the Rhine's left bank, 8 miles SSW. of Spires. Pop. 6132.

Gero'na, the capital of a Spanish province, 65 miles by rail NE. of Barcelona, with a fine Gothic cathedral and some manufactures. Pop. 16,000.

Gers (*Zhār*), a dep. of SW. France, separated by Landes from the Bay of Biscay. Area, 2415 sq. m.; pop. (1861) 298,931; (1901) 238,448.

Gersau (*g* hard), a village in the Swiss canton of Schwyz, on the Lake of Lucerne, and near the foot of the Rigi. Pop. 1871.

Gersoppa, a village of South India which gives name to the great falls of the Sharawati River, 960 feet high, 30 miles SE. of Honawar.

Gethse'mane (Heb. *gath*, 'a wine-press,' and *shemen*, 'oil') was a small farm or estate at the foot of Mount Olivet, somewhere on the east slope of the Kedron valley, and rather more than ½ mile from Jerusalem.

Gettysburg (*g* hard), in Pennsylvania, 50 miles by rail SSW. of Harrisburg, with a Lutheran college (1832) and seminary. Pop. 3500. Here in 1863 (July 2–3) Meade defeated Lee.

Gex, once capital of the Pays de Gex in Savoy, now a town of 2500 inhabitants in the French department of Ain, is 12 miles NW. of Geneva, on the slopes of the Jura.

Geyser Springs, a number of boiling springs (not real geysers) in the Devil's Cañon, in California, 90 miles NW. of San Francisco and 2000 feet above the sea.

Ghadames. See GADAMES.

Ghâts, or GHAUTS ('gates, passes, or landing-stairs'), EASTERN and WESTERN, two converging ranges of mountains, which run parallel with the east and west coasts of southern India, and meet at an angle near Cape Comorin. (1) The Eastern Ghâts commence a little north of the Mahanadi, and run through Madras, with an average height of 1500 feet, for the most part at a distance of from 50 to 150 miles from the coast. (2) The Western Ghâts stretch from the valley of the Tapti to their junction with the kindred ridge, and on to Cape Comorin itself. Their elevation

varies from 3000 feet to 8760 in the peak of Dodabetta, in the Nilgiri hills.

Ghaziabad, a town and important railway Junction in the United Provinces of India, 28 miles SW. of Meerut. Pop. 12,000.

Ghazipur, a city in the United Provinces of India, on the left bank of the Ganges, 44 miles NE. of Benares. It has the ruins of the Palace of Forty Pillars, a marble statue by Flaxman to Lord Cornwallis, who died here in 1805, and manufactures of opium. Pop. 35,000.

Ghazni (also *Ghizni* and *Ghuznee*), a fortified town of Afghanistan, stands 7729 feet above sea-level, and 84 miles SW. of Kabul, on the road to Kandahar and at the head of the Gomal route to India. From the 10th to the 12th century it was the capital of the Ghaznevid empire; and was captured by the Mongols, and in 1738 by Nadir Shah of Persia. It was taken by Lord Keane in 1839, and in 1842 by General Nutt. The celebrated gates of Somnath were kept at Ghazni from 1024 to 1842. Pop. 10,000.

Gheel, a famous colony for the insane, in Belgium, 26 miles ESE. of Antwerp by rail.

Ghent (Flem. and Ger. *Gent*, Fr. *Gand*), a city of Belgium, capital of the province of East Flanders, is situated at the confluence of the Lys and the Scheldt, 34 miles by rail NW. of Brussels. It is divided by canals into 26 islands, connected by 270 bridges, and is encompassed with gardens and meadows. It is in general well built; in the older part it retains several quaint and picturesque houses. Among the chief buildings are the splendid cathedral of St Bavon, of the 13th and 14th centuries, containing the 'Adoration of the Lamb,' by the brothers Van Eyck; the belfry (1183–1339), 280 feet high, or 375 with the iron spire of 1855; the new citadel (1822–30); the hôtel-de-ville (1480–1628); the Palais de Justice (1835–43); the university (1816); the Béguinage; and the Academy of Painting. The industries include cotton, woollen, and linen manufactures, besides leather, lace, sugar, iron, beer, &c. Specially noteworthy is the floriculture of Ghent. By the Great Canal, which flows into the Scheldt, Ghent is united with the sea, and it can receive into its docks vessels drawing 17 feet of water. The harbour is capable of holding 400 vessels, new docks having been opened in 1881. Pop. (1846) 102,977; (1902) 162,925. Ghent, which in the 12th century was made the capital of Flanders, and which in 1830 fell to Belgium, was the birthplace of Jacob van Artevelde and of John of Gaunt, i.e. Ghent.

Ghilan', a province of Persia, the western portion of the narrow strip of country lying between the Elburz range and the Caspian Sea.

Ghizeh. See GIZEH.

Ghizni. See GHAZNI.

Ghûr, or GHORE, a mountainous district of western Afghanistan, lying south-east of Herât.

Giants' Causeway (deriving its name from a legend that it was the commencement of a road to be constructed by giants across the channel to Scotland) is a sort of natural pier or mole, of columnar basalt, projecting from the northern coast of Antrim, Ireland, into the North Channel, 7 miles NE. of Portrush by an electric tramway (1883). It is part of an overlying mass of basalt, from 300 to 500 feet thick, which covers almost all Antrim and the eastern part of Londonderry. The first bed appears at the bold promontory of Fair Head; its columns exceed 200 feet in height. The other two are seen together rising above the sea-level at Bengore Head, the lower one forming the Giants' Causeway. It is exposed for 300 yards, and exhibits an unequal pavement, formed of the tops of 40,000 vertical closely-fitting columns, which in shape are chiefly hexagonal, though examples may be found with 5, 7, 8, or 9 sides. Their diameter varies from 15 to 20 inches.

Giarre (*Jar're*), a town of Sicily, on the eastern slope of Mount Etna. Pop. (1901) 26,000.

Giaveno (*Ja-vay'no*), a town of Piedmont, 17 miles W. of Turin. Pop. 10,800.

Gibeah (*g* hard; Heb. 'hill'), 4 miles N. of Jerusalem, near Ramah, was the residence, if not the birthplace, of King Saul.

Gibeon, a city of ancient Palestine, on a hill 5 miles NW. of Jerusalem.

Gibraltar (Span. *Gibraltar'*), an isolated mass of rock, in the SW. of Spain, rising to an altitude of 1408 feet, 3 miles in length, and ¾ mile in average breadth, is situated at the extremity of a low sandy peninsula, which connects it on the north with Andalusia. By the completion of the railway route in 1892, Gibraltar is within four days of England. Its western side is washed by the Bay of Gibraltar, called also the Bay of Algeciras; and at the foot of the rock, on this same side, is the town of Gibraltar, which consists of two parts, the South Town, above the dockyard, and the North Town, which has narrow streets and many mean houses, and is inhabited by a motley agglomeration of English, Spaniards, Jews, and Moors. Pop. (1901), civil, 20,355; military, 6475; total, 26,830. One may notice the numerous barracks; the governor's official residence, an old Franciscan convent; the naval hospital; the Alameda Gardens; the signal-station, crowning the central eminence of the rock, 1255 feet high; the remains of the Moorish castle (10th c.); and the lighthouse (1841), on Point Europa, whose light, 150 feet above the sea, is seen for 20 miles. At the northern base of the rock is the open space called the North Front, extending as far as the British lines; here are the cemetery, the cricket-ground, the race-course, &c. Between the British and the Spanish lines is the neutral ground, which is uninhabited. The harbour and dock improvements in progress in 1900–10 (mainly for naval purposes) were estimated to cost some £6,500,000. There is good anchorage in the Bay of Gibraltar, 8 miles deep by 5 wide. Gibraltar has been a free port since its capture by the British, was for a time one of the chief commercial emporiums of the Mediterranean, and is an important coaling-station. Since 1842 it has been the see of an Anglican bishop. Almost the entire rock bristles with artillery; and the approaches from the north and from the sea are guarded by many powerful batteries. Towards the north and north-west the defences are aided by a series of fortified galleries, 2 to 3 miles in length. The eastern side is so precipitous as to be altogether secure from assault. In these days, however, of steamships and heavy long-range guns, the military importance of Gibraltar has certainly diminished. The rocky mass is perforated by numerous caverns, some of which penetrate for several hundred feet into the rock. The largest, called the 'Hall of St Michael,' is 220 feet long, 90 wide, and 70 high, and its floor is connected with the roof by stalactite pillars ranging up to 50 feet in height; the entrance lies 1100 feet above the sea. Gibraltar is the only place in Europe where monkeys (some 20 Barbary apes) live wild.

Gibraltar was known to the early Phœnician

navigators. The Greeks called it *Calpe*, and it and Abyla opposite (now Ceuta) formed the Pillars of Hercules, long held to be the western boundary of the world. In 711 A.D. the Saracen leader Tarik fortified it, as a base of operations against the Visigothic kingdom; and from him it took the name of Gebel el-Tarik, or Hill of Tarik, of which Gibraltar is a corruption. In 1302 Ferdinand II. of Castile won it from the Moors; but in 1333 it fell into the hands of the king of Fez. In 1410 Yussuf, king of Granada, possessed himself of the fortress, which, however, was finally wrested from the Moors by the Spaniards in 1462. A combined Dutch and English force compelled the governor to capitulate in 1704; and since then Gibraltar has remained continuously in the possession of the British, in spite of many desperate efforts on the part of Spain and France to dislodge them, the greatest in 1779–82, when it was defended with heroic valour by General Eliott (Lord Heathfield) and 5000 men, including 1100 Hanoverians.

See works by Drinkwater (1785), Gilbard (1881), and H. M. Field (New York, 1889).

Gibraltar, Strait of (anc. *Strait of Hercules*), connects the Mediterranean with the Atlantic. It is 36 miles long, and narrow eastward; its width between Point Europa and Cape Ceuta being only 15 miles, at the western extremity 24, and at the narrowest 9.

Gidding, Little, a parish of Hants, 11 miles NW. of Huntingdon. Here in 1625 Nicholas Ferrar founded the religious community so well known through *John Inglesant*.

Gien, a town in the French dep. of Loiret, on the Loire, 38 miles SE. of Orleans. Pop. 7767.

Giessen (*Gēs'sen; g* hard), a town of Hesse-Darmstadt, on the Lahn, 40 miles N. of Frankfort-on-the-Main. It has a university (founded in 1607), with over 60 professors and 500 students, and manufactures tobacco, iron, beer, &c. Pop. 25,500.

Gifford (*g* hard), a Haddingtonshire village, on Gifford Water (a feeder of the Tyne), 4¼ miles SSE. of Haddington. Pop. 305.

Giffordgate, a suburb of Haddington, the birthplace of Knox.

Giggleswick, a village in the West Riding of Yorkshire, 1 mile WNW. of Settle. It has a well-endowed grammar-school (1553). Pop. 980.

Gigha (*Gē'ha; g* hard), an Argyllshire island, 1¾ mile W. of Kintyre. It measures 6 by 2 miles, and attains 260 feet. Pop. 378.

Gijon, a seaport of Spain, on a peninsula and bay of the Atlantic, 20 miles by rail NE. of Oviedo. It manufactures tobacco, glass, and earthenware. Pop. 47,144.

Gila (*Hē'la*), a river rising in the state of New Mexico, and flowing nearly 650 miles westward, across Arizona, to the Colorado, 75 miles above its mouth in the Gulf of California.

Gilbert Islands, a British archipelago in the Pacific, lying on the equator between 172° and 177° E. long. Area, 166 sq. m.; pop. 36,800. The group consists of sixteen atolls, several of them triangular in shape, with two outlying hilly islands. Cocoa-nuts and copra are the chief products. Marshall and Gilbert discovered it in 1788.

Gilboa, a bare chain of hills between 500 and 600 feet high, overhanging the site of the ancient city of Jezreel, between the Jordan and the plain of Esdraelon. Here King Saul met his doom.

Gilead, a mountainous district on the east side of the Jordan, described by Laurence Oliphant as a country of wine and oil, with rich alluvial deposits. See his *Land of Gilead* (1880).

Gilford, a town of County Down, on the Bann, 4 miles NW. of Banbridge. Pop. 1276.

Gilghit. See Cashmere, Dardistan.

Gillingham (*g* hard), a Dorset market-town, on the Stour, 22 miles by rail W. of Salisbury. Near it are the 'Pen Pits,' thought to be either quarry-holes or prehistoric dwellings. Pop. of parish, 3303.

Gillis Land, a Polar land NE. of Spitzbergen, first sighted in 1707 by Gillis, a Dutchman, in 81° 30′ N. lat. and 36° E. long.

Gilmerton, a Midlothian village, 4 miles SSE. of Edinburgh. Pop. 1300.

Gilnockie (*g* hard), Dumfriesshire, on the Esk, 4½ miles SSE. of Langholm, was the site of the peel-tower of Johnny Armstrong, hanged by James V. at Caerlanrig in 1529.

Gilolo, one of the Moluccas (q.v.) or Spice Islands.

Gilp, Loch, an arm of Loch Fyne, 3 miles long.

Gilsland (*g* hard), a Cumberland village, with a sulphur-spring, 8 miles NE. of Brampton. Here Scott met his future wife. Pop. 365.

Gioja del Colle, a town of Italy, 33 miles by rail S. of Bari. Pop. 16,573.

Giovinazzo, an Italian cathedral town on the Adriatic, 14 miles WNW. of Bari. Pop. 11,250.

Gipping (*g* hard), a Suffolk river, flowing 15 miles south-south-eastward from Stowmarket to Ipswich (q.v.), where it becomes tidal, and takes the name Orwell.

Gippsland, the southern one of the four important districts of Victoria, Australia. It was originally called Caledonia Australis by Macmillan, its first explorer (1839), and then Gippsland after the governor, Sir George Gipps.

Girgeh, a town of Egypt, on the Nile's left bank, in 26° 20′ N. lat. and 31° 58′ E. long., 10½ miles N. of the ancient Abydos. Outside it is a Roman Catholic monastery, said to be the oldest in Egypt. Pop. 17,819.

Girgenti (*Jēr-jen'tē;* anc. *Agrigentum*), a coast-town of Sicily, 84 miles by rail SSE. of Palermo, with magnificent Greek ruins. Pop. 25,100.

Girnar, a sacred mountain (3500 feet) of India, in Kathiawar, Bombay. As a holy place of Jainism, it is covered with ruined temples.

Gironde (*Zhē-rongd'*), a maritime dep. of south-west France, is formed out of part of the old province of Guienne. Area, 3760 sq. m.; pop. (1872) 705,149; (1901) 821,131. It is watered mainly by the Garonne and the Dordogne, and by the Gironde, the estuary formed by the union of these two rivers. It includes the six arrondissements of Bazas, Blaye, Bordeaux (the capital), Lesparre, Libourne, and Réole.

Girton (*g* hard), a parish 3½ miles NNE. of Cambridge. Girton College for women was removed hither from Hitchin in 1873.

Girvan (*g* hard), an Ayrshire seaport and watering-place, at the mouth of the river Girvan, 21 miles SSW. of Ayr by rail. The harbour is small, but has been improved since 1881. Pop. 4024.

Gisborne, a post-town of New Zealand, in the North Island, on the Turanganui (fine bridge, 1885), 250 miles SE. of Auckland. It is the port of entry for Poverty Bay, a name given by

Captain Cook in 1769, and sometimes still retained for the town; only small vessels can come up to the wharves, but in 1889 a harbour was undertaken, to cost £200,000. In 1886 petroleum was struck in the neighbourhood. Pop. 4000.

Gisors (*Zhē-zor'*), a town in the French dep. of Eure, on the Epte, 43 miles NW. of Paris by rail. The octagonal donjon of the ruined castle was built by Henry I. of England. Here Richard I. defeated the French in 1198; his watchword, *Dieu et mon Droit*, has ever since been the motto of the royal arms of England. Pop. 4745.

Gitschin (Czech *Jičin*), a town of Bohemia, 60 miles by rail NE. of Prague. It was once the capital of the duchy of Friedland, where Wallenstein built a splendid palace (1630). On 29th June 1866 the Austrians were severely defeated here by the Prussians. Pop. 9871.

Giugliano, a town of Italy, 8 miles NW. of Naples. Pop. 14,748.

Giurgevo (*Joor-je-vo;* Roumanian *Giurgiu*), a town of Roumania, on the Danube's left bank, opposite Rustchuk, 40 miles by rail SSW. of Bucharest, of which it is the port. It was originally settled by the Genoese in the 14th century, who called it St George. Pop. 20,866.

Givet (*Zhē-veh*), a frontier town and first-class fortress in the French dep. of Ardennes, on the Meuse, 31 miles by rail S. of Namur in Belgium. The citadel of Charlemont, on a rock 700 feet above the stream, was reconstructed by Vauban. Pop. 5100.

Givors (*Zhē-vor*), a smoky town in the French dep. of Rhone, on the Rhone, 14 miles S. of Lyons by rail. Glass bottles and silk and iron goods are extensively manufactured. Pop. 12,100.

Gizeh, or GHIZEH, a town in Egypt, on the opposite side of the river from Old Cairo, and approached from Cairo, since 1905, by more than one bridge over the Nile. The Boulak Museum was transferred hither in 1889. The Pyramids (q.v.) of Gizeh are 5 miles away to the W. Pop. 12,500.

Gladbach, or BERGISCH-GLADBACH, an industrial town of Rhenish Prussia, 8 miles NE. of Cologne. Pop. 11,500.

Gladbach, or MÖNCHEN-GLADBACH, a rapidly growing manufacturing town of Rhenish Prussia, 16 miles W. of Düsseldorf. The centre of the Rhenish cotton-spinning industry, it also has manufactures of silk, wool, linen, and paper, cotton-printing works, dyeworks, bleachfields, iron-foundries, machine-shops, breweries, and brickworks. Gladbach, which has been a town since 1366, was formerly the seat of an important linen trade; the cotton industry was introduced in the end of the 18th century. The town formerly contained a famous Benedictine abbey, founded in 792. Pop. (1858) 13,965; (1871) 26,354; (1900) 58,014, mostly Roman Catholics.

Gladsmuir, a Haddingtonshire parish, 3½ miles E. of Tranent. With the Jacobites it gave name to the battle of Prestonpans.

Glamis Castle (*Glâmz*), the seat of the Earl of Strathmore, in Forfarshire, 5 miles WSW. of Forfar. It is a splendid château-like pile of (mainly) the 17th century.

Glamorganshire (Welsh *Gwlad Morgan*), the most southerly county of Wales, bounded S. and SW. by the Bristol Channel. Area, 855 sq. m.; pop. (1801) 70,879; (1841) 171,188; (1881) 511,433; (1901) 860,022. This unexampled increase is due to the development of the mineral industries. In the west of the county the coast is indented by Swansea Bay, from which it projects westward into the peninsula of Gower. The northern district is covered with rugged hills, the highest of which, however, Llangeinor, is only 1859 feet in height. Here is one of the richest coalfields in the kingdom. The southern portion of the county consists of a series of fertile valleys, richly wooded and with a mild climate, the finest being the Vale of Glamorgan, the 'garden of Wales.' The chief rivers—the Rhymney, Taff, Neath, Tawe, and Llwchwr—flow southward into the Bristol Channel. Besides coal, anthracite or stone-coal, coking-coal, ironstone, and limestone are found. At Merthyr-Tydvil and Dowlais are large ironworks; at Swansea, Neath, Aberavon, large copper-smelting works. Tin and lead are also smelted in the county. The county sends five members to parliament; the represented boroughs are Merthyr-Tydvil (with two), Swansea (two), and the Cardiff boroughs (one). Oystermouth Castle, Caerphilly Castle, and Castle Coch are fine ruins; Cardiff Castle is a stately restored edifice. See Thomas Nicholas, *History of Glamorganshire* (1874).

Glarus, a canton of Switzerland, bounded by the cantons of St Gall, the Grisons, Uri, and Schwyz. Area, 266½ sq. m.; population, 32,500, mainly Protestant and German-speaking. It is an Alpine region, in the Tödi peak attaining 11,887 feet. The climate is very severe, and only one-fifth of the land is arable. The capital is the town of Glarus (pop. 5330), 43 miles SE. of Zurich by rail. It was founded by an Irish monk, Fridolin, in the end of the 5th century. Zwingli was pastor here, 1506–16.

Glasbury, a Radnorshire village, on the Wye, 4 miles SW. of Hay. Pop. of parish, 488.

Glasgow, the industrial metropolis of Scotland and the most populous city in Great Britain next to London, is situated on the banks of the Clyde, in the county of Lanark, the portions heretofore in Renfrew and Dumbarton shires having been transferred to Lanark under the act of 1889. At Greenock, 22 miles below, the river spreads out into a great estuary, the Firth of Clyde. Glasgow is 405½ miles by rail from London, and from 44 to 47¼ miles from Edinburgh. In 1801 the population was only 77,385, but the increase has been rapid and enormous. In 1881 the municipal population was 511,415. In 1891, before the extension of boundary, it was 565,839; after the extension in that year, when the area of the city was increased from 6111 acres to 11,861 by the addition of six suburban burghs and other districts, it was 658,198. In 1901 the municipal and police burgh contained a population of 761,709, including parts of the parishes of Cathcart (20,983), Eastwood (3534), Glasgow (547,645), Govan combination (189,470), and Rutherglen (77). The total area of the city, including the conterminous but still independent burghs of Partick, Kinning Park, and Govan, is about 15,660 acres. The parliamentary burgh has a population of 622,372, divided into seven constituencies—viz. Bridgeton Division, Camlachie Division, St Rollox Division, Central Division, College Division, Tradeston Division, and Blackfriars and Hutchesontown Division. In 1893 Glasgow was constituted a county of a city.

As an archiepiscopal seat, and subsequently as a centre of Covenanting activity, Glasgow has a prominence in the religious history of Scotland; but as an industrial city its history can hardly be dated farther back than the Union of 1707. This event opened up to the town

—the most favourably situated in Scotland for the enterprise—an immense trading prospect with America, and roused in its inhabitants the extraordinary mercantile activity which has been its leading feature ever since. And yet the city of Glasgow is a very old one. It was about 560 A.D. that St Kentigern or Mungo, the apostle of the rude Celts of Strathclyde, on the banks of the Molendinar, built his little wooden church on the very spot where now rises the venerable cathedral. In 1116 the diocese was restored; and between 1175 and 1178 Jocelyn, Bishop of Glasgow, received authority from William the Lion to 'have and hold' a burgh in the neighbourhood of the cathedral; but it was not till 1636 that Glasgow received the position of a royal burgh. Of buildings possessing historical interest Glasgow is conspicuously destitute, with the very notable exception of the cathedral, which is a fine example of the Early English Gothic style of architecture. Built between 1197 and 1446, it was saved from injury at the Reformation by the Glasgow craftsmen, and afterwards, from time to time, was carefully repaired by the Protestant archbishops who governed the see until the Revolution. It is 319 feet long, and 63 wide. From the centre rises a tower, surmounted by a graceful spire, 225 feet in height. The richly-ornamented so-called crypt under the choir is really a lower church formed to take advantage of the ground sloping eastward towards the Molendinar. The city chambers, opened in 1889, built at a cost of £530,000, occupy a prominent position, filling the east side of George Square. The Royal Exchange (1829) is a handsome building ornamented with colonnades of Corinthian pillars. The architecture of many of the churches, banks, and other public buildings is varied in style and rich in detail, and the post-office buildings, though severely plain and massive, deserve mention for their great size and perfect planning.

Many extensive improvements have been made by the corporation. A plentiful supply of water from Loch Katrine has been introduced (1854–59 and 1889–96) at a total cost of nearly 3½ million pounds. The municipality controls the lighting (including the electric system) and the electric tramways, as well as the sanitation and sewage disposal. Over £2,000,000 have been spent on improved dwellings for the working-classes. The corporation have a telephone exchange under their own management.

Glasgow has several public pleasure-grounds besides the Glasgow Green—a wide expanse along the north bank of the river. The equestrian statue of Wellington stands opposite the Royal Exchange, and that of William III. at the east end of Argyle Street, near the site of the old cross. There are a number of monumental statues in George Square, including, besides Sir John Moore and Lord Clyde (natives), Scott, Burns, Livingstone, and others.

The university, founded in 1451 by Bishop Turnbull, occupies fine new buildings at Gilmorehill, overlooking the West End Park, designed by Sir G. G. Scott, and opened in 1870, their total cost being upwards of half a million, including the Marquis of Bute's common hall, the students' union, &c. It has five faculties—arts, science, divinity, law, and medicine—a teaching staff of 100, and, if we include the Queen Margaret College for Women, 2000 students. There are over 300 bursaries of from £6 to £80, besides the Snell exhibitions to Balliol College, Oxford, and the Clark scholarships. The Glasgow and West of Scotland Technical College was formed in 1886 by the amalgamation of several institutions (including the arts department of Anderson's College). It has over 2000 students attending its day and evening classes. St Mungo's College, dating from 1889, has faculties in medicine and law; and the medical department of Anderson's College is a separate school. The latter college was founded by John Anderson (1726–96), professor of Natural Philosophy, and has nearly twenty teachers of medicine, science, languages, music, &c. St Margaret's College is for women. The Free Church College possesses conspicuous buildings; and mention should also be made of the Normal Schools, and of the School of Arts and Haldane's Academy. Of the secondary schools in Glasgow the principal is the High School. There is no free lending library, but there are several great collections which may be used free of charge as consulting libraries. Of these the Mitchell Library, which is under corporation management, contains over 125,000 volumes; and the Stirling's and Glasgow Public Library contains about 65,000. Baillie's Library is under the same roof. In the Kelvingrove industrial museum (1871–76) a considerable collection, especially in natural history, is displayed. A valuable collection of pictures and statuary (1854) belonging to the corporation is now housed in a fine building which formed part of the exhibition of 1901 in the Kelvinside Park. In addition to numerous hospitals and dispensaries for special diseases, there are three general infirmaries, which among them accommodate upwards of one thousand patients.

Three vast terminal railway stations bring traffic to the heart of the town; and there are several systems of underground railways, besides electric tramways, extending to outlying suburbs and adjoining towns. Another means of transit is found in the magnificent fleet of river-steamers. The river Clyde (q.v.) has been a chief source of the great prosperity of Glasgow. Its utility has been almost created by the gigantic works of narrowing the channel and dredging, so as to permit of the passage of the largest vessels. The quayage of the harbour and docks from the Broomielaw extends to over 8 miles, and the water space covers over 200 acres, while since 1875 three graving-docks have been provided capable of accommodating the largest mercantile steamers afloat. On the river and harbour the Clyde Navigation Trust has spent about twenty millions sterling. An average of about 11,500 vessels of 4,500,000 tons clear the port annually. The principal feature of the Clyde beyond the harbour is the great shipbuilding and marine engineering yards which line its sides, and which have flourished since the second quarter of the 19th century. The pioneers of these industries—the Napiers, Charles Randolph, John Elder, &c.—have a world-wide fame. They launched from their yards the most perfect examples of naval architecture and engineering skill of their day, and their present successors amply uphold that reputation. The greatest tonnage launched in any year on the Clyde was 419,600 in 1883; in 1903 there were (exclusive of war-vessels) 176 steamers and 46 sailing-vessels, of a gross tonnage of 363,306 tons, built. To the success of the little *Comet*, the earliest trading steamship in the Old World, which began to ply between Glasgow and Greenock in 1812, may be traced the great development of shipbuilding and shipping on the Clyde.

But another factor in the industrial prosperity of the city is the fact that it is built over a

coalfield rich in seams of ironstone. It was in the neighbourhood of the city that the first experiments with Neilson's hot-blast in iron-furnaces, patented in 1828, were made, and the economy thereby effected developed the iron industry so rapidly in Glasgow as to distance for a long period all competition. Great forges, with powerful steam-hammers and other appliances, the making of steam-tubes, boiler-making, locomotive-engine building, sugar machinery, and general engineering are among the most important industrial features of the city.

Bleaching and calico-printing were established in Glasgow in 1738, nearly thirty years earlier than in Lancashire. The dyeing of Turkey-red was inaugurated in 1785 as a British industry by two Glasgow citizens, David Dale and George Macintosh; and this branch of trade has developed in Glasgow and the neighbourhood to an extent unequalled in any other manufacturing centre. In Glasgow, also, bleaching-powder (chloride of lime) was patented in 1799 by Charles Tennant, who thereby laid the foundation of the gigantic St Rollox chemical works, and gave the first impetus to chemical works generally. These, with the spinning and weaving industries, afford employment for a great proportion of the population.

See works by M'Ure (1736), Gibson (1779), Brown (1795–97), Cleland (1829), Macgeorge (3d ed. 1888), MacGregor (1881), Wallace (1882), Bell and Paton (1896); Innes and Robertson (1854) and Stewart (1891) on the university; for the cathedral, Eyre Todd (1898); for the Glasgow school of painting, D. Martin (1897).

Glasnevin, incorporated in 1900 with Dublin as one of the city wards.

Glastonbury, an ancient municipal borough of Somerset, lies, engirt by the river Brue, amid orchards and level pastures—once fen-land—at the foot of the conical tower-crowned Tor (500 feet), 6 miles by rail SSW. of Wells. The Celtic *Ynysvitrin*, the *Avalon* of Arthurian legend, and the *Glæstingaburh* or Glæstings' borough of the West Saxons, it was hither, says William of Malmesbury, that Joseph of Arimathea came bearing the Holy Grail, here that he founded the first Christian church in Britain. On Wearyall Hill he planted his pilgrim's staff; it took root, and grew into the Holy Thorn, which blossomed miraculously every Old Christmas-eve until it was cut down by a Puritan. A wattled basilica, which contained the grave of a St Patrick and of Gildas, was in 630 encased by Paulinus of York in boards and lead; and to the east of it in 719 King Ine reared the great church of SS. Peter and Paul. This, spoiled by the Danes, was the abbey refounded by St Dunstan about 946, and became the sepulchre of Kings Edmund, Edgar, and Edmund Ironside, if not indeed of Dunstan himself, of Joseph of Arimathea, or of Arthur and Guinevere. It had just been rebuilt when in 1184 the whole pile was consumed by fire; and the splendid minster, 528 feet long, then undertaken by Henry II., was not dedicated till 1303. In 1539 Richard Whiting, the last abbot, was hanged on the Tor by Henry VIII.; and the ruins of this great Benedictine house, which had covered 60 acres, are now comparatively scanty. Yet still on the site of the 'Vetusta Ecclesia' stands the roofless chapel of Our Lady or St Joseph, a fine example of Transition Norman, with its 15th-century crypt; still there is the massive stone Abbot's Kitchen (14th c.), 33½ feet square, and 72 high, with its four huge fireplaces and pyramidal roof. Apart from its abbey and its two parish churches, one of which has a noble tower 140 feet high, Glastonbury is a quaint, old-world place, with the 15th-century Pilgrims' Inn (now the 'George'), the Tribunal, and the Abbot's Barn. Sharpham, 2 miles SW., was Fielding's birthplace. Sheepskins, mats, rugs, gloves, and pottery are manufactured. The population is a little over 4000. See Willis's *Architectural History of Glastonbury Abbey* (1866).

Glasvein, a mountain (3006 feet) of Ross-shire, 5 miles ENE. of Invershiel.

Glatz (Czech *Kladsko*), a town of Prussian Silesia, between two fortified hills, on the Neisse, 58 miles by rail SSW. of Breslau. It manufactures linen, cigars, leather, &c. Pop. 15,585.

Glauchau (*Glow-how*), the second manufacturing town of Saxony, on the Mulde's right bank, 20 miles W. of Chemnitz by rail. It is the centre of the woollen-weaving industry, goods to the value of £2,000,000 being exported annually. There are also dyeworks, print-works, iron-foundries, and carpet, paper, and machine factories. Pop. (1834) 6292; (1900) 25,677.

Gledstanes, Easter, in Libberton parish, Lanarkshire, 5 miles NW. of Biggar, was the ancient seat of the Gledstane or Gladstone family.

Gleiwitz, a town of Prussian Silesia, 40 miles SE. of Oppeln. It has extensive iron, glass, paper, and wood manufactures. Pop. (1900) 52,362.

Glenalmond, a romantic valley of Perthshire, much visited for its scenery, and for Ossian's grave—the subject of Wordsworth's verses on the 'Narrow Glen.' It is the seat, 12 miles WNW. of Perth, of Trinity College, Glenalmond (1847), a public school of about 100 boys.

Glenarm, an Antrim seaport, on Glenarm Bay, 11 miles NW. of Larne. Pop. 1048.

Glencoe, a valley of northern Argyllshire, descending 7½ miles west-by-northward from a 'col,' 1011 feet high, to salt-water Loch Leven, 2 miles ENE. of Ballachulish. It is traversed by the Coe (or *Cona* of Ossian), and flanked by conical mountains, the Pap of Glencoe (2430 feet) the most prominent, Benveedan (3766) the loftiest. On 13th February 1692 it was the scene of the massacre, by 120 soldiers (Campbells mostly), of thirty-eight Macdonalds, others also perishing of cold and hunger.

Glencorse. See Penicuik.

Glencroe, an Argyllshire glen descending 4¼ miles south-eastward to Loch Long, 2½ miles SW. of Arrochar. At its head is a stone seat inscribed 'Rest and be thankful.'

Glendalough, a valley in Wicklow county, 15 miles SW. of Bray, which combines the attractions of fine scenery and remarkable ruins. It became a seat of religion with St Kevin in the 6th century; and some of the ruined 'seven churches,' as well as the round tower (110 feet high), may date from the 7th century.

Glenelg, a shallow river of Australia, rising in the Grampians in SW. Victoria, and flowing 281 miles to the Southern Ocean between Capes Northumberland and Bridgewater, at the boundary of South Australia and Victoria.

Glenfinnan, a glen in Inverness-shire, 18 miles W. of Fort-William. Here, on 19th August 1745, the clans gathered under Prince Charles Edward's banner, and here in 1815 a tower was built with an inscription in Gaelic, Latin, and English.

Glengariff, a village of County Cork, at the

head of the island-dotted Glengariff Harbour, an inlet of Bantry Bay, and at the foot of a mountain glen, much frequented by tourists.

Glengarnock, an Ayrshire village, with ironworks, 3½ miles NNE. of Dalry. Pop. 2090.

Glengarry, (1) a glen of W. Inverness-shire, through which the Garry winds, 19 miles eastward, from Loch Quoich to Loch Oich, 8 miles SW. of Fort Augustus.—(2) A glen of NW. Perthshire, traversed by the Highland Railway. Its Garry falls into the Tummel.

Gleniffer, Braes of, a range of hills (749 feet), 3 miles SSW. of Paisley. They are celebrated by Tannahill.

Glenisla (*Glen-ī'la*), a Forfarshire parish, 9 miles N. by W. of Alyth.

Glenlivet (*Glen-lĭ'vet*), the valley in Banffshire of Livet Water, which runs 14 miles north-westward till, at a point 5 miles S. of Ballindalloch station, it falls after a total descent of 1600 feet into the Aven, itself an affluent of the Spey. Its population still is largely Catholic. Since 1824 its 200 whisky bothies have given place to one celebrated distillery. In the battle of Glenlivet or Alltacoileachan (4th October 1594), 10,000 Protestants under the Earl of Argyll were routed by the Catholic insurgents under the Earl of Huntly.

Glenluce', a Wigtownshire village, 15 miles WSW. of Newton-Stewart. Near it are the ruins of Glenluce Abbey (1190). Pop. 800.

Glenlyon, a Perthshire glen descending 24 miles ENE. to the Vale of Fortingall.

Glenmore-nan-Albin ('great glen of Scotland'), the Highland depression, 60 miles long, now traversed by the Caledonian Canal (q.v.).

Glenroy', a deep Inverness-shire glen, descending 14 miles south-westward to a point 13 miles NE. of Fort-William. Its three 'parallel roads' mark the shore-lines of former fresh-water lakes, which were dammed up by glacier ice, and gradually sunk as the barrier melted away.

Glen's Falls, a town of New York, on the Hudson, 60 miles by rail N. of Albany, with sawmills and machine-shops, and a quarry of black marble. The river, which is crossed by a bridge, here falls about 50 feet, and is very picturesque. Pop. (1880) 4900; (1900) 12,613.

Glenshiel', a valley of Ross-shire, 58 miles SW. of Inverness. Here, on 11th June 1719, 1500 Jacobites and 274 Spaniards encountered 1600 Hanoverians. The fight was indecisive, but next day the Highlanders dispersed, and the Spaniards surrendered.

Glenties, a Donegal village, on the Owenea, 26 miles W. of Stranorlar.

Glentilt', in north Perthshire, the deep narrow glen of the troutful, impetuous Tilt, which issues from Loch Tilt (3 by 2 furlongs; 1650 feet), and runs 16 miles SW. to the Garry at Blair-Athole.

Glockner, or Gross-Glockner, the highest peak (12,458 feet) of the Noric Alps, on the boundary between Tyrol, Carinthia, and Salzburg.

Glogau, or Gross-Glogau, a town and fortress in Prussian Silesia, on the Oder's left bank, 60 miles NNW. of Breslau by rail. It manufactures agricultural implements, pottery, tobacco, sugar, &c., and has a cartographical institute. Pop. about 25,000.

Glommen, or Stor-Elv (i.e. 'great river'), the largest river in Norway, issues from Lake Aursund, at 2339 feet above sea-level, and winds 350 miles southward to the Skager Rack at Frederikstad. Its course is interrupted by frequent waterfalls, the last, with a descent of 74 feet, being the Sarpsfos, 7 miles from the mouth.

Glossop, a market-town of Derbyshire, amid bleak but picturesque hills, 13 miles ESE. of Manchester, and 24 WNW. of Sheffield. It is the chief seat of the cotton manufacture in Derbyshire, and has also woollen and paper mills, dyeing, bleaching, and print works, and iron-foundries. Near it is Glossop Hall, the seat of Lord Howard of Glossop. The town was incorporated in 1866. Pop. (1871) 17,046; (1901) 21,526.

Gloucester (*Glos'ter*), the capital of Gloucestershire, a parliamentary and county borough, is pleasantly situated on the left bank of the Severn, which here becomes tidal. It is 114 miles by rail (by road 106) WNW. of London, 38 NNE. of Bristol, and 55 SSW. of Birmingham. The *Caerglowi* of the Britons, and *Glevum* of the Romans, whose cruciform ground-plan survives in the four main streets, *Gleauranceastre* or Gloucester was the seat successively of a nunnery (681), a monastery (821), and a great Benedictine abbey (1022). The last was suppressed in 1539; and its church two years later became the cathedral of the new see of Gloucester—a see conjoined with that of Bristol in 1836, but made independent again in 1897. Built between 1088 and 1498, and restored since 1853, the cathedral measures 420 feet by 144 across the transept, and though substantially Norman—crypt, chapter-house, and the interior of the nave *are* Norman—in general character is Perpendicular. Its pinnacled central tower (1457) rises 225 feet, and contains the 'Great Peter' bell, weighing 3 tons 2 cwt. Other noteworthy features are the lofty round piers of the nave, the east window (the largest in England —72 by 38 feet) with its splendid stained glass of 1350, the shrine of King Osric of Northumbria, the exquisite canopied shrine of Edward II., the statue of Jenner, and a group by Flaxman, the 'whispering gallery' in the triforium, and the matchless fan-vaulted cloisters (1351–1412). A new episcopal palace was built in 1862; the picturesque deanery is the old prior's lodge; and other buildings are the 12th-century West Gate, the New Inn (built about 1450 for pilgrims), the Tolsey or guildhall, the shire-hall (1816), the infirmary (1755), the county lunatic asylum (1823), the King's or College school, the Crypt grammar-school, the Blue-coat hospital, and a theological college. There is a cross (1863) to Hooper, and a statue (1880) of Raikes, the founder of Sunday schools; in the public park is a chalybeate spring, which was discovered in 1814. Gloucester's commerce is now more important than its manufactures—chemicals, soap, matches, railway plant, shipbuilding, &c. The Gloucester and Berkeley Canal, 17 miles long, and admitting vessels of 600 tons, was completed in 1827 at a cost of £500,000. The number of vessels entering the port has almost trebled during the last thirty years; the imports include corn and timber, the exports agricultural produce and the minerals of the Forest of Dean. Gloucester returns one member. Pop. (1841) 14,152; (1871, as extended) 31,844; (1901, as extended in 1900) 47,955. In the Great Rebellion (1643) Gloucester held out successfully against Charles I. till Essex relieved it. Among its natives have been (doubtfully) the chronicler Robert of Gloucester; Taylor, the water-poet; Whitefield, Raikes, Wheatstone, and W. E. Henley. See works by Rudder (1781), Britton (1829), F. Bond (1848), Waller (1856), Massé (1898); also Murray's *Western Cathedrals*.

Gloucester, a port of entry of Massachusetts, on the south side of Cape Ann peninsula, 28 miles NNE. of Boston. It has an excellent harbour, and the cod and mackerel fisheries employ several thousand men; but there are also a large trade in the granite quarried here, shipbuilding, and manufactures of anchors and railroad iron. Gloucester was incorporated as a town in 1642, and made a city in 1874. Pop. (1880) 19,329; (1900) 26,121.

Gloucester City, a town of New Jersey, on the Delaware, opposite Philadelphia. It contains ironworks and cotton-factories. Pop. 6864.

Gloucestershire, a west midland county of England, lying around the lower course and the estuary of the Severn, and bounded by the counties of Monmouth, Hereford, Worcester, Warwick, Oxford, Berks, Wilts, and Somerset. With a maximum length and breadth of 64 by 43 miles, and an area of 1258 sq. m., it offers a very irregular outline. There are three well-marked divisions, each with its natural characteristics—the Hill, the Vale, and the Forest. The first is formed by the Cotteswold Hills (q.v.), whose highest point is Cleeve Hill (1134 feet); the second, comprising the Vales of Gloucester and Berkeley, by the low rich meadow-lands lying along the Severn; and the third, to the west of the Severn, by the Forest of Dean (q.v.). The principal rivers are the Severn, Wye, Upper and Lower Avon, and Thames, which receives all the waters east of the Cotteswolds. Permanent pasture and corn-crops occupy more than two-thirds of the entire area. Gloucestershire is famous as a dairy country, and raises large numbers of cattle. The well-known double and single Glo'ster cheese is produced in the Vale of Berkeley. The orchards yield great quantities of cider; and woods and plantations cover 82 sq. m. Building-stone is plentiful; and there are two rich coalfields—that of Bristol in the SW., and the Forest of Dean in the W.; but the ironworks are of less importance than formerly. The woollen manufacture is of ancient standing. Gloucestershire since 1885 contains the parliamentary boroughs of Gloucester and Cheltenham, with part of Bristol, and five parliamentary divisions—Mid or Stroud, North or Tewkesbury, East or Cirencester, Forest of Dean, and South or Thornbury. Pop. (1801) 250,723; (1881) 572,433; (1891) 599,947; (1901) 634,729. See Worth's *Gloucestershire* (1888), and larger works there cited.

Gloversville, a town of New York, 53 miles NW. of Albany. It manufactures buckskin and other gloves. Pop. (1880) 7133; (1900) 18,349.

Gluchov, a Russian town, 112 miles E. of Tchernigoff. Pop. 16,440.

Glückstadt, a town in the Prussian province of Sleswick-Holstein, on the Elbe's right bank, 32 miles NW. of Hamburg. Founded in 1616 by Christian IV. of Denmark, it is a pretty town, regularly built, and intersected by canals, its chief building the Rathhaus (1642). Its harbour, much improved since 1880, remains open in winter, when the Elbe higher up is frozen. Pop. 6483.

Glukhov. See GLUCHOV.

Gmünd, a town of Würtemberg, in the fertile valley of the Rems, 30 miles E. of Stuttgart by rail. It manufactures jewels and hardware. Pop. about 20,000.

Gmunden (*Ge-moon'den*, *g* being hard), a town of Upper Austria, 159 miles W. of Vienna by rail. It lies 1439 feet above sea-level, amid the grandest scenery of the Salzkammergut, at the lower end of the Traunsee or Lake Gmunden (8 by 2 miles), above which towers the Traunstein (5536 feet). It is a favourite summer bathing-place. Near it are salt-mines. Pop. 7150.

Gnesen (Polish *Gniezno*), a Prussian town, situated in a region of hills and lakes, 31 miles ENE. of Posen by rail. It has a Catholic cathedral (965), till 1320 the coronation-place of the Polish kings. Pop. 21,700.

Goa, a Portuguese possession on the west coast of India, 250 miles SSE. of Bombay, with an area of 1469 sq. m., and a population of 475,500. A hilly country, bounded on the east by the Western Ghâts, the territory is watered by numerous rivers. Half the land under cultivation, which embraces a third of the entire area, is devoted to rice; stately forests cover nearly a fourth of the remainder. Captured by Albuquerque in 1510, 'Golden Goa' reached by the end of the century a high pitch of military and ecclesiastical splendour and commercial prosperity. The decline of the Portuguese power quickly followed the appearance of the Dutch, and in 1759 the city of Old Goa, once the chief emporium of trade between the east and west, was deserted by all but its ecclesiastical inhabitants, and left to the decay in which it has since lain. Its former pop. of 200,000 has sunk to less than 1900; its arsenal, its palaces, its quays, even many of its churches are in ruins, their sites covered with cocoa-nut plantations, and the streets overrun with grass. Among the edifices that survive are the majestic archiepiscopal cathedral, and the splendid church of Bom Jesus, containing the magnificent tomb of St Francis Xavier.—The new capital is Nova Goa or Panjim, nearer the sea, on the Mandavi, 3 miles from its mouth. It presents a picturesque appearance; its streets are wide and clean; and new harbour and railway works were inaugurated on 31st October 1882. The public buildings include the viceregal palace and spacious barracks, one wing of which accommodates the national lyceum, the public library, and a college for practical sciences. Pop. 8440. See works by Fonseca (1878) and Lady Burton (1879).

Goalanda, a town of Bengal, on a tongue of land at the confluence of the Ganges and Brahmaputra, is an important river-trade entrepôt, the Bengal Railway terminus, and the starting-point of the Assam steamers. Pop. 8652.

Goalpara, a town of Assam, on the Brahmaputra. Pop. 6700.

Goatfell, the highest point (2866 feet) of Arran, 3¼ miles NNW. of Brodick.

Gobi, DESERT OF. See ASIA.

God'alming, a borough of Surrey, 34 miles SW. of London. Hither in 1872 was removed from London the Charterhouse public school, founded in 1611 by Thomas Sutton on the site of a Chartreuse or Carthusian monastery. Among its scholars have been Addison, Steele, Wesley, Thackeray, Leech, Thirlwall, Eastlake, and Helps. The new school forms a quadrangle, with a gatehouse tower 130 feet high, and a chapel rich in stained glass. Pop. 8797. See works by Dr Haig Brown (1879) and Eardley-Wilmot (1894).

Goda'vari, the largest river of the Deccan, rises within 50 miles of the Indian Ocean, and flows 898 miles south-east across the peninsula to the Bay of Bengal, entering it by seven mouths. Where by a rocky gorge the river bursts through the barrier of the Eastern Ghâts, its picturesque scenery has earned for it the name of the Indian

Rhine. The magnificent *anicut* or dam at the head of the delta throws off three main irrigating canals which turn the entire delta into a great garden. The upper navigation is impeded by three impassable rocky barriers or rapids within a space of 150 miles; the works undertaken in 1861 to get rid of them were abandoned ten years later. The Godavari is one of the twelve sacred rivers of India, and the great bathing festival, called *Pushkaram*, is held on its banks once in twelve years.

Goderich (*God'er-itch*), a port of entry of Ontario, on Lake Huron, 160 miles WNW. of Buffalo by rail, with a good harbour, factories and mills, and eight salt-wells. Pop. 4164.

Goderich Castle. See GOODRICH.

Godesberg, a village of Rhenish Prussia, on the Rhine, 4 miles S. of Bonn. It has a mineral spring, and a ruined castle (1213). Pop. 8901.

Godmanchester (*Gum'sester*). See HUNTINGDON.

Gödöllö, a town of Hungary, 15 miles NE. of Pesth, with a castle and park presented by the Hungarians in 1867 to their king, the emperor of Austria-Hungary. Pop. 3940.

Godolphin, a Cornish manor, 5½ miles NW. of Helston. It was the seat of the Godolphins from the Conquest until 1785.

Godthaab. See GREENLAND.

Godwin-Austen, the second highest peak in the world, is situated in the Himalayan system, in the western range that is crossed in the east by the Karakorum Pass. Its height is 28,250 feet. Formerly known only by the sign K2, it was named in 1888 after Lieut.-colonel Godwin-Austen of the Trigonometrical Survey of India.

Goes (*Hoos*), or TER GOES, a Dutch town in South Beveland, 16 miles NE. of Flushing. Pop. 7000.

Gogmagog Hills, a range of hillocks, 4 miles SE. of Cambridge.

Gogo, a decayed seaport of India, in the peninsula of Kathiawar, and on the Gulf of Cambay, 193 miles NW. of Bombay. Pop. 7063.

Gogra, or GHAGRA, a river flowing 600 miles SE. to the Ganges at Chapra.

Godstow, a ruined nunnery (1138) with Fair Rosamond's grave, on the Isis, 3½ miles NNW. of Oxford.

Gohelwar', or GOHELWAD, a tract of country in Bombay presidency, comprising several tributary states, and lying along the Gulf of Cambay, on the eastern coast of the peninsula of Kathiawar.

Goil, LOCH, a picturesque loch in Argyllshire, a branch of Loch Long, is 6 miles long and less than 1 mile broad. The mountains in the neighbourhood rise to the height of more than 2000 feet.—LOCHGOILHEAD, 20 miles NNW. of Greenock, is a favourite summer watering-place.

Gol'chika, a small port at the mouth of the Yenisei (q.v.).

Golconda, an extensive fortress of the Nizam, situated on a granite ridge, 7 miles W. of Hyderabad. In its neighbourhood are the ruins of an ancient city, till 1687 the metropolis of a powerful kingdom. Golconda is proverbially famous for its diamonds; but, in truth, they were merely cut and polished here.

Goldau, formerly a small town of the Swiss canton of Schwyz, is memorable for its destruction by a stupendous landslip, 2d September 1806.

Goldberg, a town of Prussian Silesia, on the Katzbach, 13 miles by rail WSW. of Liegnitz. It owes both origin and name to its former rich gold-mines. Pop. 6736.

Gold Coast, a British crown colony and protectorate on the Gulf of Guinea, with a coast-line of about 350 miles, is bounded east by German Togoland, west by the French Ivory Coast, and north by the French Soudan. The area, including Adansi and Ashanti, is about 74,000 sq. miles, with a pop. of 1,490,000 (646 Europeans). The chief towns are Accra (14,840), Cape Coast Castle (28,950), Elmina (3970), Kwitta, Saltpond, Winneba, Axim, and Akuse. Ashanti came under British protection in 1896, and in 1901, with the Northern Territories, was definitely annexed. The principal exports are palm kernels and oil, india-rubber, gold-dust, ivory, and monkey skins; but cocoa-nuts, copra, coffee, Calabar beans, corn, ground-nuts, Guinea grains, ginger, cam-wood, gum copal, tobacco, and porcupine quills are also produced. The climate on the low and swampy coast is very unhealthy, but is better inland. The exports and imports have an annual value of £875,000 and £1,300,000 respectively. In 1902 nearly £18,000 was spent on roads; there are 720 miles of telegraph lines in operation, and a railway was opened to Coomassie in 1903. See Ellis, *History of the Gold Coast* (1893), and Lucas, *British Colonies*, vol. iii. (1895).

Golden Gate, a channel 2 miles wide, the entrance to the magnificent Bay of San Francisco.

Golden Horn. See CONSTANTINOPLE.

Gold Hill, a town of Nevada, 7000 feet above the sea, and 1 mile S. of Virginia City, with rich silver-mines, and quartz-mills. Here, on Mount Davidson, is the famous Comstock Lode.

Goletta (Fr. *La Goulette*), the former port of Tunis, from which it is 11 miles N. by rail. It has lost much of its importance since the opening in 1893 of the ship-channel from it across the lagoon to the capital. Pop. 3000.

Göllnitz, or GÖLLNICZBANYA, a town of Hungary, 17 miles SW. of Eperies. It has iron and copper mines, and ironworks. Pop. 4353.

Gollnow, a town of Prussia, in Pomerania, 15 miles NE. of Stettin. Pop. 8430.

Golspie, a Sutherland coast-village, 84 miles by rail N. by E. of Inverness. Pop. 1025.

Gombroon', or BENDER ABBAS, a seaport of Persia, on the Strait and the island of Ormuz. It owes its name Bender Abbas to Shah Abbás, who, assisted by the English, drove the Portuguese in 1622 from Ormuz, ruined that seaport, and transferred its commerce to Gombroon. For a while the new town prospered; but at present it is a wretched place. Pop. 8000.

Gome'ra, one of the Canary Islands (q.v.).

Gom'etra, an Argyllshire island, measuring 2 miles by 1, W. of Ulva. Pop. 53.

Gomorrah. See SODOM AND GOMORRAH.

Gomul. See ZHOB.

Gonaïves, a seaport of Hayti, on the W. coast, 65 miles NNW. of Port au Prince. Pop. 18,000.

Gondar, capital of Amhara in Abyssinia, is situated on a basaltic hill 23 miles N. of Lake Tzana. It was formerly the capital of Abyssinia, with 50,000 inhabitants; now barely 4000, though there are still some forty churches.

Gondo'koro, a trading-post (for ivory, &c.) in the country of the Bari negroes, on the Upper Nile, in about 4° 54′ N. lat. To put down the slave-trade Baker established a strong military

station here in 1871; later Gordon removed the station to Lado, 6 miles lower down the Nile.

Good Hope. See Cape of Good Hope.

Goodrich Castle, a stately ruin in Herefordshire, on the Wye, 4 miles SSW. of Ross. Goodrich Court is the seat of the Meyricks.

Goodwin Sands, famous sandbanks stretching 10 miles NE. and SW. at an average distance of 5½ miles from the east coast of Kent. Large level patches of sand are left dry when the tide recedes, and afford a firm foothold, so that cricket has often been played upon them. When covered the sands are shifting, and may be moved by the prevailing tide to such an extent as to considerably change the form of the shoal; still, the general outline has been fairly constant. The shoal is divided into the North and the South Goodwin, between which is the deep anchorage named Trinity Bay. These sands, which are marked by four lightships, have always been dangerous to vessels passing through the Strait of Dover. They serve as a breakwater to form a secure anchorage in the Downs (q.v.) when easterly or south-easterly winds are blowing; but when the wind blows strongly off-shore, ships are apt to drag their anchors, and to strand upon the perfidious Goodwins. Many wrecks have taken place here, the most terrible the loss of an entire fleet of thirteen men-of-war, during the 'great storm' on the night of 26th November 1703. These dangerous sands are said to have once been a low fertile island called Lomea (*Infera Insula* of the Romans), belonging to Earl Godwin; but in 1014, and again in 1099, it was overwhelmed by a sudden inundation of the sea. The tale is that at the period of the Conquest these estates were taken from Earl Godwin's son, and bestowed upon the abbey of St Augustine at Canterbury. The abbot having diverted the funds with which the sea-wall should have been maintained to the building of Tenterden (q.v.) steeple, in 1099 the waves rushed in; and thus 'Tenterden steeple was the cause of the Goodwin Sands.' But geology indicates a date long anterior. See Gattie, *Memorials of the Goodwin Sands* (1889).

Goodwood, the seat of the Duke of Richmond, 3½ miles NE. of Chichester. An 18th-century building by Chambers and Wyatt, it has a notable collection of portraits; and its park is famous for its cedars and other trees, which in 1754 included thirty different kinds of oaks and 400 different American trees and shrubs. Here is the picturesque racecourse, where the famous Goodwood meeting is held at the end of July, at the close of the London season. It was established in 1802; but its importance (since 1825) was due to Lord George Bentinck.

Goole, a town and river-port in the West Riding of Yorkshire, at the junction of the Ouse with the Don, 22 miles SSE. of York. It has grown rapidly since 1829, and now ranks amongst the chief ports of the kingdom, its extensive docks being annually entered and cleared by some 4600 vessels of over 1,100,000 tons burden. The annual value of the imports amounts to about 4¼ millions sterling, of the exports to more than 4¾ millions. Amongst the imports are shoddy for manufacturing purposes, oil, logwood, timber, champagne, farm-produce, and groceries. Coal, cloth, and machinery are amongst the chief exports. There are iron-foundries, alum, sugar, and cordage manufactories, ship and boat building yards, and establishments for sail-making and agricultural machine-making. Pop. (1851) 4722; (1891) 15,168; (1901) 16,576.

Göppingen, a town of Würtemberg, 26 miles by rail ESE. of Stuttgart, has a 16th-century castle, a mineral spring, and manufactures of woollens, paper, toys, &c. Pop. 19,352.

Gorakhpur, a town in the North-west Provinces of India, on the Rapti, 430 miles NW. of Calcutta. Pop. 65,000.

Gordon Bennett, Mount, an African mountain seen by Stanley in 1875. It lies S. of Albert Nyanza, a little N. of the equator and E. of 30° E. long. Sometimes snow-covered, it is a truncated cone, probably an extinct crater, and rises 14,000 or 15,000 feet. See Ruwenzori.

Gordon Castle. See Fochabers.

Gorée, a small island of French Senegal, S. of Cape Verd, is almost entirely covered by the town of Gorée (pop. 2200), whose commerce has been transferred to Dakar the mainland.

Gorey, a municipal borough of County Wexford, 59 miles S. of Dublin by rail, and 3 from St George's Channel. Pop. 2000.

Gorgonzo'la, a village of Italy, 12 miles NE. of Milan, with a fine church and trade in a special kind of cheese. Pop. 4300.

Gorkum (Dutch *Gorinchem*), a fortified town of South Holland, on the Merwede, 22 miles ESE. of Rotterdam, possesses an arsenal. Pop. 11,519.

Gorleston, a Suffolk suburb of Yarmouth.

Görlitz, a town of Prussian Silesia, on the left bank of the Neisse, 49 miles W. of Liegnitz. One of its old mural towers, the Kaisertrutz, is now the guard-house and armoury. Among the beautiful Gothic churches is that of SS. Peter and Paul (1423–97), with five naves. There are monuments of Prince Frederick Charles of Prussia (1891) and the Emperor William (1893); and outside the town is the Kreuzkapelle (1489), an imitation of the Holy Sepulchre at Jerusalem. A railway viaduct, 2720 feet long and 118 high, here crosses the Neisse's valley. Görlitz has manufactures of cloth, which is its staple, cotton, linen, and fictile wares, with iron-foundries and machine-shops. Here Jacob Boehme lived and died. Pop. (1843) 15,200; (1890) 62,135; (1900) 80,931.

Gorton, a south-eastern suburb of Manchester.

Görz (*Girls*), capital of the Austrian province of Görz-Gradisca, in the Küstenland, in a fruitful plain, 35 miles NNW. of Trieste by rail. Shut in by mountains on all sides except the south, it enjoys an almost Italian climate, and has some fame as a health-resort. Among its principal buildings are the old castle and the former Jesuit college, both now used as barracks; the cathedral; and the prince-bishop's palace. Görz's specialty has long been the printing of Hebrew books for the East. There are dyeworks, and important manufactures of flour, sugar, cotton, silks, rosoglio, paper, leather, soap, and matches. In a Franciscan cloister close by are the graves of Charles X. of France, the Duc d'Angoulême and his wife, and the Comte de Chambord. Pop. 26,750.

Gosford, the seat of the Earl of Wemyss, 6 miles NW. of Haddington.

Goshen, that part of ancient Egypt which Pharaoh presented to Joseph's kindred, appears to have lain between the eastern delta of the Nile and the Isthmus of Suez, as far south as the modern Ismailia.—Goshen was the name given to a part of Bechuanaland, South Africa (now British), which in 1884 was the seat of a mushroom Boer republic.

Goshen, the capital of Elkhart county, Indiana, on the Elkhart River, 111 miles E. by S. of Chicago. Pop. 7820.

Goslar, an ancient town of Hanover, on the north slope of the Harz Mountains, 27 miles SE. of Hildesheim. At one time a free imperial city, and the residence of the emperors, it has the 'Zwinger' tower, with walls 23 feet thick; the emperor's house (1050), the town-house (1136–84), and the Kaiserworth, an old building containing statues of eight emperors. Goslar was founded by Henry I. in 920. About 1350 it joined the Hanseatic League. It suffered severely in the Thirty Years' War. Here were born the Emperor Henry IV. and Maurice of Saxony. Pop. 16,690.

Gospie, a town of Croatia, Austria-Hungary, 14 miles from the Adriatic. Pop. 11,000.

Gosport ('God's port'), a seaport of Hants, on the west shore of Portsmouth harbour, directly opposite Portsmouth, with which it is connected by a floating bridge. Here are an iron-foundry for making anchors and chain-cables, naval powder-magazines, barracks, the Clarence victualling-yard, and Haslar Naval Hospital (1746). Pop. (1851) 7414; (1901, with Alverstoke) 28,884.

Gosselies, a manufacturing town of Hainaut, Belgium, 4 miles N. of Charleroi. Pop. 10,050.

Gotha (*Go'ta*), a town of Germany, alternately with Coburg the capital of the duchy of Saxe-Coburg-Gotha, stands 31 miles W. by S. of Weimar, on the northern outskirt of the Thuringian Forest. The castle of Friedenstein, rebuilt in 1648 on a rock 78 feet above the town, contains a library of 200,000 volumes and 6000 MSS. The new museum (1878), in the Renaissance style, includes the picture-gallery, a natural history collection, &c. A new observatory was built in 1874. Gotha is an active industrial town, the principal manufactures being shoes, fire-engine pipes, sugar, toys, and sausages. Many designers, engravers, printers, and map-colourers are employed in the large geographical establishment of Perthes, which also publishes the *Almanach de Gotha*. Population, 35,000. See SAXE-COBURG-GOTHA.

Gotham, a Nottinghamshire village, 7 miles SSW. of Nottingham, whose inhabitants from at least Henry VI.'s time were reputed to be fools.

Gothard. See ST GOTHARD.

Gothenburg (usually pron. *Gotenburg*; Swed. *Göteborg*), next to Stockholm the most important town of Sweden, stands at the mouth of the Göta, 284 miles by rail SW. of Stockholm. Although originally founded by Gustavus Adolphus in 1618–21, the town, in consequence of numerous fires, is quite modern—regularly built and clean, with several canals, crossed by numerous bridges, and an excellent harbour seldom obstructed by ice. The few buildings which deserve special mention are the exchange, cathedral, town-hall, museum (art, zoology, industry), and a fine garden belonging to the Horticultural Society. The industries embrace shipbuilding, iron-working, sugar-refining, the brewing of porter, and herring-fishing. During the Continental blockade of 1806, Gothenburg became the chief British depot in northern Europe. The town has given its name to the much-debated Gothenburg Licensing System, which originated here in 1865. All the wine and spirit shops are kept by a company licensed by the town authorities, and are conducted by salaried managers; all profits remaining after the company has been allowed 5 per cent. on its capital go into the town treasury. Pop. (1877) 71,707; (1890) 104,657; (1900) 130,619.

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Gothland (Swed. *Götaland* and *Götarike*), the southernmost of the three old provinces of Sweden, with an area of 35,803 sq. m. and a pop. of 2,595,194.—(2) A Swedish island (Swed. *Gottland*) in the Baltic, 44 miles E. from the mainland, constitutes with Farö, Gotska Sandö, and other smaller islands the province of Gottland or Wisby. Area, 1217 sq. m. The island consists mainly of terrace-like slopes of limestone, encircled on the west by cliffs broken by numerous deep fjords. Next to agriculture, the chief occupations of the inhabitants, 55,074 in 1892, are shipping, fishing, seal-fishing, fowling, and lime-burning. In the middle ages, and till 1645, the island belonged to the German Hanseatic League. The capital is Wisby.

Göttingen (*Göt'ting-en*), a town in the former kingdom of Hanover, lies 538 feet above sea-level in the Leine's wide valley, encircled by gentle hills—the highest, the Hainberg (1246 feet). By rail it is 67 miles S. of Hanover, and 36 NE. of Cassel. The ramparts, long since outgrown, and now planted with lindens, form a charming promenade; but architecturally Göttingen has nothing much to boast of—a quaint *rathhaus*, a statue of William IV., and a few antique buildings, one of which, the Jacobikirche, has a steeple 320 feet high. The celebrated university was founded 1734–37 by Baron Münchhausen, under the auspices of George II., Elector of Hanover and king of England, and now has 120 professors and more than 800 students. Connected with it are the library (500,000 vols. and 5000 MSS.), museum, botanic garden, observatory, laboratory, hospital, &c., as also the Royal Society (1750). Coleridge, Beddoes, Pusey, Lever, Longfellow, Motley, Ticknor, and Bancroft studied at Göttingen, whose native *alumni* include many of Germany's most famous sons, among them Prince Bismarck, in whose honour a tower was built in 1894. The 'Göttinger Dichterbund' was a small poet band (Voss, the two Stolbergs, Klopstock, Bürger, &c.); by the 'Göttinger Sieben' are meant the seven professors (Albrecht, Dahlmann, Ewald, Gervinus, the two Grimms, and Weber) who for their liberal tendencies were in 1837 expelled by King Ernest Augustus. The book-trade is of more importance than the manufactures—woollens, sugar, chemicals, &c. Pop. (1875) 17,057; (1890) 23,689; (1900) 30,234.

Gouda (Dutch pron. *How'da*), or TER GOUWE, a town of South Holland, on the right bank of the Hollaendsche Yssel, 13 miles by rail NE. of Rotterdam. The church of St John has seventy-five magnificent stained-glass windows, which were executed between 1560 and 1603 by the brothers Crabeth. The organ, too, has a fine *vox humana* stop. Gouda, which has memories of Erasmus, was formerly famous for its clay-pipes, and is now notable on account of its brickworks and stearine candle factory. It has a large trade in butter and Gouda cheese. Pop. 22,535.

Goulburn, a town of New South Wales, 134 miles SW. of Sydney by rail, with tanneries, boot and shoe factories, flour-mills, and breweries, and a busy trade in agricultural produce. It is a substantially built town, with gas (1879), a good water-supply, a Gothic Anglican cathedral (1884), and a Roman Catholic cathedral, college, and convent. Pop. 10,700.

Gourock (*Goor'ok*), a watering-place of Renfrewshire, on the Firth of Clyde, 3 miles WNW. of Greenock by a railway opened in 1889. At Kempoch Point here, behind which rises Barrhill (478 feet), stands 'Granny Kempoch,' a prehistoric

monolith associated with the witches of Renfrewshire (1662). In 1688 the first red herring ever cured in Great Britain was cured at Gourock. Pop. (1841) 2169; (1901) 5261.

Govan (*Guv'van*), a police-burgh (since 1864) of Lanarkshire, on the south bank of the Clyde, outside the municipal boundaries of Glasgow, but connected with the city by continuous rows of buildings. Its leading industry is shipbuilding and engineering. Govan Park, 40 acres in extent, was gifted in 1885 by Mrs Elder, at a cost of £50,000. Pop. (1836) 2122; (1871) 19,200; (1891) 63,625; (1901) 82,174.

Gower, a peninsula forming the west part of Glamorganshire (q.v.).

Gowhatty. See ASSAM.

Gowran, a village in the county, and 8 miles E. of the town, of Kilkenny. Pop. 416.

Gowrie, CARSE OF. See PERTHSHIRE.

Goyana, a town of Brazil, 40 miles N. by W. of Pernambuco. Pop. 15,000.

Goyaz, the central province of Brazil, falls within the dry plateau region, rising in the south to an important range of mountains. Area, 287,430 sq. m.; pop. (1888) 211,721, mostly half-castes.—The capital, Goyaz, on the Vermelho, a tributary of the Araguay, preserves, in its cathedral and large government buildings, traces of better days. Pop. 8000.

Gozo (Roman *Gaulus*), a British Mediterranean island, 4 miles NW. of Malta, has, with the adjacent smaller island of Comino, an area of 20 sq. m. and a pop. of 19,620. The chief town is Babato, near the centre.

Graaf-Reinet, a town of Cape Colony, nearly girdled by the Sunday River, 185 miles N. of Port Elizabeth by rail. Founded in 1784, it still preserves the quaint characteristics of the old Dutch town. Behind it the Sneeuwberg Mountains rise to a height of 1000 to 1500 feet. Pop. 10,100.

Gradisca, a town of Austria, on the Isonzo, 25 miles NW. of Trieste, which came to Austria in 1511, and in 1754 was united to Görz (q.v.). Pop. 4000.

Graemsay, an Orkney island, ½ mile S. of Stromness, measuring 1½ by 1 mile. Pop. 195.

Gräfenberg, a village in the north-west corner of Austrian Silesia, 50 miles N. of Olmütz. The spot where the water-cure was introduced in 1826 by Vincenz Priessnitz (1799–1851), it still is visited yearly by some 1500 persons.

Gräfrath (*Gref'rât*), a town of Rhenish Prussia, 12 miles E. by S. of Düsseldorf. Pop. 6299.

Grafton, (1) a town of New South Wales, 350 miles NE. of Sydney, on the navigable Clarence River, 45 miles from the sea. The rich agricultural land in the neighbourhood yields sugar, tobacco, &c., and gold, silver, coal, and copper are also found. Pop. 4160.—(2) A town of Massachusetts, 9 miles SE. of Worcester. Pop. 4889.

Gragnano (*Gran-yâ'no*), a town of Italy, 20 miles by rail SE. of Naples. Pop. 14,100.

Graham's Land, an island of the Antarctic Ocean, discovered by Biscoe in 1832, lies between 65° and 67° S. lat. In front, towards the north, are a number of islets, called Biscoe's Chain.

Grahamston. See FALKIRK.

Grahamstown, the capital of the eastern province of Cape Colony, stands near the centre of the maritime division of Albany, 1728 feet above sea-level. By rail it is 106 miles NE. of Port Elizabeth, and 43 NW. of Port Alfred. It is the seat of two bishops—Anglican and Roman Catholic; and in its Anglican cathedral is a monument to Colonel Graham, after whom the city was named in 1812. Leather is manufactured, and among the institutions are the museum, St Andrew's College, public library, hospital, and barracks. The population (one-third of it coloured natives) is about 15,000.

Grahamstown, New Zealand. See THAMES.

Graian Alps. See ALPS.

Grammichele (*Gram-mi-kä'le*), a town of Sicily, 33 miles SW. of Catania, on a mountain-ridge, 1768 feet above sea-level. Pop. 15,804.

Grammont (Fr.; Belg. *Geeraerdsbergen*), a small town in the Belgian province of East Flanders, on the Dender, 14 miles by rail S. by E. of Ghent. Pop. 12,000.

Grampians, a name very loosely applied to the mountain-system of the Scottish Highlands. Some, for instance, restrict it to a 'chain' of heights bordering the Lowland plain from Dumbarton to Stonehaven, whilst others include a 'range' extending from Stonehaven to Ben Nevis, as well as the Cairngorm group, Schiehallion, &c. Hector Boece adopted the name in 1527 from Tacitus's *Mons Grampius* or *Graupius*, the scene in 86 A.D. of Agricola's crushing defeat of Galgacus. Where that battle was fought has itself been hotly contested. Ardoch, Dalginross, near Comrie, and Urie, near Stonehaven, are among the sites named, but Dr Skene prefers the peninsula formed by the Isla's junction with the Tay.—GRAMPIANS is also the name of a range of Australian mountains, rising to 5600 feet, in the west of Victoria (q.v.).

Grampound, a decayed Cornish market-town, 7 miles SW. of St Austell. Pop. 495.

Gran, a royal free-town of Hungary, on the right bank of the Danube, here crossed by a bridge of boats, 25 miles NW. of Pesth, and opposite the mouth of the river Gran (length, 150 miles). Its great domed cathedral (1821–56), on the castle hill, rivals in its magnificent proportions St Peter's at Rome. Near is the palace of the prince-archbishop, who is primate of Hungary. The warm mineral springs of Gran have also some fame. Pop. 16,950. Here St Stephen, the first king, was born in 979, and baptised and crowned in 1000; soon it became the greatest commercial town in the kingdom, but never recovered from the storming by the Tartars in 1241. The old name, *Istrogranum* ('Danube grain-town'), appears now in the Magyar *Esztergom*.

Grana'da, an ancient Moorish kingdom of Spain, embracing the south-eastern portion of Andalusia, and now divided into the three modern provinces of Granada, Almeria, and Malaga. Area, over 11,000 sq. m., with a population of 1,500,000. Except in the narrow strip of coast-region along the Mediterranean, the surface is a succession of mountain and plateau rising in the centre to the snow-capped Sierra Nevada; but the soil is fertile, and the ancient Granada, which became an independent kingdom after the fall of the caliphate of Cordova in 1236, supported a population of 3 millions, and sent 100,000 men into the field, but in 1492 was conquered by the Spaniards. Area of the modern province, 4928 sq. m.; pop. (1877) 479,066; (1900) 492,460.

GRANADA, the town, has sadly declined since the days of its Moorish masters, but still ranks as one of the larger cities of Spain. It lies at the foot of the Sierra Nevada, on and between two hills, the southernmost being the site of

the famous Alhambra (q.v.), and is 2245 feet above sea-level, and 126 (by rail 179) miles E. by S. of Seville. It overlooks a fertile and extensive plain, and stands on the right bank of the Jenil. The modern town is commonplace and dull, with wide streets and open squares; but the old houses, with their flat roofs, turrets, particoloured awnings, balconies, and fountains, preserve a half oriental aspect, and the labyrinths of narrow, tortuous, ill-paved, ancient streets offer picturesque views. Granada is the seat of an archbishop, and has a university (1531) attended by nearly 1000 students. The cathedral, begun in 1529, contains the tombs of Ferdinand and Isabella, and of Philip I. and his consort Juana, fine specimens of Italian Renaissance sculpture. In the monastery of San Geronimo the 'Great Captain,' Gonsalvo di Cordova, is buried. The industry and trade of the town are inconsiderable. Population, about 76,000. Granada was founded by the Moors in the 8th century, not far from the ruins of an ancient Celtiberian town, Illiberis, and rapidly rose to distinction as a wealthy trading city and as a seat of arts.

Granada, the capital of a Nicaraguan dep., founded in 1522, stands on the north-west side of Lake Nicaragua, and is connected with Managua by rail. Pop. 25,000.

Granard, a town of County Longford, 3 miles W. of Ballywillan station. Pop. 1622.

Gran Chaco, an extensive central tract of South America, extending from the southern tropic to 29° S. lat., and bounded on the E. by the Paraguay and Paraná, and on the W. by the Argentine provinces of Santiago del Estero and Salta. Its area, about 180,000 sq. m., exceeds that of Great Britain and Ireland by one-half. The portion south of the Pilcomayo belongs to Argentina, and the remaining third to Paraguay. Since 1885 many agricultural settlements have been made.

Grand Bassam, See GOLD COAST.

Grand Cañon. See COLORADO.

Grand-combe, LA, a coal-mining town in the French dep. of Gard, 41 miles NNW. of Nimes. Pop. 11,500.

Grand Forks, capital of Grand Forks county, North Dakota, on the Red River of the North, opposite the mouth of Red Lake River, is 55 miles N. of Fargo. It has flour and saw mills and ironworks. Pop. 8000.

Grand Haven, capital of Ottawa county, Michigan, on Lake Michigan, and on the south bank of Grand River, 31 miles W. by N. of Grand Rapids by rail. It has a medicinal spring and a harbour, shipping lumber and grain. Pop. 5023.

Grand Lahou. See GOLD COAST.

Grand Popo, a French settlement in Guinea, on the Slave Coast, 25 miles W. of Whydah.

Grandpré, a village in the French dep. of Ardennes, on the Aire, 40 miles NNE. of Châlons. Here, in 1792, Dumouriez was defeated by the Allies.

Grand Rapids, capital of Kent county, Michigan, stands at the head of steamboat navigation on Grand River, here crossed by six bridges, 60 miles WNW. of Lansing. The river, which enters Lake Michigan 40 miles below, here falls 18 feet in a mile, and across it extend the rapids which give name to the town. Conducted by canals, it supplies motive-power to numerous sawmills and manufactories of furniture and wooden ware, farming implements, flour, machinery, &c., though steam is now in use in most of the factories. Stucco-plaster and white bricks are largely made here. The city is the seat of an Episcopal bishop. Pop. (1870) 16,507; (1880) 32,016; (1890) 60,278; (1900) 87,565.

Grangemouth, a rising port in Stirlingshire, 3 miles ENE. of Falkirk. Founded in 1777, and erected into a police-burgh in 1872, Grangemouth has extensive quays and warehouses, docks (including a large one opened in 1882), a graving-dock, and shipbuilding yards. The trade of the port has risen very rapidly. In 1840 the shipping entering and clearing it was 31,686 tons annually; in 1876, 840,326; since 1904 it has exceeded 2,230,000 tons—the port then ranking fifth in importance in Scotland. Since 1887 there has been a regular line of passenger-steamers between Grangemouth and London, owned by the Carron Iron Company, whose works are within 2 miles of the port. The principal imports are timber, hemp, flax, tallow, deals, iron, and grain; and the exports are manufactured iron, and coal. At Grangemouth some of the earliest experiments in steam-navigation were made, the *Charlotte Dundas* being built there in 1801. Pop. (1831) 1155; (1871) 2569; (1891) 6354; (1901) 8386.

Gran Sasso d'Italia ('Great Rock of Italy'), or MONTE CORNO, from its resemblance to a horn on the east, is situated on the borders of the Abruzzi, between Teramo and Aquila. It is the highest summit (9574 feet) of the Apennines.

Granson, or GRANDSON, an ancient town in Switzerland, on the Lake of Neuchâtel, 21 miles SW. of Neuchâtel; pop. 1762. Here in 1476 the Swiss defeated Charles the Bold.

Grantchester, a village on the Cam, 2½ miles SSW. of Cambridge. Pop. of parish, 1196.

Grantham (*Gran'tham*), a market-town on the Witham's left bank, 25 miles SSW. of Lincoln, and 105 NNW. of London. It lies on the ancient Ermine Street, and is an important junction on the Great Northern Railway; whilst a canal (1793), 30 miles long, connects it with the Trent near Nottingham. High over the red-tiled brick houses soars the noble gray spire (278 feet high) of St Wolfran's Church, which, in style mainly Early English of the 13th century, has been finely restored since 1865. An Eleanor cross was demolished in 1645, and a castle has left no trace; but the quaint Angel Inn is still standing, in which Richard III. signed Buckingham's death-warrant. Of King John, too, Grantham has memories, and of Oliver Cromwell, who here on 13th May 1643 won his first success; but the town's greatest glory is Sir Isaac Newton, who during 1655–56 idled, fought, and rose to be head-boy in its grammar-school. A bronze statue of him was erected in 1858; and there is also a bronze statue of the Hon. Fred. Tollemache (1890). The said school was founded by Bishop Fox in 1528, re-endowed by Edward VI. in 1553, and reconstituted in 1876. The manufacture of agricultural implements, malting, and brick-making are industries. Grantham, since 1905 the see of a suffragan bishop, from 1463 till 1885 returned two members to parliament—now only one. The borough boundary was largely extended in 1879. The population, hardly 11,000 in 1851, had by the beginning of next century reached 17,600. See the local histories of Turnor (1806), Marrat (1816), and Street (1857).

Grant Land, a North Polar region, north of Grinnell Land, between 81° and 83° N. lat., discovered by Hayes, Hall, and Nares in 1875, and partly explored by Nares, who wintered here.

Granton, a harbour on the Firth of Forth, 3 miles NNW. of Edinburgh. It was constructed by the Duke of Buccleuch in 1835–45 at a cost of nearly a quarter of a million.

Grantown, a village of Elginshire, ¾ mile from the Spey's left bank, and 142 miles by rail N. by W. of Edinburgh. Founded in 1776, and a police-burgh since 1890, it is surrounded by pine woods, and is a holiday and health resort. Pop. 1523.

Granville, a fortified seaport in the French dep. of La Manche, on a rocky promontory in the English Channel, 23 miles NE. of St Malo. The industries include fishing, shipbuilding, tanning, and the manufacture of brandy, chemicals, and iron-ware. Pop. 10,500.

Graslitz, a town of Bohemia, on the Saxon border, 142 miles WNW. of Prague. Pop. 11,800.

Grasmere, a Westmorland village, 4 miles NW. of Ambleside. There are four hotels. Pop. 784. Its antique church is the church of the *Excursion;* and in the churchyard, washed by the Rothay, are the graves of Wordsworth and Hartley Coleridge. 'Grasmere's peaceful lake,' with its 'one green island,' lies ½ mile to the south, between Loughrigg Fell (1101 feet) and Helm Crag (1299). Measuring 1½ by ½ mile, it is 208 feet above sea-level, and 130 feet deep.

Grasse, a town in the French dep. of Alpes-Maritimes, on the southern slope of the Basses-Alpes, 1066 feet above sea-level, and 12 miles N. of Cannes by rail. The seat of a bishopric from 1244 to 1801, it has steep, narrow, crooked streets, a cathedral, and an interesting hôtel-de-ville. Grasse is second only to Paris in its manufactures of perfumes, made from the roses, orange-flowers, heliotropes, mint, &c. grown here. It also manufactures olive-oil, silk, &c., and is growing in favour as a winter-resort. Queen Victoria stayed here in 1891. Pop. 13,960.

Gratz, or **Graz** (formerly *Grätz*), the capital of Styria, in Austria, 141 miles SSW. of Vienna by rail, is a picturesque old town on both sides of the Mur, encircled by fine gardens. Remains of the former fortress still stand on a hill in the centre of the town. Old buildings are the cathedral (1462), two other Gothic churches (one built in 1283), the ancient castle of the Styrian dukes, the Landhaus, the university (with over 1200 students, and a library of 120,000 volumes), &c. The industries include the manufacture of machines, steel goods, rails and railway carriages, sugar, wine, perfumery, stearine candles, soap, &c. Pop. 140,000.

Graubünden. See Grisons.

Graudenz (*Grou-dentz'*), an old town in the province of West Prussia, on the Vistula, 37 miles N. of Thorn. It has iron-foundries, breweries, and tapestry and cigar manufactories. Pop. (1875) 14,553; (1900) 32,800. About a mile north of it on a hill (282 feet) is the fortress of Graudenz (1776), since 1874 a barrack and military prison.

Gravelines (*Grâv-leen'*), a fortified town in the French dep. of Nord, in a marshy locality at the mouth of the Aa, 13 miles by rail ENE. of Calais. A desolate-looking place now, with grass-grown streets, it has an historic past, as the scene of Egmont's victory over the French (1558), and the place off which the English dispersed the Armada (1588). Pop. 5900.

Gravelotte, a village of Lorraine, 7 miles W. of Metz. Here, on 18th August 1870, Bazaine was severely defeated by the Germans.

Gravesend, a port and borough of Kent, on the right bank of the Thames, 24 miles ESE. of London. It consists of the old town, with narrow, irregular streets, and of the handsome new town on the high ground. In the vicinity are extensive market-gardens; and many of the inhabitants are employed in fishing. Gravesend forms the limit of the port of London; and here pilots and custom-house officers are taken aboard vessels going up the river. The salubrious air and beautiful scenery at Gravesend render it a favourite watering-place with Londoners. It carries on some shipbuilding, iron-founding, soap-making, and brewing, and a considerable trade in supplying ships' stores. Gravesend was incorporated under Elizabeth, and since 1867 has returned one member to parliament. Pop. of the municipal borough (1901) 27,175; of the parliamentary borough, 39,766. At Gravesend the fleets of early voyagers, as that of Willoughby in 1553, and of Frobisher in 1576, assembled, and here the lord mayor, aldermen, and city companies of London were wont to receive all strangers of eminence, and to conduct them up the river in state. A great fire in 1850 did damage to the amount of £100,000. See Arden's *History of Gravesend* (1843).

Gravina, a town of southern Italy, 33 miles SW. of Bari. Pop. 15,612.

Gray, a town in the French dep. of Haute-Saône, on the Saône, 25 miles NW. of Besançon. It has a ruined castle of the dukes of Burgundy. Pop. 5759.

Grays Thurrock, a town of Essex, on the Thames, 19½ miles E. by S. of London. Pop. of urban district, 13,834.

Graz. See Gratz.

Grazalema, a town of Spain, 53 miles ENE. of Cadiz. Pop. 8000.

Great Basin. See Great Salt Lake.

Great Bear Lake. See Bear Lake (Great).

Great Britain, as distinguished from Britannia Minor, or Brittany, in France, was not officially so called till in 1604 James I. styled himself king of Great Britain. Lying between 49° 57′ 30″ and 58° 40′ 24″ N. lat., and between 1° 46′ E. and 6° 13′ W. long., Great Britain is the largest island of Europe, and is bounded by the Atlantic, the North Sea, the English Channel, the Irish Sea, and St George's Channel. The most northerly point is Dunnet Head, in Caithness; the most southerly, Lizard Point, in Cornwall; the most easterly, Lowestoft Ness, in Suffolk; and the most westerly, Ardnamurchan Point, in Argyllshire. Its greatest length is about 608 miles, and its greatest breadth (from Land's End to the east coast of Kent) about 325 miles; while its surface contains 88,226 sq. m. The geology of Great Britain is of peculiar importance. Nearly all the recognised 'systems' occur in Britain, although some of these are more fully represented elsewhere; the only system not found here is the Miocene. The mountainous regions of the north and west are formed of the oldest rocks, and as we move south-eastwards, we gradually pass over newer strata, until, in the east of England, we come to the uppermost divisions of the Tertiary. The mineral wealth, especially the coal and the iron, are the real sinews and muscles of Britain's mighty power. No other country has similar advantages in such an area. In some respects the most important of British minerals is coal. Formerly, the only iron produced in the country was obtained from the greensand of the south-east of England, and from the brown hematite of the Dean Forest.

The ore was smelted with charcoal. But the introduction of coke and coal for smelting, and the discovery of numerous additional and unthought-of deposits, especially in connection with coal-bearing strata, immensely increased the production of iron. The most important ore is the ferruginous shale, or impure argillaceous carbonate of iron, which occurs in connection with every coalfield in Britain. The brown and red hematites, associated with the oldest Palæozoic rocks, yield also a large amount of metallic iron. Tin is obtained from only two counties—Cornwall and Devon. Copper is principally obtained from the same two counties. Lead and silver are obtained from the same ore from numerous mines in Palæozoic districts; the most productive English mines being in Northumberland, Durham, Cumberland, Shropshire, Yorkshire, Derbyshire, Cardiganshire, Glamorganshire, and the Isle of Man. In Scotland the most productive lead and silver mines are at Wanlockhead and Leadhills. Zinc is obtained chiefly from Cardigan, Denbighshire, Carnarvon, Flint, Cumberland, and the Isle of Man. Sulphur ores (iron pyrites) are raised in different parts of Great Britain; as also arsenic, manganese, gold, nickel, silver-copper, fluor-spar, and wolfram. Salt occurs chiefly in Cheshire and Ulster. The total value of the coal and other minerals raised in the United Kingdom was £40,345,945 in 1866, £74,094,638 in 1880, and £107,134,854 in 1902. The total value of the metals obtainable by smelting from ores produced in the United Kingdom (aluminium, antimony, copper, gold, iron, lead, magnesium, silver, sodium, tin, zinc) in 1887 was £12,795,993; in 1902, £15,287,357.

The physical features of a country are intimately connected with its geological structure. Thus the Highlands and Southern Uplands of Scotland are built up chiefly of crystalline schists and the older Palæozoic strata, while the intervening lowlands of the so-called Central Plain are composed mainly of the younger Palæozoic rocks and overlying accumulations of superficial deposits. The mountainous tracts of Scotland consist therefore of more enduring or less readily eroded materials than the lowlands. The mountains are monuments of erosion; they are the wreck of an old tableland. The Highlands (q.v.) are intersected from south-west to north-east by the Great Glen, which probably occupies the line of a dislocation. It is customary in geographical text-books to speak of the 'range of the Grampians,' but the Highland mountains do not trend in linear directions, but rather form confused groups. The greatest height reached is 4406 feet in Ben Nevis, less eminences being Ben Macdhui (4296 feet) and Ben Lawers (3984; with cairn, 4004). The southern limit of the Highlands is defined by a line drawn from the Firth of Clyde at Helensburgh north-east to the sea-coast at Stonehaven. North of this line there are of course considerable tracts of less elevated ground, especially along the coast in Aberdeenshire, the borders of the Moray Firth, and Caithness. The coast-line of the Highlands, particularly in the west, is repeatedly broken by numerous and large fjords or deep sea-lochs. And opposite the same coasts appear the numerous islands of the Inner and Outer Hebrides. These fjords are simply submerged land-valleys, while the islands are the higher parts of the depressed continental plateau. The fresh-water lakes vary in size from mere tarns to large mountain-valley lakes like Lochs Lomond, Ness, Awe, Shin, Maree, Tay, &c.

The Central Plain of Scotland may be described as a broad depression of relatively easily eroded materials lying between two tablelands of less readily denuded rocks. The principal features of this low-lying tract have a north-east and south-west trend determined by geological structure, as is seen in the Sidlaw Hills, the Ochil Hills, the Lennox Hills, &c., in the north, and in the Pentland Hills in the south. The surface of the lowland tracts is likewise diversified by many more or less abrupt and isolated hills, such as Arthur's Seat, Dalmahoy Crags, the Castle-rocks of Edinburgh and Stirling, &c. Most of these heights consist of igneous rocks of a more durable character than the strata of sandstone, shale, &c., which surround them.

The Southern Uplands of Scotland form a broad belt of high ground extending from the sea-coast of Haddingtonshire and Berwickshire south-west to the shores of Ayrshire and Galloway. Like the Highlands the area of the southern uplands is simply an old tableland, furrowed into narrow ravine and wide dale by the operation of the various agents of erosion. The rocks that enter into their composition are chiefly Silurian, greywackes, and shales, and consequently there is less variety of contour and colour than in the Highlands. Now and again, however, the mountains assume a rougher aspect, more especially in Carrick and Galloway (highest point Merrick, 2764 feet). The Silurian strata are overlaid towards the south by younger Palæozoic rocks; thus we have the broad vale of Tweed and the lower reaches of Teviotdale occupied chiefly by sandstones and shales. The Cheviot Hills, again, are built up in the north-east chiefly of bedded igneous rocks which towards the south-west give place to sandstones.

Crossing the borders of Scotland and England we find the high ground just referred to is continued southwards through Northumberland, Cumberland, Durham, Yorkshire, Lancashire, and Derbyshire to form what is called the Pennine Chain. This 'chain' varies in height from 1200 to 3000 feet, reaching its highest summit in Scafell Pike, Cumberland, which is 3210 feet high. The Lake district of Cumberland and Westmorland, being built up mainly of Silurian rocks, reproduces the characteristic features of the southern uplands of Scotland. And the same is to a large extent true of the mountainous parts of Wales (whose highest point, Snowdon, is 3571 feet), while not a few of the features of the Scottish Highlands reappear on a small scale in Devonshire and Cornwall. All these hillier tracts are composed essentially of Palæozoic and associated igneous rocks. The major portion of England, however, consists principally of younger strata, and may be considered on the whole as a somewhat undulating plain traversed by ridges of varying elevation, which trend in a general direction from north-east to south-west. The band of Jurassic strata, extending from the Yorkshire Moors south and south-west to the coast of Dorset, forms a tortuous belt of tableland and escarpment, rising sometimes to a height of 1500 feet, and throughout its course presenting usually a bold face to the west and a gentle slope to the east. Similar escarpments accompany the outcrop of the chalk, but they are neither so lofty nor so bold. They form the Wolds of Yorkshire and Lincoln, and rise into a low range of hills that extend from Norfolk to Wilts, the more prominent portions of which are known as the Chiltern Hills, the Marlborough Downs, and Salisbury Plain. On the north and south side of the Wealden anticlinal axis, similar chalk-hills

appear, forming the North Downs in Surrey and Kent, and the South Downs in Hants and Sussex. Lying between the Pennine Chain in the west, and the Yorkshire Moors and Wolds and Lincoln Heights and Wolds in the east, lies the broad depression traversed by the Ouse and Trent which is occupied chiefly by Triassic strata. In like manner, a low plain separates the mountain-tracts of Wales from the Pennine Chain, which is similarly occupied by Triassic and younger Palæozoic strata. The maritime parts of Lincoln, Norfolk, Suffolk, Essex, and Middlesex are for the most part low-lying, being composed of Cretaceous and overlying Tertiary and Quaternary deposits. The whole surface of Britain, with the exception of the extreme south of England, has been more or less modified by glacial action, to which is largely due the rounded contour and flowing outline of all but the highest elevations. The surface-features of the low-lying tracts have also been greatly modified by the enormous morainic and fluvio-glacial accumulations which were spread over the country in Pleistocene times.

The physical geography of Ireland is discussed elsewhere (see IRELAND); in its geological relations it is intimately related to Great Britain—its orographic features being likewise determined by the character of its various rock-masses. Ireland, like its sister-island, forms a portion of the depressed continental plateau—its highly indented coast-line, more especially in the west and south-west, being the result of a comparatively recent submergence. There can be no doubt that in post-glacial times Ireland was joined to Britain, which at that period formed a part of the continent of Europe.

The climate of Great Britain derives its peculiar character from the insular situation of the country, taken in connection with the prevailing direction of the winds. It is mild and equable in a remarkable degree, the winters being considerably warmer, and the summers colder than at other places within the same parallels of latitude. For at least three months, the mean monthly temperature ranges between 50·0° and 60·0°; for other three months it continues about 60·0°, or occasionally a little higher, seldom more than four degrees; and for the remaining six months it ordinarily ranges between 36·0° and 48·0°. Since the Reports of the Registrar-general clearly prove that the temperature most conducive to health is between 50·0° and 60·0°, it follows that, as far as concerns temperature, the climate of Great Britain is one of the healthiest in the world. The mean temperature of England is 49·5°, and of Scotland 47·5°. There is a difference of fully six degrees between Falmouth, in Cornwall, and Shetland, attributable chiefly [illegible] difference of their latitudes. It becomes [illegible]er, as the force of the sun's rays increases; (1875) 14,[illegible]while the winter temperatures are re- of it on a hu[illegible]° and 39·0°, the summer tempera- (1776), since l[illegible]and 53·4°. The highest summer

Gravelines (61·2° in London, and the lowest French dep. of [illegible]Nt, the difference being 12·0°. the mouth of the [illegible]laces on the west are in of Calais. A desolate-look[illegible]the same latitudes, grass-grown streets, it has [illegible]the Atlantic. In the scene of Egmont's victory[illegible]he west and the (1558), and the place off which [illegible]greater. persed the Armada (1588). Pop. [illegible]ost prevalent

Gravelotte, a village of Lorrain[illegible]l and May, of Metz. Here, on 18th August 18[illegible]degree to was severely defeated by the Germans[illegible]y dry and

Gravesend, a port and borough of [illegible]hem very the right bank of the Thames, 24 miles [illegible]d, the south-west winds, coming from the Atlantic, are moist and genial, and it is on their greater frequency—being, as compared with the north-east, in the proportion of two to one—that the salubrity of the British climate in a great measure depends.

In those districts of England where hills do not intervene, the annual rainfall is about 25 inches, and in similar parts of Scotland about 28 inches; but these amounts, which may be considered as the rainfalls of the driest districts of the two countries, are variously increased by proximity to hills or rising grounds, according as the place is situated in the east or west of the island, viewed in relation to the direction of the wind which brings the rain, and by its lying on the wind or on the lee side of these hills. Since it is the south-west winds which bring by far the larger proportion of the rainfall, the heaviest falls take place among the hills in the west of the country, in great part of the area about 40 inches. But over broad districts in the West Highlands and Skye, and in limited areas in the Lake district, and in North and South Wales, the annual rainfall exceeds 80 inches. At the head of Glencroe, Argyllshire, it rises to 128½ inches, and at the Stye, Cumberland, to 186 inches.

Area and population were in 1901:

	Area.	Pop.
England	50,823 }	32,527,843
Wales	7,363 }	
Scotland	29,820	4,472,103
Ireland	32,531	4,458,775
Isle of Man	220	54,752
Channel Islands	75	95,618
Soldiers and sailors abroad	—	367,736
United Kingdom	120,832	41,976,827
Indian Empire	1,766,797	294,361,056
Colonies and Protectorates	10,039,203	61,588,944
British Empire	11,926,832	397,926,827

There were, in 1904, in Great Britain and Ireland 88 towns above 50,000 in population, of which seventy-four were in England, eight in Scotland, three in Ireland (Belfast, Dublin, Cork), and three in Wales (Cardiff, Rhondda, and Merthyr-Tydfil). Of the total area of 56,786,741 acres in Great Britain, 32,317,610 acres were under cultivation in 1904. Of 20,710,589 acres in Ireland, 15,230,124 were under cultivation.

In 1903–4 the net revenue was £141,545,579, and the expenditure £140,961,136. In 1904–5 the estimated revenue was £143,610,000. In 1904 the national debt was £794,498,100. In 1888 the total imports were £387,635,743, and the exports £298,577,541. In 1904 the total imports were £551,362,124, and the total exports £371,139,816. Of the latter sum £300,817,897 represented British produce, the remaining £70,321,918 being foreign and colonial produce re-exported. In addition, the imports of gold and silver bullion in 1904 amounted to £45,503,927, and the exports to £46,302,932. In 1903 the imports from British possessions amounted to £113,670,792, and from foreign countries to £428,929,497, of which £122,112,652 were from the United States, £49,847,184 from France, £34,533,390 from Germany, and about the same amount from Holland. Of the exports of British produce in 1903, £111,146,864 went to British possessions, and £179,653,244 to foreign countries—£22,605,131 to the United States, £15,800,011 to France, and £23,550,631 to Germany. The number of vessels in 1903 was 20,452 (10,122 steamers) of 10,268,604 tons. The railways had a length of 22,435 miles, the telegraph lines of 51,483 miles. In 1905 the regular army comprised 217,000 men; besides army reserve, 80,000;

militia and militia reserve, 142,446; yeomanry, 28,114; volunteers, 346,136; making, with Indian and colonial native corps, a total of 884,095. The navy in 1905 consisted of 365 vessels, of which 44 were battle-ships, 28 armoured cruisers, 10 protected cruisers of the first class, 20 of the second class, and 25 of the third class, besides torpedo gunboats, torpedo boats and destroyers, and submarines, with a total of 131,100 officers and men of all ranks.

On the colonies, details will be given under their several heads; but it may be useful here to name the chief colonies and dependencies: Australia, Tasmania, and New Zealand; Canada and Newfoundland; Cape Colony, Natal, and associated South African lands; India and Ceylon; the West Indies. Other dependencies reckoned to Asia are the Straits Settlements, North Borneo, Labuan, Sarawak, Aden, Hong-kong; to the Mediterranean, Gibraltar, Malta, Cyprus; to Africa, Gambia, Sierra Leone, Gold Coast, Lagos, Nigeria, East Africa and Central Africa, with Uganda, &c., Rhodesia, Orange River Colony, Transvaal, Swaziland; to Australasia and the Pacific, Fiji, Fanning, Christmas, Malden, Starbuck, Ellice, Gilbert Islands; to the Indian Ocean, Mauritius and Rodriguez; to the Atlantic, Bermudas, Ascension, St Helena, Tristan da Cunha, Falkland Islands.

See the articles ENGLAND, SCOTLAND, IRELAND, WALES; Anderson's *Book of British Topography* (1831); works on the geography and physiography of the British Islands, by Ramsay (1878), Hull (1882), Rudler and Chisholm (1885), Reclus (1888), A. Geikie (1889), Seeley, and others; on ethnology, Beddoe (1886), Lubbock, Nicholas, Roemer; on trade and commerce, Leone Levi (1880); Cunningham (1890), Dymes, &c.; besides Thorold Rogers on agriculture, Bevans on manufactures, &c.; Mulhall's *Dictionary of Statistics* (1886; new ed. 1891); and for the colonies, Dilke (1868–90) and C. P. Lucas (1888–94).

Great Fish River, (1) in Cape Colony, rises in the Sneeuwberg Mountains, and flows 230 miles SE. to the Indian Ocean in 33° 25′ S. lat. and 27° E. long.—(2) Or BACK'S RIVER, in North America, is over 440 miles long, and enters an inlet of the Arctic Ocean in 95° W. long., after passing through Lake Pelly. Sir George Back in 1834–35 traced its course to the ocean.

Great Grimsby. See GRIMSBY.

Great Kanawha (pron. *Kanaw'wa*), an affluent of the Ohio, is called New River in its upper course, and rises in the Blue Ridge of North Carolina. It is 450 miles long, and is navigable to a fall 30 miles above Charleston.

Great Marlow. See MARLOW.

Great Ormes Head. See LLANDUDNO.

Great Salt Lake, in Utah, stretches along the western base of the Wahsatch Mountains, about 4200 feet above the sea, forming a principal drainage centre of the vast plateau known as the Great Basin, 800 miles long by 500 broad, in Utah, Nevada, Oregon, California, and Idaho. Well-marked shore-lines on the mountains around, reaching 1000 feet higher than the present level, show that the lake had formerly a vastly greater extent. Great Salt Lake is over 80 miles long and from 20 to 32 broad, but for the most part exceedingly shallow. It contains several islands, the largest, Antelope Island, about 18 miles long. Its tributaries are the Bear, Ogden, Jordan, and Weber, the Jordan bringing the fresh waters of Lake Utah; but Great Salt Lake has no outlet save evaporation, and its clear water consequently holds a large quantity of saline matter in solution, which has varied from 22·4 per cent. (in 1850, when the lake had an area of 1700 sq. m.) to 18·4 (in 1869, when the area had increased to 2360 sq. m.). Of late, the lake has been shrinking again. Several species of insects and a brine-shrimp have been found in its waters, but no fishes; large flocks of water-fowls frequent the shores. The Great Salt Lake was first explored in 1843 by Fremont, and surveyed in 1849–50 by Stansbury. See SALT LAKE CITY, and UTAH.

Great Slave Lake lies in the Canadian North-west Territory (62° N. lat.). Its greatest length is about 300 miles, and its greatest breadth 50 miles. By the Slave River it receives the surplus waters of Lake Athabasca (q.v.); and it discharges by the Mackenzie River into the Arctic Ocean.

Greece is the easternmost of the three peninsulas projected southwards by Europe into the Mediterranean. The mountain-range which cuts off the peninsula from the continent of Europe is an extension of the Balkans. From it run chains from north-north-west to south-south-east, which form the skeleton of Greece. The western boundary of Thessaly is formed by Pindus (7111 feet), the main offshoot of the Balkans. The eastern boundary is also marked not only by the sea, but by important mountains derived from the Balkan system. These are Olympus (9750 feet), Ossa, Mavrovuni, and Pelion (5310). Othrys, a branch of Pindus, forms the south boundary of Thessaly. This branch is continued in the celebrated mountains Parnassus (8036 feet) and Helicon, forms the land of Attica, and reappears as the islands of Ceos, Cythnos, Seriphos, and Siphnos. The Peloponnese, 'the island of Pelops,' or by its modern name the Morea, is connected with northern Greece merely by the narrow isthmus of Corinth (q.v.), now pierced by a canal; its highest point is Taygetus (*Hagios Elias*, 7901 feet). The rivers of Greece are unimportant.

The ancient Greeks were a branch of that family which includes most European peoples, and also the Persians and the Hindus, and is variously called Indo-Germanic, Indo-European, and Aryan. Successive waves of Aryan tribes entering from the north drove emigrants on to and over the isles of Greece to plant Greek cities and Greek culture on the coasts of Asia Minor. At later times Sicily, the Black Sea, Libya, &c. were dotted with Greek colonies; and wherever Greeks were, there, to the Greek mind, was 'Hellas,' which is thus an ethnological rather than a territorial term. The Greeks called themselves *Hellenes*, and the inhabitants of Italy called them *Græci*. The modern Greeks are by no means pure-bred descendants of the ancient Greeks. Indeed, it has been maintained by Fallmerayer that from the 7th century A.D. there have been no pure Greeks in the country, but only Slavs. It is, however, pretty certain that the 2¼ million of modern inhabitants are descendants of the three races that occupied the soil at the time of the Roman Conquest—viz. Greeks, Thracians (mod. Wallachians), and Illyrians (Albanians). Greek, ancient and modern, is a typical Aryan speech.

In 1879 the area was 19,810 sq. m., with a pop. of 1,679,775; the Thessalo-Epirot districts incorporated with the kingdom in 1881 (as an outcome of the Berlin Treaty) added to this the remainder, with a pop. of 299,677, making a total of 25,020 sq. m. and a pop. of 1,979,452. In 1903 the pop. was 2,645,175. Besides the Greeks of the kingdom, the Greeks in various

parts of the Ottoman empire—notably in Constantinople, Macedonia, the western parts of Asia Minor, Crete, Cyprus, and the smaller islands—number above 6,000,000. Athens, the capital, has now a population of 115,000; the towns next in size being Patras, Piræus, and Trikhala, all above 20,000; and there are eight others between 20,000 and 10,000. Greece, although one-half of its area is pasture-land or waste, is mainly an agricultural country; the land is mostly in the hands of peasant-proprietors, and the implements of husbandry are of the most primitive type. Besides cereals, fruits, sugar, tobacco, cotton, and dyestuffs are raised. The chief articles of export are currants (about half of the total), lead and other ores, olive-oil, wine, honey, sponges, &c. The principal imports are cereals and textile goods. The imports have an annual value of from £4,000,000 to £5,500,000; the exports from £3,000,000 to £4,250,000. The exports to Britain average about 1¾ million, and the imports from Britain 1½ million annually. The herding of sheep (3,000,000) occupies about 9 per cent. of the people; the sponge and coral fisheries employ more than 900 boats. The minerals of Greece include lignite, argentiferous lead, zinc, magnetic iron, and marble. There are some 1200 flour-mills worked by water and wind, and about 100 by steam; over 200 distilleries; and numerous dyeworks, tanneries, and manufactures of machinery, cotton and silk goods, &c. About 700 miles of railway are open, and others are in course of construction; and there are nearly 4400 miles of telegraph lines.

The legislative power is vested in a single chamber of representatives, the Boulē, which consists of about 235 paid representatives, elected under the ballot by universal suffrage for a period of four years. Greece is divided for administrative purposes into twenty-six nomarchies or departments, which are again subdivided into 69 districts and 450 communes. The revenue averages from £4,000,000 to £4,750,000, and the expenditure nearly balances. The total debt amounts to £33,000,000, without the last war indemnity. Fully a third of the expenditure is absorbed by the interest on the debt, and a fifth by the ministries of war and marine. The Greek Orthodox Church is established by law, and to it the great mass of the people belong; but there are some 25,000 Mohammedans in Thessaly and Epirus. There are more than 160 monasteries and nunneries, with over 2600 monks and some 500 nuns. Elementary education is compulsory for children between the ages of five and twelve; but the law is not carefully enforced outside the towns, and the majority of the people are illiterate. In 1905 the nominal strength of the army on a peace footing was 24,076—which in the event of war could easily be raised to 100,000; all able-bodied males are liable to service. The navy consisted of four small ironclads, sixteen gunboats, twenty-one torpedo boats and launches, and several other vessels; the officers and men number nearly 3000.

Before the dawn of history, we have traces of the encroachments on one another by various Hellenic or Greek races, tribes, or alliances—Pelasgians, Aetolians, Ionians, Bœotians, and Achaians being amongst them. The first really historical fact is the invasion from the northward by the Dorians, who made themselves masters of the Peloponnesus about the beginning of the 12th century B.C. A consequence of this Dorian invasion was the colonisation of the islands and of the coasts of Asia Minor by Æolians, Ionians, and later by Dorians also. The seeds of that literature, art, and philosophy, which afterwards made Greece, and specially Athens, glorious were sown and first nurtured in the colonies. By degrees Greek colonies established themselves on the shores of the Black Sea, and along both north and south coasts of the Mediterranean, Sicily was largely Hellenised, and South Italy became Magna Græcia. Neither at home nor abroad had the Greeks the faculty of union as a nation or race; even in the fatherland there were multitudes of small states, a city with three or four miles of territory being often an independent state of itself, and frequently at war with its neighbours. Almost the only central bond of union, besides the Hellenic tongue in its various dialects, was the oracle of Apollo at Delphi. For long, two Greek states were pre-eminent. The powerful Dorian state of Sparta was reorganised about 800 B.C. by Lycurgus, the kingly institution being retained. Athens was democratic before that date, and its constitution, fixed by Solon in 594 B.C., ultimately triumphed over the tyranny of Pisistratus and his sons. Encroachments of the Persians on the Greek colonies of Asia Minor led to the invasion of Greece by the Persians in 490 B.C., an invasion gloriously repelled by the Athenians at Marathon. Xerxes was defeated at Thermopylæ, Salamis (480), Platæa, and Mycale, Athenians and Spartans for a time combining their forces. Now it was that Greek literature and Greek art attained a perfection that has made the rest of the world ever since scholars and imitators of the Greeks of the Periclean period. The next period is marked by the fratricidal struggle between Athens and Sparta in the Peloponnesian war, which ended in the humiliation of Athens in 404 B.C., and the enfeeblement of all Greece. In 379–371 the Thebans asserted themselves victoriously against the Spartans; and forty years later Philip of Macedon subjected Greece to a semi-barbarous nation. Under his son, Alexander the Great, the Greek name and the Greek fame were extended into Asia and Africa by the Macedonian king's campaigns. In 197 the Romans broke the Macedonian power, and by 146 were masters of Greece, which subsequently shared the fortunes of the Roman empire. When the Roman empire was divided (395 A.D.) into the Eastern and Western empires, Greek was of course the language of the Eastern, Greek, or Byzantine half of the Roman dominion. The Byzantine emperors fell in 1453 before the Turks, under whom the Greek race reached the lowest stage of political, intellectual, commercial, and spiritual decadence, though the Greek Church survived, and the old Greek tongue, in corrupted guise, continued to be spoken. A national reawakening began in 1821; and by 1828, with the support of Britain, France, and Russia, Greece was again a free, but small and weak kingdom. The Russo-Turkish war of 1877–78 added Thessaly and part of Epirus to its area; but the ambition of the Greeks to secure a large share of the 'sick man's' inheritance—especially Macedonia and Constantinople—is one of the causes that has led to growing embarrassment in the national finances, and to national bankruptcy in 1893.

On the land of Greece and its people, see works by Leake (1830–35), Wordsworth (1831; new ed. 1883), Tozer (1873), Sergeant (1879, 1880), Jebb (1880), and Rennell Rodd (1892); on the history, the works of Thirlwall, Grote, Curtius, Finlay, and Bury.

Green Bay, capital of Brown county, Wisconsin, at the head of Green Bay and the mouth

of Fox River, 65 miles NNE. of Fond du Lac by rail. It has a handsome Roman Catholic cathedral, a good harbour, export of lumber, iron-works, and sawmills. Pop. 18,700.

Greencastle, once a little Antrim village, now part of northern Belfast.

Greenhithe, a Kentish village on the Thames, 3 miles E. by N. of Dartford. Hence Franklin sailed in 1845.

Greenland, an extensive region, stretching from 59° 45′ to 83½° N. lat. and from 17° to 73° W. long., now known to be an island engirt by smaller islands, but an island of almost continental size. Even its southern end has a thoroughly arctic character. It was discovered by the earliest Scandinavian settlers in Iceland. After having been sighted by Gunbjörn, it was visited by Erik the Red, who, having explored it, founded there in 986 two colonies. The colonies afterwards came under the dominion of Norway, but were neglected and suffered from disaster and privation, until the western settlement was attacked and destroyed by Eskimo intruders from the north some years after 1340. Subsequently the connection with Europe gradually grew less and less, wholly ceasing after 1448, when Greenland almost passed into oblivion. On its rediscovery by John Davis in 1585 the Eskimo were the only inhabitants. In 1721 the modern Danish settlements on the west coast were founded by Hans Egede as missionary stations. Remarkable ruins of undoubted Scandinavian origin were early discovered on two points of the west coast, one between 60° and 61° N. lat., the other between 64° and 65°. In each case the ruins lie scattered over an area of some hundred square miles, occupying small flat and fertile spots around the heads of the fjords. The whole coast-line may be roughly estimated at 3600 miles, or 192,000, following every island, fjord, and peninsula. The area again may be variously estimated at 512,000 and 320,000 sq. m., according as one includes or omits the islands and fjords running inland, which are 60 miles long on an average. A huge ice-sheet covers the whole of the interior. The surface of this enormous glacier, only occasionally interrupted by protruding mountain-tops, rises slightly towards the interior. In 1888, when Greenland was crossed from east to west (by Nansen), the 'divide' was found to attain some 10,000 feet above the sea. On account of this ice-cap Greenland has no rivers corresponding to its magnitude; instead of its being drained by rivers, the inland ice at certain points of the coast is thrust into the sea by forces which have their origin in extensive lateral glaciers in the interior. These points are represented by the so-called ice-fjords, through which the ice, whose thickness may be estimated at 1000 feet, is pushed on an average with a velocity of 50 feet in twenty-four hours into the sea, where it breaks into fragments—the bergs. The coast-margin, itself largely bounded with perpetual ice, is very mountainous; bold headlands, 3000 to 5000 feet high, are common, some even rising 6000 to 7000 feet. Low flat land is found only in small patches, especially round the heads of some of the fjords. These inlets generally take the form of narrow channels, frequently more than 1000 feet deep.

The climate of Greenland, when contrasted with the climate of the eastern coasts of the Atlantic in the same latitude, shows a surprising difference. The southern point of Greenland has a mean temperature corresponding to that of the most northern shores of Iceland and Norway. But the difference consists more in the want of summer than in the severity of the winter. The mean of summer, of winter, and of the year at Upernivik (73° N. lat.) is respectively 38·2°, −6·6°, and 13·3° F. The mountains of Greenland consist chiefly of granitic and gneissose rocks. Metallic ores have hitherto proved rather scarce. Besides coal, graphite has been discovered; and 10,000 tons of cryolite are annually exported for the manufacture of soda and alum. A mineralogical rarity is the native iron, of which a mass found on Disco Island was estimated to weigh 46,200 pounds. In sheltered slopes and valleys around the fjords south of 65° N. lat. copse-woods are found, consisting of alder, white birch, more rarely rowan-trees, which grow to 6 or 8 feet high. Berries are abundant, especially crowberries and whortleberries. The Greenland flora comprises 395 species of phanerogams and higher cryptogams, and 330 species of mosses. The fauna numbers 33 species of mammalia, 124 of birds, 79 of fishes. It is from the animal kingdom, especially from the seals and whales, that the natives derive almost their whole subsistence. Reindeer, of which 25,000 were shot annually in the years 1845–49, are now rather scarce. Of fish, sharks only have any commercial value, but several other kinds afford food for the inhabitants. American ships have for some years tried halibut-fishery on the banks off the west coast. The dogs used for draught are of great importance in the north. A few goats and horned cattle have been kept by the Europeans, but mainly as a curiosity.

The inhabitants of Greenland are of the Eskimo race, more or less mixed with European blood. The individuals of the mixed race hardly differ as to language and habits from the pure Eskimo. Besides the natives, about 250 Europeans usually reside in the country. Total pop. about 11,600. Since 1774 the trade of Greenland has been a royal monopoly. There are 12 chief stations for trading and the Danish Mission; the southernmost is Julianehaab (60° 42′ N. lat.), the northernmost Upernivik (72° 48′ N. lat.). At Godthaab there is a seminary for training native catechists; of late natives have been appointed pastors. The Moravian Mission has four chief stations.

See *Danish Greenland*, by Rink (Lond. 1877), and works on the expeditions of Scoresby, Clavering, Kane, Hall, Nares, Greely, Nansen, and Peary.

Greenlaw, a small town of Berwickshire (q.v.), on the Blackadder, 38 miles ESE. of Edinburgh (by rail 55). Its court-house (1834) is a large Grecian pile. Pop. 744.

Greenlet Island, a small island in Belle Isle Strait, in 51° 34′ N. lat. and 56° 36′ W. long.

Green Mountains, a portion of the Appalachians (q.v.).

Greenock, an important seaport of Renfrewshire, the seventh largest town in Scotland, on the southern shore of the Firth of Clyde, 3¾ miles by water S. of Helensburgh, and 22½ by rail WNW. of Glasgow. For more than four miles it stretches along the level strip of ancient sea-margin, or climbs up the slopes of the hills, which rise rapidly behind it to a height of 813 feet, and which command splendid views of the opposite coasts of Argyll and Dumbarton shires. Greenock has a reputation of being always wet, and the yearly rainfall does exceed 60 inches; but as the prevalent winds are from the south and west, they are generally mild. The west end of the town, with its elegant and commodious

villas of every style of architecture, its beautiful esplanade, 1½ mile long, its wide and well-paved streets, planted with trees, is particularly attractive. The public buildings, many of them very handsome, include the Renaissance town-hall (1886), with a tower 245 feet high, the county buildings (1867), the custom-house (1818), the poorhouse and lunatic asylum (1876), Wood's Mariners' Asylum (1851), and the Watt Institution (1837), containing a marble statue of Watt by Chantrey. To Sir Michael Shaw-Stewart the town is largely indebted for the Well Park (1851), the Wellington Park (1872), and the Lyle Road (1880). The new cemetery, 90 acres in extent, with its Watt cairn, and the magnificent waterworks (1827–83) also deserve mention. The harbour-works date from 1707, and have cost upwards of 1½ million pounds. Accessible at all states of the tide, they include Victoria Harbour (1850), the Albert Harbour (1866), and the James Watt Dock (1886). The tonnage of vessels belonging to Greenock rose from 29,054 in 1825 to 103,919 in 1867, and 278,097 in 1893 (besides 313 fishing-boats); whilst the tonnage of vessels entering the port ranges between 1,000,000 and 1,600,000 per annum. Shipbuilding (mostly iron or steel steamers) has been carried on since 1760; and sugar-refining, commenced in 1765, in spite of bad recent years has still its chief seat at Greenock. There are also manufactures of steam-engines, anchors and chain-cables, ropes, sail-cloth, paper, wool and worsted, &c. Since 1832 Greenock has returned a member to parliament. Pop. (1696) 1328; (1801) 17,190; (1851) 36,689; (1881) 66,704; (1901) 68,142. Created a burgh of barony in 1635, Greenock owes its growth from a mere fishing-village to the Shaw family and to the Treaty of Union (1707), by which free commerce was opened up with America and the West Indies. Besides being the birthplace of Watt, Kidd the pirate, Spence the mathematician, Principal Caird, and Hamish MacCunn, it has memories of Rob Roy, John Wilson, and Galt, and contains the grave of Burns's 'Highland Mary.' See Provost Dugald Campbell's *Historical Sketches of the Town and Harbours of Greenock* (2 vols. 1879–81).

Greenore, a small village (pop. 323), railway terminus, and pier of County Louth, on the S. side of Carlingford Lough, 13 miles SE. of Newry.

Green River (1) rises in Wyoming, and flows 750 miles through Colorado and Utah to the Grand River, a branch of the Colorado.—(2) Rises in Kentucky, and flows 350 miles to the Ohio.

Greenville, capital of Greenville county, South Carolina, on Reedy River, 95 miles (143 by rail) NW. of Columbia, with a Baptist university (1851), and manufactures of cotton, oil, flour, furniture, and machinery. Pop. 11,900.

Greenwich (*Gren'itch*; A.S. *Green-wic*, 'green creek or bay'), a parliamentary borough of Kent (now, officially, the county of London), 5 miles ESE. of London Bridge, on the south bank of the Thames, here crossed by a steamship ferry, on the American system, which was opened in 1888. Greenwich Hospital occupies the site of an old royal palace, in which Henry VIII. and his daughters Mary and Elizabeth were born, and Edward VI. died. Founded in 1694 by Queen Mary as a mark of the gratitude which England felt towards her brave sailors who had fought at La Hogue, it consists of four distinct quadrangular piles—King Charles's building (1664), designed by Inigo Jones, and Queen Anne's, King William's, and Queen Mary's buildings, all designed by Sir Christopher Wren. The Great Hall is remarkable for its painted ceiling, a work carried out by Sir James Thornhill in 1707–27. It contains several valuable pictures of great naval battles and of the heroes who fought in them; there is still preserved the coat which Nelson wore when he was shot at Trafalgar. The chapel is a fine specimen of Greek architecture. A statue of George II. by Rysbrach adorns the central square. The first pensioners were received in the hospital in 1705; these numbered 100; in 1814 the maximum number was reached—viz. 2710. In 1763 out-pensions were granted; in 1849 the number of in-pensioners began to decrease, until in 1865 they only numbered 1400. For some time the in-pensioners had been discontented, and in 1869, when they had the option of receiving an out-pension, a very large majority preferred to go to their friends. Greenwich Hospital was thus disestablished by the votes of the very men for whose benefit it was originally founded. The annual income of the hospital is £167,259. From this sum numerous pensions are paid; 1000 boys, the sons of seamen and marines, are maintained and educated at Greenwich Hospital Schools at an average cost of £23,000 a year; gratuities are granted to widows of seamen and marines; and 50 orphans of officers receive grants for their education. It is estimated that 9000 persons, exclusive of the children mentioned, derive benefit from the funds. In 1873 Greenwich Hospital became the college for the Royal Navy, and all combatant naval officers are now compelled to take their degree at Greenwich. There are also the Naval Museum, the Royal Hospital School (1712), and the Royal Observatory, which crowns the hill behind the hospital, and was built by Charles II. in 1675, the first astronomer-royal being Flamsteed. The Whitebait Dinner is a banquet held intermittently by the cabinet-ministers to celebrate the termination of a parliamentary session. The manufacturing establishments include engineering, telegraph works, chemical works, &c. Greenwich returned two members down to 1885, when it was divided into three parliamentary boroughs—Greenwich, Deptford, and Woolwich, all now metropolitan boroughs of London. Pop. of Greenwich (1901) 95,757. In 1881 it was but 65,411. See a work by L'Estrange (2 vols. 1886).

Greenwich, the south-westernmost town of Connecticut, with many handsome residences, 28 miles NE. of New York. Pop. 12,131.

Greifenberg, a town in the Prussian province of Pomerania, 55 miles NE. of Stettin. Pop. 5636.

Greifenhagen, a town of Prussia, on the Oder, 13 miles SSW. of Stettin. Pop. 6603.

Greifswald, a town in the Prussian province of Pomerania, 2½ miles from the mouth of the Ryck, and 25 by rail SE. of Stralsund. The university (1456) has from 700 to 1000 students, chiefly in medicine and theology, and a library of 140,000 volumes. There is a considerable shipping trade. The industries include the making of machinery, chains, and railway wagons, the curing of herrings, and iron-founding. Pop. (1875) 18,016; (1900) 22,950. Shortly after being made a town (1250), Greifswald joined the Hanseatic League. At the peace of Westphalia (1648) it came to Sweden; but, with the whole of Swedish Pomerania, was ceded to Prussia in 1815.

Greinord. See GRUINARD.

Greiz (*Greits*), capital of the German principality of Reuss-Greiz, on the White Elster, 47

miles SSW. of Leipzig. It has three castles, a 13th-century church, and manufactures of cotton and woollen goods, shawls, linen, &c. Pop. (1875) 12,657; (1900) 22,350.

Grena'da, a volcanic island in the British West Indies, lying N. by W. from Trinidad, mountainous and picturesque, with an area of 133 sq. m. Some of the craters in the central ridge of mountains, rising to 3200 feet, have been transformed into large lakes. Streams and mineral springs abound. There are several good natural harbours, that of St George (pop. 4000), the capital of the island and the headquarters of the government of the Windward Islands, being one of the best in the West Indies. Pop. (1881) 42,403; (1901) 63,438, who are almost all negroes, and cultivate cocoa, coffee, and oranges. A little rum is manufactured. Columbus in 1498 was the discoverer of the island, which in 1783 was ceded by France to England.

Grenadines, a chain of West Indian islets, extending between Grenada and St Vincent, with a total area of 13 sq. m., and 7800 inhabitants. The largest is Carriacou (11 sq. m.).

Grenelle, a south-western suburb of Paris.

Grenoble (Lat. *Gratianopolis*), since 1839 a first-class fortified city of France, capital of the dep. of Isère, on the river Isère, 59 miles SE. of Lyons. The 15th-century cathedral of Nôtre Dame, St Laurent, St André (with Bayard's monument, transferred hither in 1822), and the Gothic palais-de-justice are the most interesting buildings. The university has some 275 students. The library contains 170,000 volumes and 7500 MSS. The staple manufacture is kid gloves (employing 22,000 persons in 115 factories). There are also manufactures of liqueurs (Chartreuse), hats, cement, and hardware. Pop. (1872) 35,280; (1901) 59,480. Grenoble, originally a city of the Allobroges, was fortified by the Romans. Later on it became the capital of Dauphiné, passing with it to France in 1349.

Greta, a Cumberland stream flowing 4 miles to the Derwent at Keswick, where is Greta Hall, Southey's home.

Gretna Green, a Dumfriesshire village, near the head of the Solway Firth, 10 miles NNW. of Carlisle. After the abolition of Fleet marriages (1754), English persons wishing to marry clandestinely had to get out of England. Thus the practice arose of crossing the Border into Scotland, where Gretna Green, or Springfield, as the first village, had by 1771 become the resort of runaway couples. The 'priest' or 'blacksmith' might be any one—ferryman, toll-keeper, or landlord; his fee ranged from half a guinea to £100; and 'church' was commonly the tollhouse till 1826, and afterwards Gretna Hall. At the tollhouse nearly 200 couples were sometimes united in a twelvemonth. Coldstream and Lamberton, in Berwickshire, were chapels-of-ease to Gretna for the eastern Border, as also till 1826 was Portpatrick, in Wigtownshire, for Ireland. One of the earliest Scottish runaway matches on record is Richard Lovell Edgeworth's (1763); amongst his successors were Lords Brougham, Dundonald, Eldon, and Erskine, besides numerous scions of the noble families of Villiers, Fane, Beauclerc, Coventry, Paget, &c. In 1856 all irregular marriages were rendered invalid unless one of the parties had been residing in Scotland for three weeks previously. See Hutchinson's *Chronicles of Gretna Green* (2 vols. 1844).

Grey Mare's Tail, a Dumfriesshire waterfall, 10 miles NE. of Moffat, on the Tail Burn, running from Loch Skene to Moffat Water.

Greymouth, a rising port of New Zealand, on the west coast of South Island, at the mouth of the Grey River, 190 miles SSW. of Nelson. Extensive harbour-works, including two breakwaters, have been erected since 1885, and railways to Nelson and Christchurch were undertaken in 1887. The entire district is auriferous, but is even more famous for its coal. Pop. 3787.

Greytown, or San Juan del Norte, the only Nicaraguan port on the Caribbean Sea, is on the north fork of the San Juan, which was nearly silted up till 1889, when labourers were despatched from the United States to commence work on the Nicaraguan inter-oceanic canal, of which Greytown is the proposed Atlantic terminus, and to construct a breakwater. Pop. 1500.

Grigoriopol, a town of South Russia, on the Dniester, 82 miles NW. of Odessa. Pop. 7918.

Grimes Dyke. See Antoninus' Wall.

Grimisay, an Inverness-shire island, between North Uist and Benbecula, measuring 3 by 1½ miles. Pop. 291.

Grimma, a town of Saxony, on the Mulde, 19 miles SE. of Leipzig by rail. It has a town-hall (1442), a former royal castle (now a court-house), and a celebrated school (1550, the 'Moldanum Illustre'). Pop. 11,000.

Grimsby, or Great Grimsby, a parliamentary, municipal, and county borough and seaport of Lincolnshire, on the Humber's right bank, 20 miles ESE. of Hull and 41 NE. of Lincoln. The parish church, a good cruciform Early English edifice, was restored in 1859. A statue of the Prince-Consort was unveiled in 1879, and a public park of 27 acres opened in 1883. In Edward III.'s time Grimsby was a port of considerable importance, which, however, it gradually lost as its harbour became silted up. The town is famous as the largest fishing-port in the kingdom, its trawlers and smacks being mostly engaged in the cod, herring, and whelk fisheries. Its importance as a landing-place of fish dates from 1849–58, when docks began to be constructed under the auspices of the Manchester, Sheffield, and Lincolnshire Railway, which carries the fish to the towns of the northern Midlands. The docks cover altogether 350 acres. The industries include shipbuilding, tanning, brewing, cordage-making, and flax-dressing. About 3000 vessels, of 1,000,000 tons, enter every year. The imports reach an annual value of 4½ millions sterling, and the exports of 7¾ millions. Grimsby since 1832 has returned only one member. Pop. (1851) 12,263; (1871) 28,503; (1881) 45,351; (1901) 78,198, of whom 63,138 were within the municipal boundary. See works by Oliver (1825) and Davenport (1866).

Grindelwald, a beautiful Swiss valley (3468 feet) in the Bernese Oberland, 12½ miles long and 4 broad, forms the approach to the two Grindelwald glaciers. It is a winter health-resort.

Grinnell Land, a barren, mountainous Polar tract on the west side of Kennedy Channel (the northern continuation of Smith's Sound), which separates it from Greenland. It was discovered by Dr Hayes in 1854, and named after Henry Grinnell (1800–74), of New York, who had fitted out Kane's expedition. Greely in 1882 thoroughly explored it. North and south it is covered with ice-caps; between them lie valleys that get quit of their snow in summer, and support herds of musk oxen. In the interior are Lake Hazen, 60 miles long, and two ranges of mountains, one

with Mount Arthur (5000 feet).—Another Grinnell Land, discovered by De Haven in 1850, lies farther SW., off the NW. extremity of North Devon Island.

Grinstead, East, an old-fashioned town of Sussex, 36 miles S. by E. of London by rail, which till 1832 returned two members to parliament. Here is Sackville College, of which Dr J. M. Neale was warden, and the convent of the sisterhood of St Margaret, with Home and Orphanage. Pop. of urban district, 6100.—West Grinstead is 18 miles to the SW. Pop. 1502.

Griqualand West and **East** are two British districts of South Africa, one a part of Cape Colony (q.v.), the other a dependency of it, and named from the Griquas or Bastaards, who are a mixed race sprung from Dutch settlers and native women.—*Griqualand West* lies to the north-east of Cape Colony, is bounded S. by the Orange River, N. by Bechuana territory, E. by Orange Free State, W. by the Kalahari country. Portions of the country are suitable for sheep-farming and agriculture, but the chief source of wealth is the diamond-fields. From the discovery of the first diamond in 1867, a steady stream of immigration set in; settlements were formed representing all nationalities, and digging was vigorously prosecuted. Diamonds to the value of above £12,000,000 were found there during 1871–80, and of perhaps £100,000,000 between 1867 and 1900. Griqualand West was annexed in 1871, and incorporated with Cape Colony in 1880. Kimberley, connected by rail with the Cape since 1885, is the seat of government. Other towns are De Beers, Du Toit's Pan, Bultfontein, Barkly, and Griqua Town. Area, 15,197 sq. m.; pop. 100,000, of whom about 40,000 are whites.—*Griqualand East* is that part of No-Man's-Land which lies between the Kaffir border and southern Natal. It was allotted to the Griqua chief, Adam Kok, who had removed thither with 15,000 Griquas, and to the Basutos who had previously migrated hither. This territory was annexed to the Cape in 1875. Chief village, Kokstadt. Area, about 8000 sq. m.; pop. 200,000, of whom about 20,000 are whites.

Gris-nez (*Gree-nay'*), Cape, a headland (164 feet high) in the French dep. of Pas-de-Calais, opposite Dover, is the point of land nearest to England (barely 20 miles). A lighthouse surmounts it.

Grisons (*Gree-zong'*; Ger. *Graubünden*), the largest and the most thinly peopled of the Swiss cantons, is bounded E. by Tyrol and S. by Lombardy. Area, 2773 sq. m.; population, 106,000, nearly half of German stock, and more than half Protestants. The whole canton is an assemblage of mountains intersected by narrow valleys. These last form three groups, of which the first and most important lies along the course of the Rhine; the second, forming the Engadine (q.v.), extends north-east along the Inn; and the third belongs to the basins of the Ticino and the Adige. During the middle ages the Bishop of Chur sought to oppress the people, who in self-defence formed themselves into leagues. One of these (1424), was called the *gray* league (Ger. *der graue bund*), from the gray home-spun worn by the unionists, and hence the German and French names of the canton. In 1471 these separate unions entered into a general federation, which in 1497–98 formed an alliance with the Swiss cantons.

Grodek, a town of Austrian Galicia, 20 miles SSW. of Lemberg. Pop. 12,116.

Grodno, the capital of a Russian province, on the Niemen's right bank, 148 miles by rail NE. of Warsaw. It manufactures cloth and tobacco. Pop. 46,788.—The province has an area of 14,926 sq. m., and a pop. of 1,650,000.

Groly, a Leicestershire manor, the birthplace of Lady Jane Grey, 4½ miles WNW. of Leicester.

Groningen (*Gro'ning-en*), the north-eastern province of Holland. Area, 887 sq. m.; pop. over 303,000.—The capital, Groningen, is 25 miles by rail SW. of Delfzihl, on Dollart Bay, and 34 E. of Leeuwarden. The university (1614), with new buildings of 1850, and some 360 students, possesses a library, a botanic garden, an observatory, &c. A celebrated deaf and dumb institution was founded in 1790. The manufactures include linen and woollen goods, tobacco, brushes, Dutch tiles, and boat-building. Groningen, already an important place in the 9th century, joined the Hanseatic League in 1282. Pop. (1876) 40,165; (1901) 67,570.

Groote Eylandt (Dutch, 'great island'), a hilly uninhabited island, 40 miles in diameter, on the west side of the Gulf of Carpentaria, in North Australia. It is surrounded by reefs.

Grossenhain, a town of Saxony, 21 miles by rail NNW. of Dresden. It manufactures cloth, hosiery, machinery, &c. Pop. 12,544.

Grosse'to, a Tuscan town on the Ombrone, near its mouth, 160 miles SE. of Leghorn by rail, with a fine cathedral. Pop. 6962.

Grossglockner, the highest peak (13,458 feet) of the eastern Alps, is situated near the meeting-point of Tyrol, Carinthia, and Salzburg.

Grosswardein (Magyar *Nagy-Varad*), an old town of Hungary, on the Sabes (Rapid) Körös, 152 miles by rail SSE. of Pesth. Formerly a fortress, it is the seat of Roman Catholic and Greek bishops, and manufactures spirits, oil, vinegar, tiles, matches, pottery, and wine. Population, above 50,000. Near it is the Bishop's Bath, with alkaline sulphur-springs (104°–106° F.).

Grottaglie, a town of Italy, 12 miles ENE. of Taranto. Pop. 8880.

Grotte, Le, a town of Sicily, in the province of Girgenti. Pop. 8775.

Gruinard, a Ross-shire bay, forming part of Loch Broom.

Gruinnard, a north-west sea-loch of Islay island, 4½ miles long.

Grünberg, a town of Prussian Silesia, 34 miles NW. of Glogau by rail. Pop. 20,396.

Grütli. See Rütli.

Gruyère (*Groo-yehr'*), a little Swiss town, 16 miles SSW. of Freiburg, gives its name to the famous whole-milk Gruyère cheese. Pop. 1375.

Gryfe, a Renfrewshire stream, flowing 16 miles ESE. to the Black Cart.

Guadalajara (*Guadalahâ'ra*), (1) the decayed capital of a Spanish province on the Henares, 35 miles NE. of Madrid by rail. Pop. 11,051.—The province occupies the northern part of New Castile, and has an area of 4660 sq. m. Pop. a little over 200,000.—(2) Capital of the Mexican state of Jalisco, and the second city of the republic, on the Rio Grande de Santiago, here crossed by a fine bridge of 26 arches, 280 miles WNW. of Mexico City by rail. It has an archiepiscopal cathedral, the government palace, a mint, university, tramways, hospitals, and school of art. It is the chief seat of the cotton and woollen manufactures of the country, and the Guadalajara pottery and metal wares, like the confectionery, have a reputation all over Mexico. Pop. 101,200.

Guadalaviar (anc. *Turia*), a river of eastern Spain, rises near the Tagus, in SW. Aragon, and flows 190 miles SSE. to the Mediterranean at Grao, 1½ mile below Valencia.

Guadalquivir (*Guadalkiveer'*; Arab. *Wádi-al-Kebir*, 'the great river;' anc. *Bætis*), the chief river of Spain, rises in the Sierra de Cazorla, in the east of the province of Jaen, and flows 374 miles SW. through or along the borders of the provinces of Jaen, Cordova, Seville, Huelva, and Cadiz, to the Gulf of Cadiz at San Lucar de Barrameda. The principal towns on its banks are Cordova and Seville, to the last of which, about 80 miles above its mouth, the river is tidal and navigable for steamers. Below Seville it twice divides into two branches, forming two islands. Its chief affluents are the Guadajoz, Jenil, Guadalimar, and Guadiato. At Montoro it breaks through the outlying spurs of the central Sierra Morena in a series of rapids, but its lower course is sluggish and dreary. During the equinoctial rains the river rises sometimes 10 feet, and the country is yearly flooded as far up as Seville.

Guadalupe Hidalgo, 5 miles by tramway N. of Mexico City, is the chief Mexican place of pilgrimage, its brick cathedral having a miraculous picture of a brown Virgin. The treaty which ended the war with the United States was signed here, 2d February 1848.

Guadeloupe, the chief of the French Lesser Antilles in the West Indies, lies 77 miles N. by W. of Martinique, and contains, including dependencies, 583 sq. m., with a pop. of about 185,000, mostly blacks and mulattoes. It is divided into Grande-Terre on the east, and Basse-Terre or Guadeloupe proper on the west, by a strait of from 40 to 150 yards in width, which bears the name of Salt River. The nomenclature of the two islands appears curiously perverse, for Basse-Terre is the loftier of the two (the volcanic summit La Soufrière, 5497 feet), and Grande-Terre is the smaller. Earthquakes are frequent. The chief product is sugar; coffee also is exported. Point-à-Pitre (18,000) is the principal town and port. The dependencies are the islets of Désirade, Marie-Galante, and Les Saintes, besides St-Barthélemy and part of St-Martin to the north-west. Guadeloupe, discovered by Columbus, became finally French in 1816.

Guadiana (Arab. *Wádi Ana*, anc. *Anas*), one of the five principal rivers of the Iberian peninsula. Rising as the Zancara in the east of the plateau of La Mancha, it flows south and west to the Ojos, below which point it receives the name of the Guadiana. It bends southward at Badajoz, forms for some miles the boundary between Spain and Portugal, then flows through part of Alemtejo province, returning to form the frontier again, until it empties into the Gulf of Cadiz. It is 510 miles long, but is navigable only for 42 miles. Its chief affluents are the Jabalon, Zujar, Matachel, Ardila, and Chanza.

Guaira, La, the port of Carácas (q.v.), on a narrow, shadeless strip of land between the mountains and the Caribbean Sea. Pop. 15,293.

Gualeguay, a town of Entre Rios, Argentina, on the Gualeguay River, a sub-affluent of the Paraná: there is a railway (7 miles) to Puerto Ruiz at its mouth. Pop. 11,000.

Gualeguaychú, a town of Entre Rios, Argentina, on the Gualeguaychú River, which enters the Uruguay 11 miles below, with a great beef-preserving factory. Pop. 14,000.

Guanabacóa, a town of Cuba, 5 miles E. of Havana. Pop. 30,000.

Guanajuato (*Gwanahwá'to*), an inland state of Mexico, with an area of 12,500 sq. m., and a pop. of over 1,100,000. The capital, Guanajuato, is a mining-town curiously situated on a deep ravine, traversed by a mountain-torrent. The public buildings include a large government palace, a mint, cathedral, public granary, &c. The electric light and telephones have been introduced. There are amalgamation works, blanket-factories, and cotton-printing works. Pop. 52,112.

Guanare, capital of the state of Zamora, in Venezuela, on the river Guanare. Pop. 10,390.

Guaporé, a head-stream of the Madeira (q.v.).

Guardafui, Cape, the most eastern point of the African continent, and the extremity of the Somali country. It is in 11° 50′ N. lat. and 51° 14′ E. long.

Guardbridge, a Fife village, 4 miles WNW. of St Andrews. Pop. 724.

Guastalla, a town of Italy, on the Po, 19 miles NE. of Parma. A bishop's seat (since 1828), it has an old castle, and gave name in 1406 to a countship, in 1621 to a duchy. Pop. 8648.

Guatemala (*Guatāmá'la*), a republic of Central America, bounded by Mexico, Belize, the Gulf of Honduras, Honduras, San Salvador, and the Pacific. Area, 46,600 sq. m., much of it wholly unexplored. The greater part of Guatemala is mountainous, the highlands having a mean elevation of 7000 feet above the sea; but the surface presents great variety, with extensive plateaus, terraces, and upland valleys—the last notable for their beauty, fertility, and favourable climate. Of the volcanoes, several are active; the most noted is Fuego (12,075 feet). Earthquakes are frequent; sulphur and other hot springs are numerous. The climate, except in the low-lying districts (where the temperature ranges from 70° to 90°), may be described as perpetual spring, and is generally healthy, but the hot coast-lands on the Pacific are liable to yellow fever. Gold and silver are worked, as also salt and saltpetre. Other minerals are lead, iron, copper, coal, quicksilver, marble, porphyry, suphur, zinc, gypsum, &c. But the wealth of the country consists in its rich soil, which, according to the altitude, yields the products of every zone. The forests contain over a hundred kinds of timber trees. Maize, haricot beans, peas, potatoes, wheat, rice, grow well in various districts. Other products are coffee (the chief export), sugar, cacao, india-rubber, tobacco, cotton, hemp, sarsaparilla, and many medicinal plants, bananas, and other fruits. The fauna includes the jaguar, puma, ocelot, coyote, red-deer, tapir, peccary, armadillo, several monkeys, iguanas, turtles, and snakes. The birds are of great variety and beauty; the national emblem is the superbly coloured quetzal. The industries are chiefly confined to the manufacture of woven fabrics, pottery, saddlery, chocolate, and the fiery *aguardiente*, the sale of which is a government monopoly, yielding about a fourth of the annual revenue. The development of the country, however, is greatly hampered by the absence of serviceable roads. The average annual imports vary from six to eight million dollars, the annual exports average about fourteen million dollars. The imports, of which the United States supplies about one-half and Britain one-fourth, are chiefly specie, cotton, woollen, and silk goods, wines and spirits, rail-

way plant, and flour; the principal exports are coffee, rubber, sugar, fruits, and hides.

About a third of the people are said to be of European descent, and the rest aborigines (Maya-Quichés) and mixed races. In 1905 the total pop. was 1,845,000. The capital, Guatemala (q.v.), is the largest town. The state religion is the Roman Catholic. The executive is vested in a president and council. The standing army consists nominally of about 7000 men, the militia and reserve of nearly 87,000. The revenue, 17,500,000 dollars, is supposed to cover the expenditure; but the finances are mismanaged, and there is a foreign debt of about £1,838,672, and an internal debt of 28,118,000 silver dollars. After three centuries of Spanish rule, under which the viceroyalty of Guatemala embraced all Central America, independence was proclaimed in 1821; and the present republic was founded in 1839. There are about 400 miles of railway in operation, and over 3100 miles of telegraphs.

Guatemala (*Santiago de Guatemala;* also *Guatemala la Nueva*), capital of the republic of Guatemala, and the largest and most important city of Central America, stands on a wide plateau, nearly 4900 feet above sea-level, and 72 miles by rail NNE. of its port, San José. In the plaza the metropolitan cathedral towers above the government buildings and the archbishop's palace. Tramways and the electric light have been introduced, and all the foreign trade of the republic is concentrated here. Pop. 93,000. The present city is the third capital of the name. The first, now called *Ciudad Viejo*, has a pop. of some 3000 Indians. The second, *Guatemala la Antigua* (Old Guatemala), 2½ miles NE. of the first and 21 miles WSW. of the present capital, was one of the finest cities of America, with 60,000 inhabitants; in 1773 it was for the second time destroyed by an earthquake, but among the noble ruins a new city has arisen, sheltering a pop. of 14,000.

Guaxaca. See OAXACA.

Guayaquil (*Gwïakeel'*), the chief commercial city of Ecuador, lies in the fertile valley of the Guayas, 30 miles above its mouth. It has a custom-house, cathedral, town-hall, tramways, water-works, a statue to Bolívar (1889), &c. The manufactories include steam sawmills, foundries, machine-shops, ice-factories, and a lager beer brewery; and the place is noted for its straw hats and hammocks. Ships drawing 18 feet can come up to the breakwater, and below the town are a wharf and dry-dock. A railway penetrates the interior to Chimbo (64 miles). The annual exports average £1,500,000, of which cocoa represents nearly two-thirds; other items are coffee, ivory-nuts, rubber, hides, and specie. The town was founded by Orellana in 1537, and removed to its present site in 1693. Pop. 54,515. The Bay of Guayaquil is the only important bay on the west coast of South America north of Patagonia.

Guaymas, a well-sheltered port of Mexico, on the Gulf of California, the terminus of the Sonora Railway. Pop. 6000.

Guayra. See GUAIRA.

Gubbio (anc. *Iguvium* or *Eugubium*), a decayed city of Central Italy, on the SW. declivity of the Apennines, 20 miles NNE. of Perugia. It has a 13th-century cathedral, several mediæval palaces, and remains of an ancient theatre. The celebrated Eugubine Tables are preserved in the town-house. Gubbio was noted about 1525 for its majolica ware, still imitated in a few factories. Pop. 9540.

Guben, a manufacturing town in the Prussian province of Brandenburg, at the head of the navigable portion of the Neisse, 28 miles S. of Frankfort-on-the-Oder. The principal staples are hats and cloth. There are also wool-spinning, tanning, machine factories, &c. Pop. (1875) 23,738; (1900) 33,122.

Guebwiller. See GEBWEILER.

Guelderland (*Geldern, Gelderland*), a Dutch province between the Zuider Zee on the NW. and the Prussian dominions on the SE. It has an area of 1957 sq. m.; a population of 600,000, two-thirds Protestants. The former duchy was more extensive than the modern province, stretching southwards along the Meuse to beyond Venlo. In 1814 it was finally divided between Holland and Prussia.

Guelph, an inland port of entry in Ontario, capital of Wellington county, on the river Speed, 45 miles W. by S. of Toronto by rail. It is the seat of an agricultural college, and has several flour-mills, woollen-mills, and manufactories of sewing-machines, &c. Pop. 11,359.

Guernsey, the second in size of the Channel Islands (q.v.). It is about 30 miles in circumference, and 28 sq. m. in area. Pop. (1821) 20,339; (1851) 29,806; (1901) 40,777. The lowest part is to the north (L'Ancresse), the highest to the south (Haut Nez) being 349 feet above sea-level. St Peter Port, the only town, has a good harbour; a large public school (1563), named after Queen Elizabeth; a fine church, dating from the 13th century; two libraries; a good public market; &c. The climate is equable and favourable to the growth of fruit, flowers, and vegetables. Two-thirds of the island are under cultivation, and great quantities of fruit and vegetables are exported to England, as is also a hard gray building granite. Guernsey is 127 miles from Land's End, 109 from Falmouth, 113 from Southampton, 69 from Start Point.

Guerrero, a southern state of Mexico, on the Pacific, with an area of 22,863 sq. m. It is a broken mountainous country, rich in minerals. Population, 485,000. Capital, Chilpancingo (6500); chief port, Acapulco (q.v.).

Guiana, or GUAYANA, in its widest signification is the region lying between the Orinoco and the Amazon in South America, with no definitive boundaries on the west. It consists of five divisions, known respectively as Venezuelan, British, Dutch, French, and Brazilian Guiana. But Venezuelan and Brazilian Guiana being incorporated in those states, we have to describe here only British, Dutch, and French Guiana. These three colonies abut upon the Atlantic, in the order named, between Venezuela on the north and Brazil on the south. The physical conformation is practically the same in all three. Next the Atlantic is a fringe of very fertile alluvial soil, lying in many parts below the sea-level, and generally inundated in the rainy seasons, with mangrove swamps and mud-flats skirting the coast. This alluvial zone, from 10 to 40 miles wide, contains virtually the only cultivated territory in the three colonies. Beyond it the contour rises by a series of terraces up to an undulating savannah region 150 feet higher. The third and innermost division consists of the almost unexplored upland country, a plateau region ridged with mountain-chains (which rise in places to 3000 or 3500 feet), and everywhere covered with a dense primeval forest. The rivers are navigable only up to the line of the rapids and falls; communication is nevertheless principally effected by the rivers and canals. The climate,

as beseems a region lying between 1° and 8° N. lat., is hot and moist, but on the whole tolerably uniform, though the thermometer ranges from 95° to 70° F. The rainfall is heavy—75 to 140 inches in the year. Vegetation is of extraordinary richness and luxuriance—many kinds of timber, gums, balsams, wax, bark, fibre, oil, nuts, juices, drugs, caoutchouc, sarsaparilla, cinchona, tonka beans, arnotto, angelica, cotton, tobacco, food-plants, fruits, and a prodigious quantity of creepers, ferns, tree-ferns, and flowers, including orchids. The most conspicuous branch of the fauna is the birds, including the stink-bird (a vulture), eagles, owls, humming-birds, orioles, toucans, and parrots. Mammals are represented by jaguars, tiger cats, peccaries, tapirs, deer, sloths, armadillos, ant-eaters, agoutis, capybaras, and manatees. The native Indians, who still for the most part lead a 'wild' life in the forests, constitute several different tribes, and seem to belong to two distinct stocks, indigenous tribes and Caribs.

The first Europeans to explore the coast of Guiana seem to have been the Spaniards Alonzo de Ojeda in 1499 and Vicente Pinzon in 1500. Apart from semi-buccaneering expeditions and landings, the first successful colonisation of Guiana seems to have been made by the Dutch, on the Essequibo, shortly before 1613. The English got firm footing at Surinam in 1650, and the French on the Kourou and Oyapock in 1664. Two years later the English seized both French and Dutch Guiana, but restored them in 1667, and at the same time handed over Surinam to the Netherlands in exchange for New Amsterdam—i.e. New York. During slave-holding times sugar-planting brought the colonies some degree of prosperity; but it was very sensibly crippled by the abolition of slavery, and the cultivation of beet-root for sugar caused a serious crisis in Guiana cane-planting. Gold-mining is a progressive industry.

British Guiana, or Demerara, with a coast-line of 320 miles, is separated from Dutch Guiana on the E. by the river Corentyn; on the S. and W., next Brazil and Venezuela respectively, the boundaries are disputed. Estimated area, 109,000 sq. m. The western part of the colony is diversified by chains of the Pacaraima or Parima mountain-system, which rise to some 8000 or 9000 feet in the table-topped Roraima (q.v.). The more important rivers are the Corentyn, Berbice, Demerara, Essequibo, all flowing north into the Atlantic; and the Takutu, which feeds a tributary of the Amazon. The exports embrace sugar, rum, molasses, timber, shingles, charcoal, cocoa-nuts, balata and other gums, and gold. The total value of the exports, which go principally to the United Kingdom, United States, and West Indies, fell from £3,208,000 in 1882 to £1,753,835 in 1903. The imports (mostly from the United Kingdom), which consist chiefly of flour, rice, dried fish, butter, pork, and beef, average from £1,300,000 to £1,650,000. In 1881 the pop. was 252,535, in 1901, 294,000, and included Europeans, Creoles, negroes, coolies from India, Chinese, natives of Madeira and the Azores, and some 8000 aboriginal Indians. Most of the plantation work is done by immigrant coolies from British India and by Chinese. The colony is divided into three counties, Berbice, Demerara, and Essequibo. The ports are Georgetown (q.v.), the capital, and New Amsterdam. The administration is in the hands of the governor, appointed by the crown, and two legislative councils. The colony possesses one line of railway, from Georgetown to Mahaica (21 miles long), telegraphic communication with Europe and the United States, and a good system of postage.

Dutch Guiana, or Surinam, with an area of 46,058 sq. m., and a coast-line of 240 miles, has for its boundary on the west the river Corentyn, and on the east the Maroni or Marowijn, which separates it from French Guiana—some parts on the upper Maroni being claimed both by Dutch and French. Other rivers are the Surinam, Saramacca, Coppename, and Nickerie. The greater part of the surface is covered with unexplored primeval forest, scarcely more than 210 sq. m. of the entire area being cultivated. Sugar, cocoa, gold, rum, molasses, bananas, rice, and corn are the staple productions. The total annual value of the exports is from £350,000 to £450,000, of the imports from £500,000 to £600,000. Trade is carried on principally with Holland, the United States, Britain and her dependencies. The capital is Paramaribo (q.v.). The pop., which is very heterogeneous, in 1905 numbered about 75,000, of whom nearly one-half live at Paramaribo. Included in the total are about 4000 Bush Negroes (negroes who escaped during slavery times—i.e. before 1863), and 6000 Indians.

French Guiana, or Cayenne, is separated from Dutch Guiana on the west by the Maroni, from Brazil by the Tumuc-Humac Mountains and the Oyapock, although the French claim all the coastal districts as far south as the Amazon. Taking the Oyapock as provisional boundary, the area of the colony is about 31,000 sq. m., whilst the length of coast-line is about 240 miles; the area, as officially given, is 46,850 sq. m. Cayenne (q.v.), the capital of the colony, stands on a rocky promontory. The only considerable exports are cocoa, arnotto (roucou), and gold. The total exports and imports have an annual value of about £400,000, the exports representing but a small part of that sum. The pop. of the entire colony only amounts to about 35,000. From 1853 to 1864 an attempt was made to found penal colonies in French Guiana, all of which proved disastrous, partly owing to the unhealthiness of the climate, and partly to the harsh and ill-devised regulations. The immigrant criminals now come (since 1864) exclusively from Africa (Arabs and negroes) and Asia (Annamites). Slavery was abolished in 1848.

See Raleigh's *Discovery of Guiana* (1595; ed. Schomburgk, 1848); for British Guiana, various works by Schomburgk (1840–48), Brete (1868), E. im Thurn (1883), and Bronkhurst (1883); for Dutch Guiana, Palgrave (1876); and for French Guiana, French works by Mourcé (1874), and Ribaut (1882).

Guienne, an old French province, comprehending the present deps. of Gironde, Lot, Dordogne, Aveyron, with portions of Tarn-et-Garonne and Lot-et-Garonne. With Gascony it formed Aquitania, of which name Guienne is a corruption.

Guildford, the county town of Surrey, lies in a break of the chalk-ridge of the North Downs, on the navigable Wey, 30 miles SW. of London. In Cobbett's phrase a 'happy-looking' place, it wears an air of order and cleanliness, and mainly consists of one street, running up the steep east side of the river, which here is crossed by an old five-arch bridge. Its houses are still rich in quaint gables, projecting fronts, and long latticed windows. The square Norman keep of its royal castle (*c.* 1150) is 70 feet high with walls 10 feet thick; on St Catharine's Hill is a ruined chapel (1313); Trinity Hospital, founded in 1619 by

Archbishop Abbot for twelve brethren and eight sisters, is a picturesque red-brick pile; and other buildings are the churches of St Nicholas, St Mary, and the Holy Trinity, the guildhall (1687), county hall (1862), county hospital (1868), and grammar-school (1509–50). A railway junction of some importance, Guildford now is chiefly famous for its grain market. From Edward I.'s reign till 1867 it returned two members to parliament, then till 1885 one. Since 1874 it has been the seat of a bishopric suffragan to Winchester. Pop. (1851) 6740; (1901) 15,937. Bequeathed in 901 by Alfred the Great to his nephew Ethelwald, Guildford in 1036 was the scene of the decimation by King Harold's men of the Norman followers of Alfred the Atheling—a crime that led up to the Norman conquest. The Dauphin Louis took the castle in 1216; and in 1685 Monmouth was temporarily confined in Trinity Hospital.

Guimarães, a town of Portugal, on the Ave, 12 miles SE. of Braga. Two noted hot sulphur-springs are in the vicinity. Pop. 8805.

Guinea, the name of a large section of the west coast of Africa, which first came into general use in the 15th century, and is generally applied to the stretch of coast-lands extending from the mouth of the Senegal, in about 14° N. lat., to Cape Negro, in 16° S. lat. By conventional usage it is further divided into two parts, Upper and Lower Guinea, the dividing line being taken variously as the equator, the Gaboon, the Ogoway. The coast-line is throughout tolerably uniform, and everywhere flat, with numerous shallow lagoons separated from the ocean by narrow spits of sand, lying parallel to the coast. Proceeding inland, the country rises to the central plateau of the continent by a series of broad terrace-like steps, down which the longer rivers are generally precipitated in cataracts and rapids. The Ivory Coast, the Gold Coast, the Slave Coast, are names for portions of the coast between Liberia and the Niger mouths. Some part of Guinea belongs to native states and some to the Liberian republic; most of it is now cut up into dependencies of Britain, France, Germany, Spain, Portugal, in somewhat inconvenient fragments. The Genoese claim to have been the first Europeans to reach (in 1291) the coasts of Guinea. They were, however, first regularly visited, from 1364 onwards, by merchant adventurers from Rouen and Dieppe, and first colonised in 1481 by the Portuguese, under Prince Henry the Navigator.

Guinea, Gulf of, a portion of the Atlantic Ocean, forming the huge angle of the West African coast from Cape Palmas to Cape Lopez.

Guinegate, or Enguinegatte, a historical village in the French department of Pas-de-Calais, where the French were twice defeated—(1) on 17th August 1479 by Maximilian I. of Austria; (2) on 16th August 1513 by Henry VIII. and the Emperor Maximilian. This battle was called the Battle of the Spurs—the French knights having made more use of their spurs than of their swords.

Guingamp, a town in the French dep. of Côtes-du-Nord, on the Trieux, 74 miles E. of Brest, the capital formerly of Penthièvre duchy. The name gave rise to the word *Gingham*. Pop. 7181.

Guipuzco'a, the smallest but the most densely peopled of the Spanish Basque provinces on the Bay of Biscay. The capital is San Sebastian. Area, 728 sq. m.; pop. near 200,000.

Guisborough, a market-town in the North Riding of Yorkshire, 9 miles ESE. of Middlesborough, lies at the foot of the Cleveland Hills, in the midst of the iron-mining district. The earliest alum-works in England were established here about 1600. Here too is a ruined priory built in 1119 by Robert de Brus, and at the Reformation one of the wealthiest in the kingdom. Pop. (1851) 2062; (1881) 6616; (1901) 5645.

Guise, a town in the French dep. of Aisne, on the Oise, 25 miles by rail ENE. of St Quentin. From its ruined castle the famous Dukes of Guise derived their title. The ironworks here are conducted on a profit-sharing scheme. Population, under 10,000.

Gujarat, or Guzerat, the northern maritime province of Bombay, with an area of 10,296 sq. m., and a pop. just over 4,000,000. Within its limits lie the British districts of Surat, Broach, Kaira, Panch Mahals, and Ahmedabad.

Gujranwala, a town of the Punjab, 40 miles N. of Lahore by rail. Pop. 29,785.

Gujrat, or Guzerat, a town of the Punjab, left (by a change in the river's course) a few miles north of the Chenab's present bed, but a place of some military and political importance. Here in 1849 a decisive battle finally broke the Sikh power, and brought the whole Punjab under British rule. Pop. 18,743.

Gulf Stream, the best known, the best defined, and the most remarkable of all the ocean currents. It derives its name from the Gulf of Mexico, out of which, as a great current of warm water, it flows through the Strait of Florida, along the eastern coast of the United States of America, and is then deflected near the banks of Newfoundland diagonally across the Atlantic. This great body of warm water indirectly modifies the climate of western Europe, and it is possible to trace its effects as far as the coasts of Spitzbergen and Nova Zembla.

Gullane, a Haddingtonshire coast-village, with golf-links, 4 miles NW. of Drem Junction.

Gumbinnen, a town of East Prussia, 72 miles E. of Königsberg. Dating from 1724, it owes its prosperity to the settlement here in 1732 of many Protestant Salzburgers. Pop. 14,206.

Gumri. See Alexandropol.

Gumti, a navigable river of India, rises in the North-western Provinces, and winds nearly 500 miles south-eastward to the Ganges, 56 miles below Jaunpur.

Gundamuk. See Gandamak.

Gunfleet, an Essex sandbank, with a lighthouse, 12 miles S. of Harwich.

Güns (Magyar *Köszeg*), a free town of Hungary, 57 miles SSE. of Vienna. Pop. 7905.

Guntur', a town of Madras, 46 miles WNW. of Masulipatam. Pop. 30,359.

Gurgaon, a district of the Punjab, in the division of Delhi, with an area of 1984 sq. m. Pop. 768,929. The commercial centre is Rewari; the civil headquarters is Gurgaon (pop. 5000), 21 miles SW. of Delhi by rail.

Gurhwal. See Garhwal.

Güstrow, a town of Mecklenburg-Schwerin, 70 miles E. by S. of Lübeck, with castle (1565), old church, breweries, iron-foundries, a sugar-factory, &c. Pop. 17,000.

Guthrie, capital of Oklahoma, U.S., 32 miles N. of Oklahoma City. Pop. (1890) 5333; (1900) 10,006.

Guzerat. See Gujarat.

Gwalior, a native state of Central India, the dominions of the Mahratta Maharajah Sindia,

consists of several detached districts. Area, 19,067 sq. m.; pop. (1901) 2,187,612, mainly Hindus. Lying partly in the basin of the Jumna and partly in that of the Nerbudda, it divides its drainage between the Bay of Bengal and the Arabian Sea. The principal export is opium. Though Gwalior is a Mahratta principality, yet the Mahrattas do not form any considerable proportion of the people. Since 1803 the country has been under British protection; and during the troubles of 1857 the young Maharajah remained faithful to the British government, although deserted by his troops.—Gwalior, the capital, stands 65 miles S. of Agra by railway. Its nucleus is an isolated rock 340 feet high, perpendicular on all sides; it measures 1½ mile by 300 yards, and its citadel (said to date from the 8th century) is virtually impregnable against any native force. Along the eastern base of this eminence lies the old town of Gwalior; and to the south-west there extends for several miles the new town called Lashkar, where the Maharajah resides.

Gweedore, a Donegal hamlet, 3 miles from the west coast.

Gwelo, a township of Southern Rhodesia, on the railway from Bulawayo to Salisbury, 110 miles NE. of the former. It is the centre of a gold-mining district, with a fully equipped hospital, &c. Pop. 1500.

Gyantse, a fortified town of Tibet, 110 miles SW. of Lhasa, with a sacred monastery. The British expedition under Macdonald in 1904 entered it.

Gyarmat-Balassa, a town of Hungary, 40 miles N. by E. of Pesth. Pop. 6788.

Gympie, a town of Queensland, 61 miles S. of Maryborough, with gold-reefs. Pop. 12,000.

Gyoma, a town of Hungary, on the Körös, 89 miles SE. of Pesth by rail. Pop. 10,160.

Gyöngyös, a town of Hungary, with mineral baths, 59 miles by rail NE. of Pesth. Pop. 15,896.

Gyula, a town of Hungary, 35 miles N. of Arad. It has a monument to the composer Erkel. Pop. 22,100.

Haarlem, a town of Holland, 10 miles W. of Amsterdam, is intersected, like most Dutch towns, with canals and avenues of trees. Of its churches the principal is the Great or St Bavon's, built in the 15th century, one of the largest churches in Holland, and specially noted for its lofty tower and its organ (1738). Before the church stands a statue of Laurens Coster, to whom his countrymen ascribe the invention of printing. The town-hall, formerly the residence of the Counts of Holland, has portraits by Franz Hals. The Teyler Institution promotes the study of theology, natural science, and the fine arts. Although Haarlem is no longer celebrated, as it was in the 17th century, for its commerce, it still weaves cotton, casts type, bleaches linen, and trades largely in tulips, hyacinths, &c. It underwent a seven months' siege (1572–73) from the Spaniards, in which the citizens displayed the noblest heroism. In the wood of Haarlem stands the 'pavilion' containing the colonial and industrial museums, and a collection of modern pictures. Pop. 70,000.

Haarlem Lake, now drained, lay between Haarlem, Leyden, and Amsterdam, and communicated with the Zuider Zee by the Y. Originally it embraced four small lakes, which, in consequence of several irruptions of the sea, eventually merged into one sheet of water, covering an area of about 70 sq. m., and not above 15 feet deep. The lake, however, frequently rose during storms to an alarming height, necessitating a large annual outlay in keeping the dams and sluices in repair. In consequence of the damage done to Amsterdam and Leyden by two overflows of the lake in 1836, the government set about draining it (1839–52). The enterprise cost £1,080,000, but the sale of the lands reduced this by £780,000.

Habbie's Howe, the scene of Allan Ramsay's *Gentle Shepherd*, 4½ miles WSW. of Penicuik.

Hackensack, the capital of Bergen county, New Jersey, on the Hackensack River, 12 miles by rail N. of Jersey City. Pop. 9500.

Hacketstown, a village of Carlow, 7 miles NW. of Tinahely station. Pop. 508.

Hackney, a parish of Middlesex, now forming one of the metropolitan boroughs of London. In its earlier and fashionable days it is said to have given its name to hackney-coaches. Pop. of borough (1901) 219,272; of parliamentary borough, which returns three members, 253,291.

Hadden Rig, a Roxburghshire ridge (541 feet), 5 miles ENE. of Kelso. It was the scene in 1540 of an English defeat.

Haddington, the county town of Haddingtonshire, lies at the southern base of the Garleton Hills, on the Tyne, 17 miles E. of Edinburgh. Its Abbey Church, the *Lucerna Laudoniæ* or 'Lamp of Lothian,' is a cruciform Decorated red sandstone pile, with a central tower 90 feet high, and ruinous all but the nave, which serves as the parish church (restored 1892). Then there are the county buildings (1833), the large corn exchange (1854), the town-hall (1748–1831), the county lunatic asylum (1866), and a school, the Knox Memorial Institute (1880). Haddington's worthies have been Knox, John Brown and Samuel his grandson, Samuel Smiles, and Jane Welsh Carlyle, whilst its chief memories have been perils by flood and fire, and the great siege of the English by the Scotch in 1549. An ancient royal burgh, it united till 1885 with North Berwick, Dunbar, Jedburgh, and Lauder to return one member to parliament. Pop. (1831) 3857; (1881) 4043; (1901) 3993. See works by James Miller (1844) and John Martine (1883).

Haddingtonshire, or East Lothian, a maritime county of Scotland, washed on the north for 32 miles by the German Ocean and the Firth of Forth. Its utmost length is 26 miles, its utmost breadth 19, and its area 280 sq. m. In the south are the Lammermuir Hills, culminating in Lammer Law (1733 feet); whilst isolated heights are North Berwick Law (612), Traprain or Dunpender Law (724), and the Garleton Hills (594), on which stands a conspicuous column, erected in 1824 to the fourth Earl of Hopetoun. The Tyne flows 16 miles north-eastward through the county. The rocks yield coal, iron, and limestone, the coal having been mined near Tranent since the 13th century. Haddingtonshire has for two hundred years enjoyed high agricultural fame, having been the first Scottish county to adopt the sowing of turnips in drills (1734), the thrashing-machine (1787), and the steam-plough (1862). About 64 per cent. of the entire area is

in cultivation, and more than one-seventeenth is under wood. The county returns one member to parliament. Its towns are Haddington, Dunbar, North Berwick, Prestonpans, Tranent, and East Linton; and under these and the Bass Rock are noticed the chief events in its history. The antiquities include the ruined castles of Dirleton and Tantallon. Pop. (1841) 35,886; (1881) 38,502; (1901) 38,665. See works by D. Croal (3d ed. 1885) and J. Small (1883).

Haddo House, the seat of the Earl of Aberdeen, in Aberdeenshire, 6½ miles WNW. of Ellon.

Haddon Hall, a splendid old baronial mansion, in Derbyshire, on the Wye, 2 miles SE. of Bakewell, and 23 NNW. of Derby. It was the seat successively of Avenells, Vernons, and the Rutland family. See works by Cattermole (1846–67), S. C. Hall (1871), and W. E. Cooke (1892).

Hadersleben, or HADERSLEV, a town of Sleswick-Holstein, 32 miles N. of Flensborg, on a narrow arm of the Little Belt. Pop. 9635.

Hadleigh, (1) a quaint old market-town of Suffolk, on the Bret, 9½ miles (12½ by a branch-line) W. of Ipswich. Its chief buildings are the brick Rectory Tower (1495) and the noble parish church, with a spire 135 feet high. Formerly, from 1331, an important seat of the cloth-trade, Hadleigh was the scene of the death of the Danish king Guthrum (889), of the martyrdom of Dr Rowland Taylor (1555), and of the 'great conference' (1833) out of which grew the 'Tracts for the Times.' Woolner, the sculptor was a native. Pop. of urban district, 3250.—(2) An Essex parish, near the N. shore of the Thames estuary, 2 miles NE. of Benfleet station, and 37 E. of London. It has a ruined castle (1231), and in 1892 became the seat of the Salvation Army farm-colony. Pop. 1350.

Hadramaut, the coast-region of South Arabia from Aden to Cape Ras-al-Hadd; more properly the plateau region lying between 48° and 51° E. long. Pop. 450,000. Towns, Saiun and Terim.

Hadrian's Wall, a fort-protected stone wall, with a ditch on its north side, and on its south side a *vallum* or series of ramparts, between the estuary of the Tyne and the Solway Firth. Hadrian is now generally believed to have been the builder of the whole structure (*c.* 119 A.D.), and Severus to have repaired it nearly a century later. In Northumberland the remains of it are considerable, the wall being still in two places 9 feet high. See works by Collingwood Bruce (1851–85) and G. Neilson (1891).

Hæmus, MOUNT. See BALKAN.

Haff, a Danish word meaning 'sea,' and used to designate three lagoons along the Prussian shore of the Baltic—the Stettiner or Pommersches Haff, Frisches Haff, and Kurisches Haff.

Hagen (*Hâgen*), a town of Prussia, in the Ruhr coal-district of Westphalia, 12 miles NE. of Elberfeld-Barmen. It manufactures iron, steel, and tin goods, cotton, cloth, leather, paper, beer, and tobacco. Pop. 70,000.

Hagenau (*Hâgenow*), a town of Alsace-Lorraine, 21 miles by rail N. by E. of Strasburg. It manufactures porcelain stoves, and has cotton and woollen spinning. Pop. 18,460.

Hagerstown, capital of Washington county, Maryland, on Antietam Creek, 85 miles WNW. of Baltimore by rail. It has machine-shops, flour-mills, and manufactories of furniture and other wooden wares, fertilisers, farming implements, and cigars. Pop. (1880) 6627; (1900) 13,590.

Hague, THE (Dutch *'s Gravenhage*, 'the count's hedge'), the capital of the Netherlands, 2 miles from the North Sea and 15 NNW. of Rotterdam. It is intersected by canals and shady avenues of lime-trees, and has many fine public buildings and private houses. In the centre of it is the Vijver, or Fish-pond, to the south of which stands the old castle of the Counts of Holland, where the Dutch parliament sits. In its gate-tower the brothers De Witt were confined till dragged thence and torn to pieces by the populace (1672). The picture-gallery has a splendid collection of works by native painters (Paul Potter's 'Bull' and Rembrandt's 'Lesson in Anatomy'); and there are the royal library, with 200,000 volumes, 4000 MSS., &c.; the municipal and other museums; the town-house; and the royal palaces. Amongst the numerous statues are those of William I. (two in number), William II., Spinoza, Bernhard of Saxe-Weimar, and the monument which commemorates the deliverance from the French. Close to the town is the beautiful pleasure-park called 'The Wood' (*Bosch*), in which stands a royal residence (1647) with the magnificent so-called 'Orange Hall.' The great Peace Conference was held here in 1899; The Hague is the seat of the resulting arbitration courts, for which Mr Carnegie provided permanent buildings. (See also SCHEVENINGEN, RYSWICK.) Industries are iron-founding, copper and lead smelting, cannon-founding, printing, furniture and carriage making, and the manufacture of gold and silver lace. Pop. (1875) 100,254; (1903) 229,840. From 1250 a hunting-lodge of the Counts of Holland, The Hague in 1527 became the seat of the supreme court in Holland, in 1584 the place of assembly of the States of Holland and of the States-general; and it was also the residence of the stadtholders.

Haidarabad. See HYDERABAD.

Haifa, a seaport of Syria, at the foot of Mount Carmel; pop. 6000. A railway to Damascus was undertaken in 1892. A little NW. is a settlement (1869) of the Würtemberg 'Society of the Temple,' now a flourishing agricultural colony of 300 persons. Here Laurence Oliphant settled in 1882. See his *Haifa* (1887).

Haikh, the native name of Armenia (q.v.).

Haileybury College, 2 miles SE. of Hertford, was erected in 1809 as a cadets' training-college, by the East India Company, and in 1862, four years after the transference of the Company's powers to the crown, was reopened as a public school for 500 boys. See works by Higgen (1887) and Monier Williams (1894).

Hailsham, a market-town of Sussex, 11 miles E. by S. of Lewes. Pop. of parish, 4200.

Hainan, an island of China, the southernmost land of the empire, lying between the Gulf of Tongking and the China Sea, and 15 miles S. from the mainland. It measures 150 miles (from SW. to NE.) by 100. The centre and south of the island are mountainous. The island is purely agricultural. The capital is Kiung-chow (pop. 40,000), whose port, Hoi-how (15,000), 3 miles distant, has been open to foreign trade since 1876. Pop. 2,500,000, the plains being inhabited by Chinese (1,500,000), the interior by the aboriginal Les. Eight to ten thousand Chinese emigrants leave Kiung-Chow every year for Singapore and Bang-kok. Gold exists. The island is subject to earthquakes and typhoons. See B. C. Henry's *Ling-Nam* (1886).

Hainault (formerly spelt in a perplexing variety

of ways from *Haysneaultx* to *Héno;* pron. *Hayno;* Ger. *Hennegau*), a southern province of Belgium. Area, 1437 sq. m.; population, 1,200,000, principally Walloons. The surface consists in the north and west of flat and fruitful plains; the south is occupied by spurs of the Forest of Ardennes. The principal rivers are the Haine—from which the province has its name—the Scheldt, the Dender, and the Sambre, the last a tributary of the Meuse. Toward the south and south-east, in the neighbourhood of Mons and Charleroi, are very extensive coalfields. Iron is also produced. The capital is Mons. From the 9th century Hainault was a countship, embracing both French and Belgian Hainault. French Hainault (now the dep. of Nord) was separated in 1659. For Hainault Forest, see EPPING.

Hainburg, a walled town of Austria, on the Danube, 27 miles ESE. of Vienna. Identified with the ancient *Carnuntum*, it figures in the *Nibelungenlied*. Pop. 6857.

Hainichen, a Saxon town, the centre of the German flannel manufacture, 13 miles NE. of Chemnitz. Pop. 8053.

Haiti. See HAYTI.

Hajipur, a river-port of Bengal, on the Gandak, just above its confluence with the Ganges opposite Patna. Pop. 21,387.

Hakodate, the chief port of Yezo in Japan, on a peninsula in the Strait of Tsugaru, is built partly on the inner slope of the Gibraltar-like hill (1200 feet) which dominates the strait, partly on the low sandy peninsula connecting the hill with the main island. It has a magnificent harbour, is (since 1859) one of the open ports of Japan, and exports seaweed, sulphur, bêche-de-mer, salted salmon, &c. Pop. 85,650.

Hal, a town in South Brabant, 9 miles by rail SSW. from Brussels. Pop. 12,290.

Halas, a town of Hungary, 82 miles by rail SSE. of Budapest. Pop. 19,860.

Halberstadt, a quaint old town of Prussian Saxony, in a fertile plain extending from the north foot of the Harz Mountains, 25 miles SW. of Magdeburg. The cathedral, rich in stained glass, was erected in the 13th and 14th centuries. Other buildings are the church of Our Lady (1146); the town-house (1360–81), before it a Roland pillar; and the Peterhof, formerly the bishop's palace. The chief industries are gloves, cigars, machines, sugar, leather, paper, spirits, &c., besides large railway workshops. Halberstadt dates from 820, and was given to Brandenburg in 1648. Pop. 44,200.

Haleb. See ALEPPO.

Halesowen, a market-town of Worcestershire, on the river Stour, 7½ miles WSW. of Birmingham. Its people are nail-makers and manufacturers of small ironwares. One mile to the south-east lie the ruins of the Premonstratensian abbey founded by King John. Shenstone (1714–63), a native of the place, carried on his landscape-gardening at the Leasowes, a mile distant. His tomb is in the church. Pop. 4060.

Halesworth, a Suffolk town, on the Blythe, 9 miles SSW. of Beccles. Pop. 2250.

Halicarnassus. See BUDRUN.

Halicz, a town in Austrian Galicia, on the Dniester, 69 miles SSE. of Lemberg by rail. On a neighbouring hill is the ruined 12th-century castle of the rulers of the former principality of Halicz. From this word the name Galicia is derived. Pop. 3464.

Halidon Hill, an eminence in Northumberland, 2 miles NW. of Berwick, overlooking the Tweed, was the scene of a bloody defeat of the Scots by the English, 19th July 1333.

Halifax, a thriving market-town, municipal, parliamentary, and county borough, in the West Riding of Yorkshire, is situated on the river Hebble, a feeder of the Calder, on the slope of an eminence, and is almost wholly surrounded by hills. It is 43 miles SW. of York, and 194 miles NNW. of London. Its name is probably derived from the four ways travelled by pilgrims converging towards the parish church, called Holy Ways; *fax* (as in *Carfax*) being Norman-French for 'forks' or ways. Its ample supply of water-power and of coal, its facilities for transport both by water and by leading lines of railway, and its position in proximity to many of the great towns of the north of England, contribute materially to its manufacturing and commercial importance, which dates from the settlement here of Flemish artisans in the reign of Henry VII. The parish church of St John, restored in 1879, is a fine specimen of Perpendicular Gothic; All Souls (1861), by Sir G. G. Scott, is one of the best and most elaborate of all his churches. The Congregational 'Square Church' was erected in 1855. The town-hall, opened by the Prince of Wales in 1863, is a very ornate Renaissance edifice, from designs by Sir Charles Barry; the new post-office was opened in 1887. Another important building is the Piece Hall, erected in 1779 for the sale of manufactured goods; it was presented to the corporation in 1868, and is now used as a Market Hall. Besides the Heath grammar-school (1585), at which Sterne was educated, and the Blue-coat School, there is the Crossley and Porter Orphan Home and School, built by the Crossley brothers, with an endowment of £135,894. Halifax has five parks—Savile, Shrogg's, Claremont, Akroyd, with free library, museum, and art-gallery, and the People's Park. The last, the gift of the late Sir F. Crossley in 1857, was laid out by Sir Joseph Paxton. There are two theatres (one dating from 1888). The Public Libraries Act was early adopted; there are also a Mechanics' Institute and the Dean Clough Institute erected by the Crossleys for their work-people. The tramways are on the overhead electric system, and the electric light is in use. There is a strong co-operative society. The worsted and carpet trades are the staple industries. Crossley's carpet-works, the largest in the world, employ more than 5000 hands. Other manufactured goods are worsted coatings, fancy dress goods, damasks, and merinos. Cotton fabrics and woolcards are manufactured, while dyeing and hosiery trades are on an extensive scale. There is also some trade in corn; iron, chemicals, boots, and mill-machinery are manufactured, and freestone is quarried. The water-works, which are very complete, have cost the corporation about £950,000. Pop. (1851) 33,582; (1871) 65,510; (1881) 73,633; (1901) 104,936, the boundary having been extended in 1900. The borough since 1832 has returned two members. See Watson's *History of Halifax* (1775; ed. by Leyland, 1869).

Halifax, the capital of Nova Scotia and the principal Atlantic seaport of Canada, is situated in 44° 39′ N. lat. and 63° 37′ W. long. It is the nearest to Great Britain of any city on the American continent, being but 2178 miles from Cape Clear. The magnificent sheet of water that constitutes its harbour is easily accessible at all

seasons of the year, at all times of the tide, by ships of any tonnage; and is capable of affording safe anchorage to the whole British navy. Its selection as the American rendezvous of D'Anville's ill-starred expedition against the British American colonies in 1746, led to a demand on their part that a place of such strategic importance should no longer be unoccupied by British troops. The demand was ably supported by Lord Halifax, and accordingly an expedition was fitted out in 1749, which founded the city and gave to it the name of its English patron. It at once became the capital of the province, and the principal naval and military station of Great Britain in America, and, strongly fortified, was garrisoned by British troops till 1905, when Canada assumed full responsibility for its defence. The dockyard is one of the finest in the British colonies. The town is built on the western side of the harbour, and extends along it about 2½ miles. It is the residence of the Roman Catholic archbishop of Halifax and of the Anglican bishop of Nova Scotia. It is also the seat of Dalhousie University. It is the eastern or Atlantic terminus of the Intercolonial Railway of Canada and of the Canadian Pacific Railway, and has lines of steamers connecting it with London, Liverpool, New York, Boston, &c. It has also the largest graving-dock (580 by 102 feet) in America, constructed in 1880–89, at a cost of $1,000,000, and capable of receiving the largest ship afloat. The proximity of Halifax to the coalfields of Pictou and Cape Breton and its extensive wharf accommodation make it a great coaling-station. Pop. (1881) 36,100; (1901) 40,787. Dartmouth (pop. 6000), on the harbour's opposite shore, is practically a suburb of Halifax.

Hall, or Schwäbisch-Hall, a town (since 1802) of Würtemberg, in the deep valley of the Kocher, 33 miles by rail E. by S. of Heilbronn. Hall (meaning 'salt') has salt-works, the brine being obtained from Wilhelmsglück, 5 miles distant. There are also manufactures of cotton, silk, leather, &c. Pop. 9225.

Hall, an Austrian health-resort, in Tyrol, on the Inn, 6 miles by rail E. of Innsbruck. From the Salzberg, 7 miles N., salt brine is conveyed to the pans of Hall. Pop. 6456.

Halladale, a Sutherland stream, flowing 20 miles north to the sea at Portskerry.

Hallamshire, an ancient manor of the West Riding of Yorkshire, with Sheffield for its capital. It now gives name to a parliamentary division.

Halle (*Hal-leh*), a city of Prussian Saxony, on the right bank of the Saale and on several small islands of the river, 20 miles by rail NW. of Leipzig. As an important railway centre, Halle has of late years rapidly increased in size, industry, and prosperity. Its university was founded in 1694 by Frederick I.; suppressed by Napoleon in 1806 and in 1813, it was re-established in 1815, and with it was incorporated the university of Wittenberg. At first a chief seat of the pietistic school of theology, Halle subsequently became the headquarters of the rationalistic and critical schools. It has over 1500 students, and 140 professors and lecturers. The Francke schools (1695) rank amongst the most important establishments of the place. Noteworthy are St Mary's Church (1529–54); the Gothic church of St Maurice (12th c.), with fine wood-carvings and sculptures; the red tower, 276 feet high, in the market-place; the town-hall; the remains of the Moritzburg (1484), the ancient residence of the archbishops of Magdeburg; a deaconesses' home; the university library (220,000 vols.); and an archæological and other museums. Salt is obtained from brine-springs within and near the town, which have been worked from before the 7th century. Other industries are machine-making, sugar-refining, printing, brewing, the manufacture of mineral oil, and fruit cultivation. Halle is the birthplace of Handel. Pop. (1871) 52,639; (1880) 71,484; (1900) 156,609.

Hallein, an Austrian town, 10 miles S. of Salzburg, has salt-works and salt baths. Pop. 6727.

Halluin, a town in the French dep. of Nord, 10 miles NNE. of Lille. Pop. 16,530.

Halmstad, a seaport of Sweden, on the Cattegat, 75 miles SE. of Gothenburg. Pop. 15,492.

Halstead, an Essex market-town, on the Colne, 56 miles NE. of London. It has a parish church with a wooden spire and many old monuments, a free grammar-school (1590), and manufactures of crape, silk, paper, and straw-plait. Pop. 6059.

Haltwhistle, a market-town of Northumberland, on the South Tyne, 16½ miles W. of Hexham. Pop. of parish, 3150.

Halys. See Asia Minor.

Ham, a town in the French dep. of Somme, on the river Somme, 12 miles SW. of St Quentin. Its ancient fortress (rebuilt in 1470) is used as a state-prison. It was the place of confinement of Joan of Arc, Louis Napoleon, &c. Pop. 3000.

Ham, West, a suburb of East London, and a county borough of Essex, on the north bank of the Thames, opposite Greenwich. The rapid growth of the population has been principally owing to the Victoria and Albert docks and the gas-works. It is a busy industrial parish, and has silk-printing, shipbuilding, distilling, and chemical manufactures. In 1885 it was made a parliamentary borough, returning two members to the House of Commons. Here is Mrs Elizabeth Fry's house, 'The Cedars.' Pop. (1851) 18,817; (1901) 267,358.—East Ham, situated in the south-west of the same county, 1½ mile SW. of Barking, has a pop. of 96,018. See Katherine Fry's *History of the Parishes of East and West Ham* (1888).

Hamadan (anc. *Ecbatana*), a town of Persia, at the northern base of Mount Elwend, 160 miles WSW. of Teheran. It contains some notable tombs—e.g. Avicenna's and others affirmed to be those of Mordecai and Esther. It is the centre of converging routes from Bagdad, Erivan, Teheran, and Ispahan, and manufactures leather, coarse carpets, and woollen and cotton fabrics. Pop. 30,000.

Hamah (Gr. *Epiphania;* Bible *Hamath*), a very ancient city of Syria, on the Orontes, 110 miles N. by E. of Damascus. In 1893 it was proposed to connect Hamah and Hems (q.v.) with Damascus and with Aleppo by rail. Pop. 45,000.

Hambato, or Ambato, capital of Tunguragua province, Ecuador, in a sheltered amphitheatre on the northern slope of Chimborazo, 8860 feet above the sea. It was twice destroyed—by an eruption of Cotopaxi in 1698, and by an earthquake in 1796. Pop. 10,000.

Hamburg, a state of the German empire, includes the free city of Hamburg, the towns Bergedorf and Cuxhaven, and several suburbs, with a total area of 158 sq. m. The free city of Hamburg is on the Elbe, 75 miles from the German Ocean, 112 N. of Hanover, and 177 NW. of Berlin. Founded by Charlemagne in 808, Hamburg was made a bishopric in 831. The commercial history of Hamburg began in 1189–90,

when the emperor granted it various privileges, amongst others a separate judicial system and exemption from customs dues. In 1241 it joined with Lübeck in laying the foundation of the Hanseatic League, and from 1259 associated itself closely with Bremen also. From that time it increased rapidly in wealth and commercial importance. In 1510 it was made an imperial town; it early embraced the doctrines of the Reformation. From 1410 to 1712 there were repeated risings against the governing classes; during 1806–14 it was occupied by the French, when its pop. decreased by nearly one-half, namely to 55,000, and it endured losses of property estimated at £7,000,000. In 1815 Hamburg joined the German Confederation. In three days, in 1842, one-third of Hamburg was destroyed by fire, and more than two millions sterling worth of property lost. In 1888 Hamburg entered the German Customs Union, though still retaining part of its territory as a 'free port.' The public buildings include the 'school house' (containing the town library of 600,000 volumes and 5500 MSS., and a natural history museum), townhouse, picture-gallery, &c. Four churches are noticeable—St Nicholas, built from designs by Sir Gilbert Scott, as a memorial of the fire of 1842, a Gothic building, with a spire 482 feet high; St Michael's, an 18th-century Renaissance church, with a spire 469 feet high; and St Catherine's and St James's, both Gothic edifices of the 14th and 15th centuries. The older portion is intersected by canals, which serve as waterways between the river and the warehouses.

Hamburg is the busiest commercial city on the Continent, and the principal commercial seaport of Germany. Next to London it has the largest money-exchange transactions in Europe; its bank was founded so long ago as 1619. As a commercial centre its only rivals are London, Liverpool, Antwerp, and New York. Its industries are cigar-making, distilling of spirits, sugar-refining, brewing, engineering, iron-founding, manufacture of chemicals, india-rubber wares, furniture, starch, and jute, and shipbuilding. Of the imports about one-half represent the value of goods brought into Hamburg by rail and river (Elbe) from the interior. Hamburg owes a large part of its trade to its position as a distributing centre for commodities brought from distant parts of the world, to be afterwards sent to the different countries of Europe. Besides coffee, the more important objects of trade are sugar, woollen and cotton goods, butter, tobacco, wine and spirits, hides, machines, rice, saltpetre, leather, herrings, flour, furs, linen, petroleum, coal, iron, and silks. Hamburg ranks second to Bremen as a port of embarkation for emigrants from Germany. Pop. (1875) 374,930; (1890) 622,530; (1900) 768,349, of whom 705,738 lived in the city itself.

Hameln, a town of Hanover, on the Weser, 25 miles SW. of Hanover. It presents a quite mediæval appearance, having many Gothic and Renaissance houses and buildings. The chain-bridge (1839) over the Weser is 840 feet long. The industries include machine-making, iron-founding, wool-spinning, &c. Pop. 19,831. With this town is connected the well-known legend of the Pied Piper (or Ratcatcher) of Hameln or Hamlin, who in 1284 freed the town from rats through the mystic charm of his pipe.

Hamilton, a town of Lanarkshire, on the left bank of the Clyde, 10 miles SE. of Glasgow. The principal edifice is the burgh buildings (1863), with a clock-tower nearly 130 feet high; and there are also the county buildings, large barracks, a public park (1894), and a good racecourse. The former manufactures of lace, tamboured bobbinette, and cambric have declined; and coal-mining is now the chief industry of the district. Lord Dundonald was a native. Hamilton was made a royal burgh in 1548, and one of the five Falkirk parliamentary burghs in 1832. Pop. (1841) 8724; (1881) 18,517; (1901) 32,775.—Hamilton Palace, successor to Cadzow Castle, is the seat of the Duke of Hamilton. Dating partly from 1594, but greatly enlarged in 1705 and 1822, it is a sumptuous classical structure, though its choicest art-collections were sold in 1882 for nearly £400,000. Within its policies are a superb mausoleum (1852), the ruins of Cadzow Castle, the herd of wild white cattle, and some primeval oaks.

Hamilton, a city of Ontario, Canada, is situated on Burlington Bay, at the west end of Lake Ontario, 40 miles by rail SW. of Toronto, and 56 WNW. of Niagara Falls. The business portion lies at the foot of 'The Mountain,' on whose slope many fine residences are embowered among trees and gardens. Trees line the wide, handsome streets; the houses are mostly substantial stone erections, and the court-house and county buildings are among the finest in Canada. The manufactures include iron, cottons, woollens, sewing-machines, boots, glass-ware, &c. Hamilton, which was founded in 1813, is the seat of Anglican and Roman Catholic bishops. Pop. (1861) 19,096; (1881) 35,961; (1901) 52,550.

Hamilton, metropolis of the western part of Victoria, on Grange Burn Creek, 224 miles by rail W. of Melbourne. Pop. 4050.

Hamilton, (1) capital of Butler county, Ohio, on the Great Miami River, and on the Miami and Erie Canal, 25 miles by rail N. of Cincinnati. It has paper and flour mills, foundries, breweries, &c. Pop. (1880) 12,122; (1900) 23,914.—(2) A post-village of New York, 37 miles SE. of Syracuse, is the seat of Madison University, and of a Theological Seminary, both Baptist. Pop. 1628.

Hamilton, capital (pop. 2300) of Bermuda.

Hamirpur, capital of a district in the United Provinces of India, on the Jumna, and at the head of a branch of the Ganges Canal, 110 miles NW. of Allahabad. Pop. 7200.

Hamm, a town of Prussia, in Westphalia, on the Lippe, 25 miles NE. of Dortmund by rail, has large iron-foundries, wire-works, machine-factories, &c. It was a Hanse town, and until 1763 a fortress. Pop. 32,500.

Hammerfest, the most northern town of Europe, in 70° 40′ N. lat. and 23° 30′ E. long., is on the island of Kvalö, in the Norwegian province of Finmark. It was destroyed by fire in 1890. Pop. 2289.

Hammersmith, a metropolitan and parliamentary borough of the county of London. A suspension bridge was opened here in 1827, and a new one by Prince Albert Victor in 1887. The borough returns one member. Formerly a detached village, Hammersmith is now a large town. Pop. of the metropolitan borough (1901) 112,239; of the parliamentary borough (1901) 111,970.

Hamoaze. See PLYMOUTH.

Hamoon. See SEISTAN (LAKE OF).

Hampden House, Bucks, among the Chilterns, 4 miles S. by W. of Wendover, was the home of John Hampden, who is buried in the church here.

Hampshire, HANTS, or, officially, the COUNTY OF SOUTHAMPTON, a maritime county in the south

of England, bounded by Dorset, Wilts, Berks, Surrey, Sussex, and the English Channel. Including the Isle of Wight, it has an area of 1621 sq. m., or 1,037,764 acres, 700,000 of which are generally under culture. Pop. (1801) 219,290; (1841) 354,682; (1861) 481,815; (1881) 593,465; (1901) 797,634. The surface is diversified by the North and South Downs, the loftiest points being Sidown Hill (940 feet), and, on the Berkshire border, Inkpen Beacon (1011 feet), the highest chalk-down in England. The south-western portion of the county, almost wholly detached from the main portion by Southampton Water, is occupied mainly by the New Forest (q.v.). In the south-east and east there are remains of the forests of Bere, Woolmer, and Waltham Chace. The principal rivers are the Test, Itchen, and Avon, all flowing southward; the last named forms the western boundary of the New Forest. The county, exclusive of the parliamentary boroughs of Portsmouth, Southampton, Winchester, and Christchurch, and the Isle of Wight, returns five members for its five divisions —North or Basingstoke, West or Andover, East or Petersfield, South or Fareham, and New Forest. Hampshire is wholly in the diocese of Winchester. Towns other than the four boroughs are Aldershot, Alton, Andover, Basingstoke, Bishops Waltham, Bournemouth, Fareham, Gosport, Havant, Lymington, Petersfield, Ringwood, Romsey, and Titchfield. Among Hampshire's worthies have been Jane Austen, Walter Besant, Dickens, William Gilpin, Keble, Kingsley, George Meredith, Archbishop Warham, Gilbert White, William of Wykeham, and Edward Young. See works by Woodward (3 vols. 1861–69) and T. W. Shore (1892).

Hampstead, a metropolitan and parliamentary borough of the county of London, is finely situated on a range of hills. It was formerly famous for its medicinal springs, and is still a favourite place of residence and of holiday resort among Londoners. On the summit of the hill (430 feet), above the village, is the Heath, which affords extensive and pleasant prospects of the surrounding country. A house on the Heath, formerly called the Upper Flask Inn, and now a private residence, was the place of resort of the Kit-Cat Club, at which Steele, Addison, Richardson, Walpole, and others used to assemble. Hampstead is associated with many names in literature and art, as those of Pope, Gay, Johnson, Akenside, Joanna Baillie, Byron, Constable, Romney, Coleridge, Keats, Shelley, Leigh Hunt, Landseer, and Sir W. Besant. Pop., met. bor. (1901) 81,942; parl. bor. (one member) 82,329. See works by W. Howitt (1869), Lobley (1889), and Baines (1890).

Hampton, a village of Middlesex, on the Thames, 15 miles SW. of London. In the vicinity are many fine mansions and beautiful villas, including Garrick's villa. Pop. 6822.

Hampton Court Palace, till George II.'s time a royal residence, and now partially occupied by persons of good family in reduced circumstances, stands about a mile from the village in the midst of grounds that extend to the Thames. The original palace was erected by Cardinal Wolsey, and by him presented (1526) to Henry VIII., who enlarged it and formed around it a royal deer-park. Here Edward VI. was born, his mother, Jane Seymour, died, and Charles I. was a prisoner. Here too was held in 1604 the famous conference between the bishops and the Presbyterians. A considerable portion of Hampton Court was rebuilt by William III., from designs by Wren, and he also laid out the park and gardens in the formal Dutch style. The picture-gallery contains several Italian works, Lely's Beauties of the Court of Charles II., and valuable specimens of Holbein, Kneller, West, &c.; but Raphael's cartoons have been removed to the South Kensington Museum. The gardens present a series of raised terraces, formal flower-plots, and long and shady arcades, and have among other attractions a 'maze' or labyrinth. Damage, estimated at £20,000, was caused by fire in November 1886. See Ernest Law's *Hampton Court* (3 vols. 1885–91).

Hampton, a bathing-resort of Virginia, gives name to Hampton Roads, a channel between Chesapeake Bay and the James River estuary. Pop. 3684.

Hanau, a town in the Prussian province of Hesse-Nassau, at the confluence of the Kinzig and Main, 13 miles E. by N. of Frankfort. It is divided into the Old Town (1393) and the New Town; the latter was founded in 1597 by Protestant refugees from the Low Countries, who introduced the woollen and silk manufactures, which still flourish. Hanau stands pre-eminent in Germany for its jewellery and gold and silver wares. It also manufactures carpets, chocolate, leather, cards, paper, hats, &c. Here the brothers Grimm were born. In the neighbourhood is the watering-place of Wilhelmsbad. Near the town, in 1813, Napoleon defeated the Austrians and Bavarians. Population, 31,000.

Handsworth, a NW. suburb of Birmingham.

Hang-chow, a city of China, the gate of the great imperial canal, on the left bank of the Tsientang, where it enters the Bay of Hang-chow, 110 miles SW. of Shanghai. It was the capital of the Sung empire before its overthrow by the Mongols, and was a splendid city when visited by Marco Polo early in the 14th century. It still has many magnificent temples, is a principal seat of the silk manufacture, and of gold and silver work, and is noted for the beauty of its surroundings. Several thousands of candidates assemble here every year for the public examinations. The river is subject to a dangerous bore or eagre. Previous to the Tâiping rebellion, the city had some 2,000,000 inhabitants; but it was then (1861) laid in ruins, and its pop. is now estimated at from 500,000 to 800,000.

Han-hai, a dried-up sea in central Asia, now represented only by Lake Lob-nor (q.v.).

Hankow, a river-port of China, at the junction of the Han River with the Yang-tsze, 600 miles W. of Shanghai. Strictly speaking, Hankow is a suburb of the towns of Wu-chang and Han-yang, the three together forming one huge city. Vessels of large size can reach Hankow, the river being navigable to Ichang, 420 miles higher up. Since 1862 Hankow has been open to foreign trade. The principal article of export is tea, others being silk, oil, vegetable tallow, tobacco, hides, nutgalls, coal, musk, and wax. The imports are opium, cotton, piece-goods, woollens, metals, sugar, &c. In 1889 a decree of the emperor authorised the construction of a railway from Hankow to Peking, 700 miles in length. Before the Tâiping rebellion the three cities had a pop. of over 5,000,000; it is now about 1,700,000, Hankow having 750,000 of these.

Hanley, a Staffordshire town, in the Potteries, 18 miles N. of Stafford. It manufactures china, earthenware, and encaustic tiles; and near it are coal and iron mines. It was constituted a muni-

cipal borough in 1857; a parliamentary borough, returning one member, in 1885; and a county borough in 1888. Pop. of municipal borough (1851) 25,369; (1871) 39,976; (1901) 61,600; of parl. borough (including Burslem, q.v.), 100,365.

Hannibal, a city of Missouri, on the Mississippi, here crossed by an iron railroad bridge, 111 miles by rail NNW. of St Louis. An important railway centre, it has a Methodist college, an extensive trade in lumber, flour, and cattle, and manufactories of flour, tobacco, lime, and railroad cars. There are coal-mines close by. Pop. 12,757.

Ha-noi, the capital of Tongking, and headquarters of the French administration, on the left bank of the Song-coi or Red River, 80 miles in a direct line from the sea. Pop. 120,000.

Han'over (Ger. *Hanno'ver*), formerly a kingdom of northern Germany, but since 1866 incorporated with Prussia. Area, 14,833 sq. m., or nearly twice the size of Wales; pop. (1871) 1,963,080; (1900) 2,590,340. Except in the south, where the Harz Mountains (q.v.) attain 3037 feet, the surface belongs to the great North German plain, with great stretches of moor and heath, the largest the Lüneburg. It is watered by the Elbe, Weser, Ems, and their tributaries. Norderney and Borkum (islands) are seaside resorts. Göttingen is the seat of a university, and the capital is Hanover. The people of the north-eastern and central provinces are mostly Saxons; those on the coast are of Frisian origin; those on the west of the Ems, Dutch; and those in the southern provinces, Thuringians and Franconians. Platt-Deutsch, or Low German, is commonly spoken in the rural districts; but High German is the language of the educated classes, and is spoken with more purity than in any other part of the empire. The second elector of Hanover became in 1714 George I. of England, and the connection lasted until Queen Victoria's accession to the British crown in 1837, Hanover then passing to her uncle, the Duke of Cumberland. His son, the blind George V. (1819–78), succeeded in 1851, and in 1866 sided with Austria, and was dethroned, Hanover (which in 1815 had been constituted a kingdom) being annexed to Prussia.

HANOVER, the capital, is situated on a subtributary of the Weser, 78 miles SE. of Bremen and 158 W. of Berlin. It consists of the old town, with narrow streets and mediæval houses, and the handsome modern town, lying N., E., and SE. of the older portion. The most interesting buildings are the town-hall (1439), with antique sculpture and fine frescoes; the royal library (200,000 vols. and 4000 MSS.); the theatre, one of the largest in Germany; the palaces; the museum, with natural history and art collections; the Kestner Museum, with antiquities and a collection of engravings (120,000); the polytechnic school, formerly a ducal castle; the castle church; the 14th-century 'market' church; and the 'new town' church, with the tomb of Leibnitz; and the magnificent railway station. Close by is the royal palace of Herrenhausen, whose beautiful grounds are open to the public. Hanover is a centre of the North German railway system, and amongst its industries are railway repair shops, iron-founding, typefounding, the manufacture of pianofortes, india-rubber goods, tobacco, linen, sugar, chocolate, hardware, brewing, and distilling. Pop. (1871) 87,641; (1900) 235,650. Hanover is the birthplace of the brothers Schlegel; Louisa, queen of Prussia; and Sir William Herschel.

Hanover, a New Hampshire village, near the Connecticut, 55 miles NW. of Concord. Here is Dartmouth College (1770). Pop. 1834.

Hanse Towns. See HAMBURG, BREMEN, LÜBECK.

Hansi, a town of the Punjab, 80 miles NW. of Delhi, was a British cantonment from 1802 down to the Mutiny (1857). Pop. 15,656.

Hanwell, the Middlesex lunatic asylum (1831), 7½ miles W. of Paddington station, London.

Han-yang. See HANKOW.

Haparanda, a town in the Swedish province of Norrbotten, near the Torneå's mouth, and opposite the Russian town of Torneå. Pop. 1250.

Harar, or HARRAR, a town in the Galla country now belonging to Abyssinia, connected by rail with the port of Jibutil in French Somaliland (186 miles NNE.). Pop. 40,000.

Harbin, or KHARBIN, a town of Manchuria, on the Sungari, a tributary of the Amur (which divides Manchuria into northern and southern sections), where the Siberian railway sends off the branch to Port Arthur. In 1903 the Russian civil population was about 10,000.

Harborough. See MARKET-HARBOROUGH.

Harbour Grace, port of entry and second town of Newfoundland, 84 miles WNW. of St John's. Pop. 5500.

Harburg, a Prussian seaport in Lüneburg, 5 miles S. of Hamburg, on the Elbe. Its industries include gutta-percha goods, palm-oil, cotton-seed oil, chemicals, &c. Since the deepening of the Elbe, Harburg's commerce has greatly increased. It is a holiday resort for the Hamburgers. Pop. 51,000.

Hardanger Fjord, Norway, a narrow sea-inlet, 20 miles S. of Bergen. It is 930 feet deep, and extends 68 miles north-eastward without reckoning branches, amidst magnificent mountain scenery. The Hardanger Fjeld is a tract of the mountainous backbone of Norway, NE. of the Fjord.

Harden, the seat of Lord Polwarth, in Roxburghshire, 4 miles W. of Hawick. It has belonged to the Scotts since 1501.

Harderwijk, a Dutch fishing-town, on the south-east shore of the Zuider Zee, 31 miles NE. of Utrecht by rail. From 1648 to 1811 it was the seat of a university. Pop. 7339.

Hardwár (*Hari-dwára*, 'Vishnu's gate'), perhaps the most famous spot on the Ganges, stands where the river emerges from the sub-Himalaya into the plains of Hindustan, 39 miles NE. of Saharunpur, United Provinces. It attracts immense numbers of pilgrims at the end of March and the beginning of April—a great fair at the same time engrafting commerce on religion. In ordinary years the attendance is about 100,000; but every twelfth year (as in 1882, 1894, &c.) peculiarly sacred rites takes place, attended by perhaps 300,000 (formerly 2,000,000). Hardwár is 1024 feet above the sea, and has a pop. of 25,600. Since 1891 elaborate and successful efforts have been made, by means of rigid and scientific sanitation, to prevent the fair from being as heretofore a great means of spreading cholera.

Hardwick Hall, a Derbyshire seat of the Duke of Devonshire, 6½ miles SE. of Chesterfield. It was built in 1590 by the duke's ancestress, the famous 'Bess of Hardwick.'

Harfleur (mediæval *Hareflot*), a town in the French dep. of Seine-Inférieure, on the Seine's estuary, 4 miles E. of Havre. Formerly it was an important seaport and fortress. Pop. 2616.

Haringvliet. See MEUSE.

Hari-Rud, or HERI-RUD, a river of Asia, which rises in the Hindu Kush, 150 miles W. of Kabul, and flows 500 miles westward and northward through Afghanistan, and along the boundary between Persia and Turkestan, until it loses itself in several arms in the Tekke Turkoman oasis.

Harlaw', 18 miles NW. of Aberdeen, the scene on 24th July 1411 of the great defeat of the Highlanders led by Donald, Lord of the Isles, by the Lowlanders under the Earl of Mar.

Harlech, an ancient town of Merionethshire, North Wales, stands on the coast, 10 miles N. of Barmouth. On a steep hill overlooking the sea is its massive castle, which held out for the Lancastrians in the Wars of the Roses, and later for Charles I. The 'March of the Men of Harlech' commemorates its capture by the Yorkists in 1468.

Harleston, a Norfolk market-town, near the Waveney, 6½ miles SW. of Bungay. Pop., with Redenhall, 2003.

Harlingen (Frisian *Harns*), a Dutch seaport, in Friesland, on the Zuider Zee, 14 miles W. by S. of Leeuwarden. It has a good harbour (1875). Pop. 10,274.

Harlow, an Essex town, near the Stort, 6 miles SSW. of Bishop-Stortford. Pop. of parish, 2643.

Haro, a town of Spain, on the Ebro, 31 miles by rail NW. of Logroño. Pop. 7526.

Harper's Ferry, a post-village of West Virginia, situated among beautiful scenery at the confluence of the Shenandoah with the Potomac, 81 miles W. of Baltimore by rail. It was the scene of John Brown's abolition raid in 1859; and here a Union army of over 11,500 men surrendered to Stonewall Jackson in 1862. Pop. 864.

Harpurhey, a township within the parliamentary borough of Manchester.

Harrar. See HARAR.

Harrington, a Cumberland coast-town, 4½ miles N. of Whitehaven. Pop. of parish, 3635.

Harris, in the Hebrides, is the southern portion of the island of Lewis (q.v.), with islets; pop. 5300.

Harrisburg, the capital of Pennsylvania, is situated amid beautiful scenery on the left bank of the Susquehanna River, which is here crossed by several long bridges, 106 miles W. by N. of Philadelphia. It contains the capitol, courthouse, arsenal, insane asylum, and a Roman Catholic cathedral. The city has a number of blast-furnaces and rolling-mills, and large manufactures of steel and iron, including boilers, machinery, nails, and files; cotton goods, flour, bricks, shoes, brooms, &c. are also produced, and there is a large trade in lumber. Founded in 1785, Harrisburg became the state capital in 1812. Pop. (1870) 23,104; (1900) 50,167.

Harrismith, a town in the east of the Orange River Colony, 160 miles NW. of Durban by rail. Pop. (1904) 8300.

Harrison, a town of New Jersey, on the Passaic, opposite Newark. It manufactures oilcloth, wire, thread, &c. Pop. 10,600.

Harrogate, or HARROWGATE, a watering-place in the West Riding of Yorkshire, lies among the moors, 450 feet above sea-level, and by rail is 17 miles N. of Leeds and 20 WNW. of York. It consists of two parts, High and Low, and is celebrated for its sulphureous, saline, and chalybeate springs. The sulphureous springs are of laxative and diuretic quality, while the chalybeate are tonic. The waters are used both externally and internally, and are in great repute in many diseases of the skin and in some cases of dyspeptic disorders, scrofula, gout, jaundice, rheumatism, &c. The springs were discovered in 1596. Harrogate is a remarkably healthy place, the death-rate per 1000 ranging in six years between 13·2 and 10·3. It was incorporated as a municipal borough in 1883. Pop. (1851) 3678; (1901) 28,423. See Smollett's *Humphrey Clinker* (1771) and Grainge's *History of Harrogate* (1871).

Harrow, or HARROW-ON-THE-HILL, a town of Middlesex, 11½ miles WNW. of St Paul's, stands on a hill, 200 feet high, that looks over thirteen shires. Its 'visible church,' which crowns the hill-top, was founded in 1094, and rebuilt about the middle of the 14th century. Exhibiting every style of Gothic architecture, from Norman to Perpendicular, it has a lofty spire and eleven brasses (one of them to John Lyon): whilst in the churchyard is a flat tombstone on which Byron as a schoolboy used to lie. Pop. of the parish (1851) 4951; (1900) 10,220.

HARROW SCHOOL, founded by John Lyon in 1571, ranks as one of the great English public schools, with some 600 boys. Former distinguished *alumni* having been Lord Byron, the Marquises of Dalhousie and Hastings, Dean Merivale, Lord Palmerston, Sir Robert Peel, Admiral Rodney, Lord Shaftesbury, Sheridan, Trollope, and Colonel Burnaby. The buildings date from 1608, and include the chapel (1857), Vaughan Library (1863), and Speech-room (1877). See works by Pitcairn (1870), Rimmer (1881), Thornton (1885), Minchin (1898), Howson, Warren, and twenty-four others (1898), and Fischer Williams (1901).

Hartford, the capital of Connecticut, on the right bank of the Connecticut River, 50 miles from its mouth, and 112 by rail NE. of New York. It is a handsome city, with streets not all too regular, and an imposing state capitol of white marble, arsenal, post-office, and, on the outskirts, the new buildings of Trinity College (Episcopal), which was founded in 1823. Hartford contains a Congregational seminary, a large hospital, asylums, and several libraries; it is the seat of a Roman Catholic bishop. There are extensive manufactures of Colt's pistols, Gatling guns, engines, boilers, and machines, hardware, stoneware, and wooden wares, and a trade in Connecticut tobacco. The site of a Dutch fort in 1633, and of a colony of Massachusetts settlers as early as 1635–36, Hartford was incorporated as a city in 1784, and has been sole capital of the state since 1873. About 1780 the 'Hartford wits,' of whom Joel Barlow was one, made the city a literary centre. Here in 1814 took place the meeting of New England delegates known as the Hartford Convention. Pop. (1870) 37,180; (1880) 42,015; (1890) 53,230; (1900) 79,850.

Harthill, a collier-village of Lanarkshire, 5 miles SW. of Bathgate. Pop. 1608.

Hartland Point, a Devon headland, on the south side of Barnstaple Bay, at the mouth of the Bristol Channel.

Hartlebury Castle, the seat of the bishops of Worcester, 4 miles S. by E. of Kidderminster.

Hartlepool, a municipal borough and seaport in the county of Durham, is situated on a small peninsula north of the estuary of the Tees, 12 miles NNE. of Stockton, and 18 ESE. of Durham. Its ancient sea-fishing industry has recently extended. The ancient boundaries were in 1883 extended so as to take in the township of Throston and part of Stranton. The local industries are iron

shipbuilding, marine engineering, and cement-manufacture. The former considerable shipping trade is now almost entirely transferred to West Hartlepool. The harbour entrance is safe, and communicates by a channel direct to the more modern port. A substantial sea-wall and delightful promenade, completed in 1889, have added much to the attractive appearance of the town on the seaward side. Pop. of municipal borough (1851) 9503 ; (1901) 22,723.

West Hartlepool, a municipal borough and seaport, is situated to the south as Hartlepool is to the north of Hartlepool Bay, and practically forms one town with Hartlepool. It was founded in 1847 by Ralph Ward Jackson, an enterprising railway projector, afterwards M.P. It possesses a theatre, athenæum and mechanics' institute, custom-house, market-house, exchange, a municipal hall opened by Prince Albert Victor in 1889, a school of art, &c. The first harbour was constructed here in 1847, of 12 acres, and has since been greatly enlarged. The dock area of Hartlepool and West Hartlepool together, including the timber and shipbuilding yards, &c., is over 300 acres in extent. Extensive iron-shipbuilding yards, cement-works, wood-pulp works, and marine-engine building establishments have been founded. There are graving-docks leased by the North-Eastern Railway Company, and also one extensive graving-dock open to public use. The imports include coal, flax and hemp, grain, timber, butter, cheese, fruit, cattle, tallow, and iron ; the exports, woollen and cotton goods, copper, cement, drugs, machinery, earthenware, yarn, hides, &c., the trade being carried on for the most part with the Baltic ports, and with Hamburg and Rotterdam. Governed from 1854 by a local commission, the town was created a municipal borough in 1887. Pop. of municipal district (1861) 12,603 ; (1881) 28,167 ; of municipal borough (1901) 62,227. In 1867 'The Hartlepools' were constituted a parliamentary borough, returning one member. Pop. (1901) 86,305.

Hartz. See Harz.

Harwich (*Har'ritch*), a municipal borough, seaport, and market-town of Essex, is situated on a promontory at the influx of the confluent Stour and Orwell to the sea, 71 miles by rail NE. of London. Southward of Harwich is the watering-place of Dovercourt, with a sea-wall 2 miles long. The chief industries are shipbuilding, fishing, and the manufacture of cement. Steamers run daily to Ipswich, and there are regular lines of packets to Antwerp, Rotterdam, London, &c. The harbour is capacious, safe, and commodious, having been much improved since 1844. It is defended by a battery, and, on the Suffolk side, by Landguard Fort, which dates from the reign of James I. From the 14th century till 1867 Harwich returned two members, and from then till 1885 one. Pop. (1851) 4451 ; (1881) 7842 ; (1901) 10,070.

Harz Mountains, a mountain-range of Germany, extending between the rivers Weser and Elbe, south of Brunswick, with a length of 57 miles, a breadth of 20, and a superficial area of 784 sq. m. It forms an elevated plateau, rising on most sides somewhat steeply from the plains, and ridged with irregular and in some parts forest-clad mountains. The range, which is divided into Upper and Lower Harz, the average elevations of which are 2100 and 1000 feet respectively, attains 3740 feet in the Brocken (q.v.), the highest peak of central Germany. The Harz are exceedingly rich in metals and minerals, as silver, iron, lead, copper, zinc, marble, alabaster, and granite. They are the scenes of many of the weird legendary tales of German literature.

Haskeval. See Rum.

Haslar Hospital. See Gosport.

Haslemere, a town of Surrey, 12½ miles SW. of Guildford by rail, manufactures walking-sticks and woodware ; till 1832 it was a parliamentary borough. Pop. 2674. Three miles south, and over the Sussex border, is Blackdown Common, on the southern heights of which stands Aldworth, the home built for himself by Lord Tennyson from his own design, in which he died.

Haslingden, a municipal borough (since 1891) of Lancashire, 19 miles NW. of Manchester. It has cotton, silk, and woollen manufactures, with neighbouring ironworks, coal-mines, and stone and slate quarries. Pop. (1851) 6164 ; (1901) 18,543.

Hasselt, capital of the Belgian province of Limburg, 18 miles NW. of Maastricht. Pop. 15,194.

Hastinapur, a ruined city of India, on the old bed of the Ganges, 22 miles E. of Meerut.

Hastings (A.S. *Hæstingas*), a parliamentary, municipal, and county borough and famous watering-place of Sussex, is picturesquely situated on the shore, and surrounded by high cliffs on all sides except the south, which is open to the sea. By rail it is 33 miles E. of Brighton, and 62 SSE. of London. It consisted formerly of only two streets, intersected by a small stream called the Bourne, but is now a large place, whose resident population is doubled during the holiday season. Since the middle of the 19th century the borough has been greatly extended, and some portions of the hills which shelter the town contain several fine streets and terraces. The breezy esplanade, over 3 miles in length, forms one of the finest sea walks and drives in the kingdom. The climate is dry, mild, and equable, and the bathing very good. During cold weather in winter and spring the place is a resort for pulmonary patients, being sheltered by the hills inland from easterly and northerly winds. The drainage is good ; the water-supply pure and abundant ; and salt water is laid on for watering the streets and for bath purposes. The corporation have purchased the East and West Hills, fine open plateaus commanding beautiful land and sea views, and admirably adapted for golf and other outdoor sports. There are three large public gardens, and an extensive Alexandra Park, opened by the Prince and Princess of Wales in 1882. Hotels are plentiful, and several large and flourishing schools have been established, the Hastings centre taking a large place in the Oxford and Cambridge local examinations. One of the great attractions of the town to visitors is the handsome pier (1872), extending 900 feet from the parade, and having a spacious pavilion at the sea, with accommodation for between 2000 and 3000 persons. A similar pier (1890) is at St Leonards, about a mile westwards. The 'premier Cinque port' is one of the three richest fishing-stations on the south coast. The castle, now in ruins, was built by one of the followers of William the Conqueror. Hastings (since 1865) returns only one member. Pop. of parliamentary borough (1881) 47,619 ; (1901) 62,913—65,528 in the municipal borough, extended in 1897. For the battle of Hastings, see Battle ; and see also works by W. D. Cooper (1862) and Montagu Burrows (1888).

Hastings, the capital of Adams county, Nebraska, 151 miles SW. of Omaha. Pop. 17,190.

Hatfield, or BISHOPS HATFIELD, a market-town of Hertfordshire, 18 miles NNW. of London by rail. There exist a few scanty remains of the 12th-century palace of the bishops of Ely, seized, together with the manor, by Henry VIII., and successively the residence of that king, of Edward VI. and Queen Elizabeth before their accession, and of James I. Hatfield House, the Marquis of Salisbury's seat, was built by Sir Robert Cecil in 1611, and is a fine specimen of Jacobean architecture, rich in portraits and historical manuscripts. Pop. of parish, 4630. See Brewer's *English Studies* (1881).

Hatfield Chase, a fenny tract of land in the West Riding of Yorkshire, lying between the Trent and Doncaster, some 180,000 acres in extent, which has been drained, and is now cultivated. See a work by John Tomlinson (1882).

Hathras, a town in the United Provinces, 21 miles S. of Aligarh. The commercial centre for the Upper Doab, it exports sugar, grain, cotton, &c., and is famous for its delicate carved work. Pop. 42,580.

Hatteras, CAPE, a low point of North Carolina, forming part of a sandbank, in 35° 15′ N. lat. and 75° 31′ W. long.

Hatzfeld (Hung. *Zsombolya*), a town of Hungary, 20 miles W. of Temesvar. Pop. 8621.

Haulbowline Island, a fortified islet in Cork Harbour, with a fine harbour and the only dockyard in Ireland.

Haupur, a town of India, in the United Provinces, 18 miles S. of Meerut. Pop. 15,212.

Haurân (anc. *Auranitis*), a district in Syria, lying E. of the Sea of Galilee.

Haussa, the name of an old empire in the Soudan, comprising what is now Sokoto and Gondo; also the warlike negro race inhabiting that region.

Haute Garonne, &c. See GARONNE, &c.

Havana, or HAVANNAH, capital of the Spanish island of Cuba, and the principal centre of commerce in the West Indies, is situated on the north side of the island. Access is obtained to its magnificent well-sheltered harbour by a channel 350 yards wide, the entrance to which is defended by forts. The streets of the older part of the town, which until 1863 was walled, are narrow and dirty, and the harbour has been for generations polluted by the town sewage. With this older part the more modern portion lying to the west is connected by broad tree-shaded avenues and gardens. The cathedral, built in the old Spanish style in 1724, claims to contain the bones of Columbus. The public institutions include an arsenal, great hospital, a botanical garden, university, technical school, and some fine theatres. Yellow fever, almost endemic, was stamped out by American sanitation in 1898–1904. The staple industry is the manufacture of cigars; sugar, tobacco, and molasses are the main exports (mostly to the United States). The chief imports are food-stuffs and cotton. San Christobal de la Habana, founded on the south coast by Diego Velasquez in 1515, was four years later transferred to its present site. It was burned to the ground by the French in 1538, plundered by another band in 1554, captured by a third in 1563, and by the English in 1762. In the 17th century it was made the chief Spanish emporium in the West Indies—a position it held till 1898, when, in the Spanish-American war, Cuba was occupied by the United States, becoming an independent state in 1902 (see CUBA). Pop. (1902) 275,000.

Havant, a market-town of Hampshire, 8 miles NE. of Portsmouth. Tanning and matting are the chief industries. Pop. of parish, 8874.

Havel, a river issuing from a small lake in Mecklenburg, flows 220 miles SW. and NW. past Spandau, Potsdam, and Brandenburg, to its junction with the Elbe, opposite Werben. It receives the Spree, on which Berlin stands.

Haverfordwest (Welsh *Hwlfordd*), a parliamentary and municipal borough, seaport, and market-town of Wales, capital of Pembrokeshire, on the river Cleddau, 10 miles NNE. of Milford by rail, and 162 W. of Gloucester. A body of Flemings was settled here by Henry I. in 1107. The 14th-century castle (its keep now the county jail) was erected by the first Earl of Pembroke. There are also remains of a 12th-century Augustinian priory. Paper-making is the chief industry. Since 1885 Haverfordwest has been one of the Pembroke boroughs, which return one member. Pop. (1861) 7019; (1901) 6007.

Haverhill, an ancient market-town of SW. Suffolk, 18 miles SE. of Cambridge. Pop. of urban district, 4862.

Haverhill, a city of Massachusetts, at the head of navigation on the Merrimac River, 33 miles N. of Boston by rail. The manufacture of boots and shoes employs over 6000 men in 200 factories; and there are manufactures also of iron, hats, glass, &c. Pop. (1870) 13,092; (1900) 37,175.

Havre, LE (a contraction of the original name, LE HAVRE DE NOTRE DAME DE GRÂCE), a seaport of France, second only to Marseilles, in the dep. of Seine-Inférieure, on the north side of the Seine's estuary, 143 miles NW. of Paris. The chief imports are coals, wheat, cotton, dyewoods, coffee, hides, petroleum, wool, palm-oil, alcohol, cocoa, and sugar. The exports include wine, woollen and cotton goods, millinery, potatoes, salt, butter, paper, silks and ribbons, chinaware, eggs, and ochre. Havre possesses excellent harbour accommodation, having nine separate dock basins; two new dry-docks were opened in 1889. The port is very greatly handicapped by its poor railway connection, the heavy harbour dues, and the shifting sandbanks that lie in the estuary. Havre is one of the chief emigrant ports in France; and it has great shipbuilding-yards, machine-factories, cannon-foundries, flour-mills, petroleum and sugar refineries, and dye-works. The buildings include the 16th-century church of Notre Dame, a museum, a Renaissance town-house, a marine arsenal, &c. There are statues to Bernardin de St Pierre and Casimir Delavigne, both natives. Pop. (1876) 85,407; (1901) 127,640. Down to 1516 Havre was only a fishing-village. Its history as a seaport dates from the reign of Francis I. Havre was held for some months in 1562 by the English, who were expelled by Charles IX. after a hot siege. Louis XIV. made it a strong citadel, and it was several times bombarded by the English in the 17th and 18th centuries. The town walls were demolished in the middle of the 19th century. Mdlle. de Scudéry was born at Havre.

Hawaii, a small archipelago in the North Pacific, named Sandwich Islands by Captain Cook after Lord Sandwich, First Lord of the Admiralty. The islands, twelve in number, form a rich, beautiful, and interesting chain, which runs from south-east to north-west, and lies in 19° to 22° N. lat. and 155° to 160° W. long. Their total area is 6564 sq. m., or rather smaller than Wales. The names and areas of the eight prin-

cipal islands are: Hawaii (the 'Owhyhee' of Captain Cook), 4210 sq. m.; Maui, 760; Oahu, 600; Kauai, 590; Molokai (the 'Lepers' Island'), 270; Lanai, 150; Kahulaui, 63; Niihau, 97. The Hawaiian Islands lie in mid-ocean, but nearer America (2100 miles) than Asia; they consequently form a convenient station for the coaling and repairing of vessels on their way across the Pacific. The islands are of volcanic origin, with coral-reefs partly encircling most of them; the only well-protected harbour being that of Honolulu, on Oahu. The larger islands are mountainous, and contain some of the principal volcanoes, both active and extinct, in the world. The two highest mountains, Mauna-Kea and Mauna-Loa, are in the island of Hawaii, and are 13,805 and 13,675 feet high respectively. On the eastern slope of Mauna-Loa, in Hawaii, is the far-famed Kilauea, the largest active volcano in the world. It is over 4000 feet above sea-level. Its oval crater, 9 miles in circumference, is bounded by a range of cliffs, and contains a fiery lake of molten lava rising and falling like the waves of the sea. Mauna-Loa itself is an active volcano. On Maui is the crater of Haleakala, by far the largest known in the world. It is from 25 to 30 miles in circumference, from 2000 to 3000 feet deep, and is 10,032 feet above sea-level.

The Hawaiian Islands, though within the tropics, enjoy a fairly temperate climate—90° to 52° F., or a mean of 74·3° F. Rains, brought by the north-east trade-wind, are frequent on the side of the mountains which faces that quarter, but on the other parts of the islands little rain falls, and the sky is generally cloudless. The yearly rainfall of the islands generally is about 54 inches. In Hawaii alone, on the Waimea plains, thousands of sheep of the merino breed find grazing ground; and on most of the islands, while the upland slopes of the mountains are clothed with dense forests, the lower levels spread into grassy plains rich with sugar and rice plantations. The staple food of the natives consists of *poi*, a thick paste made from the root of the *taro* plant (*Arum esculentum*) and raw or dried fish. The only indigenous animals are rats, mice, bats, dogs, and hogs, but others have been added by the white men. There are large numbers of semi-wild horses, and some wild dogs.

The most important trade was with Pacific whalers down to 1876, when a Reciprocity Treaty was concluded with the United States, and there was an enormous development of the sugar export; other exports being rice, wool, molasses, tallow, and bananas. The imports consist principally of dry-goods. Nine-tenths of the trade is with the United States. On Hawaii and Maui there are telegraphs and 56 miles of railway.

The islands are said to have been discovered by Gaetano in 1542, and rediscovered in 1778 by Captain Cook, who met his death at the hands of the natives in Kealakekua (Karakakoa) Bay, 1779. Kamehameha I. formed the islands into one kingdom. Missionaries came from America in 1820, and in less than forty years they taught the whole Hawaiian people to read and write, to cipher and sew. In 1843 the independence of the kingdom was guaranteed by the French and English governments. Kalakaua, elected king in 1874, died in 1891, and was succeeded by his eldest sister, Liliuokalani, who was dethroned in January 1893, the islands next month being annexed to the United States—an annexation, however, repudiated by President Cleveland, whereupon a provisional republican government was established; but the islands were finally annexed by the United States in 1898, and in 1900 were organised as one of the territories of the republic. The total pop. of all the islands amounted in 1788 to some 200,000, and in 1900 to 153,727, of whom 29,834 were natives, and 25,750 Chinese, 61,122 Japanese, and 28,533 Europeans and Americans. The natives of the Hawaiian Archipelago belong to the brown Polynesian stock, and are a remarkably handsome race; in character indolent, joyous, and contented. Of the foreign diseases that have reduced the population, leprosy is now the most dreaded. In 1865 the island of Molokai was set apart for lepers (900 in 1900), among whom Father Damien laboured and died (1889).

See works by Miss Bird (Mrs Bishop; 1875), Miss Gordon Cumming (1883), Alexander (1892); also Musick, Shoemaker, Young, Whitney, Blackman, Brain, Twombly, and Griffin (all between 1897 and 1900).

Hawarden (pron. *Harden*), a small market-town of Flintshire, North Wales, 7 miles W. of Chester. The church, almost destroyed by fire in 1857, was restored by Sir G. G. Scott. Hawarden Castle, Mr Gladstone's home, dates from 1752. The park contains the ruined circular keep of a 13th-century castle. St Deiniol's Library here was established by Mr Gladstone. Lady Hamilton passed her girlhood at Hawarden. Pop. of parish, 7057.

Hawash, a river of Abyssinia.

Hawes Water, a Westmorland lake, measuring 2½ miles by ½ mile, and 694 feet above sea-level, between Mardale and Bampton.

Hawick (*Haw'ick*), a manufacturing town of Roxburghshire, at the confluence of the Slitrig with the Teviot, 52 miles by rail SSE. of Edinburgh and 45 NNE. of Carlisle. Built in and round a hollow, with villas and mansions above, it is a place of hoar antiquity, but bears few traces thereof beyond the Moat, an artificial earthen mound 30 feet high and 312 in circumference, and part of the Tower Hotel, which, once the peel-tower of the Drumlanrig Douglases, and later a residence of Monmouth's widowed duchess, was the only building not burned by the Earl of Sussex in 1570. In the neighbourhood are Branxholm and Harden, old homes of the Scotts; and, older than either, there is the refrain of the June Common-riding song, 'Teribus ye Teri Odin,' which carries us back to days of heathendom. Else, all is modern—the handsome municipal building (1885); the churches, more than a dozen in number, and the oldest (1214) rebuilt in 1763; the splendid water-supply (1865–82); and the hosiery and tweed mills, to which, with dyeworks, tanneries, &c., Hawick owes its prosperity. The hosiery manufacture dates from 1771, and that of shepherds' plaids, tweeds, blankets, &c. from 1830. The ancient municipal constitution of the burgh, based on a charter granted by Sir James Douglas of Drumlanrig in 1537, and confirmed by Queen Mary in 1545, was reformed by special act of parliament in 1861; and since 1867 Hawick, Selkirk, and Galashiels (the Border burghs) have returned one member. Pop. (1891) 19,204; (1901) 17,303. See a local history by Mrs Oliver (1887).

Hawke's Bay, a provincial district of New Zealand, on the east coast, between Auckland and Wellington. Area, 4765 sq. m.; pop. (1871) 6059; (1901) 35,424. It presents rich alluvial plains and undulating hills, with enormous forests. The bay known as Hawke's Bay was first entered by Captain Cook on 8th October

1769, and was so named after Sir Edward Hawke, then First Lord of the Admiralty. Napier (q.v.) is the port and chief city.

Hawkesbury, a river of New South Wales, rises in the Cullarin Range, and under the names of Wollondilly and Nepean flows NE., then turns as the Hawkesbury SE., and enters the Pacific at Broken Bay, about 20 miles NE. of Sydney. It has a total length of 330 miles, and is navigable for vessels of 100 tons as high as Windsor. It is crossed by a seven-span steel girder bridge (1886–89), 2900 feet long, on the railway which connects Adelaide, Melbourne, Sydney, and Brisbane.

Hawkshead, a town of north Lancashire, 5 miles SW. of Ambleside. Wordsworth was educated at the grammar-school, which was founded by Archbishop Sandys in 1585. Pop. of parish, 638.

Haworth, a moorland town in the West Riding of Yorkshire, 4 miles SSW. of Keighley by a branch-line. The old church has been ruthlessly demolished, but in the churchyard are the graves of Charlotte and Emily Brontë. Pop. 7500.

Hawthornden, the romantic home of the poet Drummond, in Midlothian, on the Esk, 1¼ mile NE. of Roslin.

Hay, a Brecon market-town, on the Wye, 21 miles W. of Hereford. Pop. 1630.

Haydock, a Lancashire township, 3½ miles ENE. of St Helens. Pop. 8575.

Haydon Bridge, a Northumberland town, on the South Tyne, 7½ miles W. of Hexham. Pop. of parish, 2045.

Haye, La. See Hague.

Hayes Barton, Devon, Raleigh's birthplace, now a farmhouse, 4 miles WSW. of Sidmouth.

Hayle, a Cornish seaport, 4 miles SE. of St Ives. Pop. 1073.

Hay River, in the Canadian North-west, on its north-eastward course to the southern shore of the Great Slave Lake, forms the two Alexandra Falls, 250 feet high and 300 yards wide.

Hayti, or Haïti ('mountainous country,' otherwise Hispaniola—i.e. 'little Spain'—or Santo Domingo), is, after Cuba, the largest of the West Indian Islands, now divided into the independent states of Hayti and the Dominican Republic (q.v.). Nearly equidistant from Porto Rico, Cuba, and Jamaica, it lies between 17° 37′ and 20° N. lat., and between 68° 20′ and 74° 28′ W. long. As in the rest of the Greater Antilles, its greatest length (about 400 miles) is in the direction—from west to east—of the chain of which it forms a part; its greatest breadth is 160 miles. Area, including the islands of Tortuga, Gonaive, &c., 28,820 sq. m., or nearly that of Scotland. The country is mountainous, being traversed longitudinally by northern, central, and southern ridges, terminating in headlands on either coast; but between these ranges are wide and fertile plains. The highest peak is Loma Tina (10,300 feet). The climate is hot and moist in the low lands, the temperature at Port-au-Prince ranging from 67° to 104° F.; the mean range in the highlands is from 60° to 76° F. Earthquakes are frequent, and occasional hurricanes visit the island. It has excellent harbours. The mountains are clothed with forests of pine and oak, and the island is rich in mahogany, satinwood, rosewood, and other valuable timbers. Cotton, rice, maize, cocoa, ginger, arrowroot, yams, tobacco, and numerous fruits are indigenous; and the mango, bread-fruit, sugar, coffee, and indigo are also produced; but agriculture is very backward. The minerals are now little worked, though some gold-washing is still carried on. The rivers are not navigable. Both rivers and lakes abound in caymans as well as fish. The agouti is the largest wild mammal.

Hayti was discovered in 1492 by Columbus; and within little more than one generation the aborigines had been swept away by the remorseless cruelties of the Spaniards. Their place was filled with negro slaves, who were introduced as early as 1505. Next, about 1630, came the buccaneers; and, as they were chiefly French, the western portion of Hayti, which was their favourite haunt, was in 1697 ceded to France by the peace of Ryswick. For nearly a hundred years vast reinforcements of Africans were imported; subsequently the mulattoes grew into an intermediate caste, neither citizens nor bondsmen. In 1791 the mutual antipathies of the three classes —white, black, and mixed—burst forth into a struggle which, before the close of the century, led to the extermination of the Europeans, and the independence of the coloured insurgents. In 1801 France sent out a powerful armament, treacherously seizing and deporting the deliverer of his brethren, Toussaint l'Ouverture. In 1804 Dessalines, aping Napoleon's example, proclaimed himself Emperor of Hayti. Sometimes one state, and sometimes two, the country alternated between despotism and anarchy, between monarchy and republicanism. Its only tranquil period of any duration coincided with the rule (1820–43) of President Boyer, at whose close the Spanish or eastern portion of the island formed itself into the Dominican Republic (q.v.). The western portion of the island remained republican until 1849, when its former president, the negro General Soulouque proclaimed himself emperor as Faustin I. In 1859 a republic was again proclaimed. Few presidents have since been permitted to complete their term of office (seven years), which has usually been cut short by revolutions. Official peculation, judicial murder, and utter corruption of every kind underlie the forms and titles of civilised government; the religion, nominally Catholic, is largely *vaudoux* or serpent-worship, in which cannibalism is even now a most important element. Instead of progressing, the negro republicans have gone back to the lowest type of African barbarism.

The area of the republic of Hayti is about 9200 sq. m.; the pop. is estimated at about 1,200,000. The capital, Port-au-Prince, has some 70,000 inhabitants. The dialect is a debased French. The chief exports are coffee, cacao, logwood, mahogany, and cotton. See works by St John (1884), Marcuse (German, 1894), Marcelin (French, 1893), Vibert (French, 1895), Jean Owen (1898), Blackman (1899), and Hesketh Prichard (1900).

Hayward's Heath, a Sussex market-town, 12½ miles N. of Brighton. Pop. 3720.

Hazaribagh, a town of Chota Nagpore, Bengal. Pop. 17,306.

Hazebrouck, a town in the French dep. of Nord, 28 miles WNW. of Lille. Pop. 12,650.

Hazleton, a borough of Pennsylvania, 100 miles NNW. of Philadelphia, has ironworks, lumber-mills, and railway-car shops, and is the centre of the rich Lehigh coalfield. Pop. 15,500.

Headford, a village 20 miles N. of Galway. Pop. 511.

Heanor, a Derbyshire town, 6 miles E. by S. of Belper, with coal-pits and ironworks. Pop. of urban district, 16,250.

Heart's Content, a port of Newfoundland, on the east side of Trinity Bay. Pop. 1080.

Heathfield, a Sussex parish, 8 miles N. of Hailsham, a great poultry-farming centre, with natural gas from borings. Heathfield Park was purchased in 1763 by General Eliott, Lord Heathfield. Pop. 2700.

Heath Town, a north-east suburb of Wolverhampton. Pop. 9450.

Heaton-Norris, a Lancashire town, suburban to Stockport (q.v.). Pop. 9480.

Hebburn, a Durham town, on the Tyne, 3 miles WSW. of South Shields. It has chemical works and shipbuilding. Pop. (1881) 11,802; (1901) 20,901.

Hebden Bridge, a town in the West Riding of Yorkshire, at the Hebden's influx to the Calder, 8 miles W. by N. of Halifax. It manufactures cotton, silk, iron, &c. Pop. 7658.

Heb'rides, or WESTERN ISLANDS, the general name applied to all the islands on the west coast of Scotland. To the Outer Hebrides belong Lewis with Harris (Long Island), North Uist, Benbecula, South Uist, Barra, and remote St Kilda, 60 miles to the west. The principal of the Inner Islands are Skye, Eigg, Coll, Tiree, Mull, Iona, Staffa, Ulva, Lismore, Kerrera, Colonsay, Oronsay, Jura, and Islay. Bute, the Cumbraes, and Arran are usually counted amongst the Hebrides; and to the same group were anciently assigned the peninsula of Kintyre, the island of Rathlin, and the Isle of Man. The total number of islands of any size is about 500, but of these four-fifths are uninhabited. Of the whole surface only about 200,000 acres are arable; the rest is pasture-land of little value, morasses, peat-mosses, lakes, and barren sands and rocks. Owing to the Gulf Stream, the Hebrides have a mild though humid climate. Politically they are distributed among the Scottish counties of Ross, Inverness, Argyll, and Bute. The crofters, who mostly speak Gaelic, are much occupied in fishing and fowling. Much of the area has been converted into sheep-walks, whilst extensive tracts are let to sportsmen. The Hebrides are the *Ebŭdæ* of Ptolemy and Pliny's *Hebŭdes* (of which 'Hebrides' is a corruption), and *Sudreyjar* (Southern Islands) of the Norwegians. This last name was Latinised as Sodorenses, which survives in the title 'Bishop of Sodor and Man.' The early Celtic inhabitants were converted to Christianity by St Columba in the 6th century. After 872 several of the islands were colonised by Norwegians, who came hither to escape the iron rule of Harold Haarfager. But to punish their depredations on the coast of Norway, Harold sent an expedition westwards, which subdued all the Western Islands as far south as Man. To Norway they remained subject till 1266. In 1346 the head of the Macdonalds subdued them, and took the title of Lord of the Isles; and from 1504 they became definitively Scottish possessions. Ecclesiastically they remained dependent on Norway till 1374. In the 19th century the population greatly declined. All the principal islands are separately treated.

See works by Martin (1703), Pennant (1774), Dr Johnson (1775), Gregory (1836), R. Buchanan (1883), Miss Gordon Cumming (1883), and Miss Goodrich-Freer (1902).

Hebrides, New. See NEW HEBRIDES.

Hebron, one of the oldest cities in Palestine, 21 miles SSW. of Jerusalem. It was the seven years' residence of King David before he conquered Jerusalem. The modern town, El Khalîl ('the friend'—of God, Abraham), is a poor place, with some 18,000 inhabitants. It lies low down in a narrow valley—the Valley of Eshcol, famous now, as of old, for its grapes. The church erected by the Empress Helena, and converted into a mosque called *El-Haram* ('sanctuary'), encloses the cave which is the traditional burial-place of Abraham, Isaac, and Jacob.

Heckmondwike, a market-town in the West Riding of Yorkshire, 8 miles NE. of Huddersfield. It is the chief seat of the carpet and blanket manufactures in the West Riding, and also makes rugs, pilot-cloth, and flushings. There are ironworks, machine-shops, and coal-mines in the neighbourhood. Here was born John Curwen, the inventor of the Tonic Solfa system. Pop. (1851) 4540; (1901) 9460.

Hecla, or HEKLA, a volcano in Iceland, stands isolated 20 miles from the SW. coast and 68 E. of Reykjavik. Its snow-clad summit is 5102 feet high, and has five craters; its sides are seamed by numerous deep ravines. The principal rocks are lava and tuff. Since the 9th century there have been eighteen outbreaks, generally very violent, and often long continued. In September 1845 a terrific outbreak occurred and lasted for more than a year. A fine dust from this eruption was scattered over the Orkney Islands, a distance of 500 miles.

Hedgeley, a Northumbrian township, 8 miles WNW. of Alnwick. It was the scene of a skirmish (1464), in which Sir Ralph Percy fell.

Hedjáz. See ARABIA.

Hedon, a decayed borough in the East Riding of Yorkshire, 5¼ miles E. of Hull. Pop. 1000.

Heide, the chief town of northern Ditmarsh, in the Prussian province of Sleswick-Holstein, 58 miles by rail WSW. of Kiel. Pop. 7355.

Heidelberg, an ancient city of Baden, extends 3 miles along the left bank of the Neckar, in one of the most beautiful districts in the country, 13 miles by rail SE. of Mannheim and 54 S. of Frankfort-on-the-Main. It lies 380 feet above sea-level, at the base of the Königsstuhl (1863 feet). Among its most important buildings are the Church of the Holy Ghost, a splendid example of Late Gothic architecture, in which service according to the Catholic and Protestant rituals is simultaneously carried on; the church of St Peter's, on the door of which Jerome of Prague nailed his celebrated *theses;* and the magnificent castle, which crowns a hill 330 feet above the town. Begun at the close of the 13th century, and added to in 1410, 1559, and 1607, it was formerly the residence of the Electors Palatine, and was in great part destroyed by the French in 1689 and 1693, and further injured by lightning in 1764. In 1890 was undertaken the work of restoring its ruins at a cost of £50,000. In the cellar under the castle is the famous Heidelberg Tun, once capable of containing 50,000 gallons of wine. Heidelberg is celebrated for its university (1386), which declined from the Thirty Years' War until 1802, when the town and territory was assigned to the Grand-duke of Baden. It has about 150 professors and lecturers, and over 1500 students. Its library contains 500,000 volumes and 4700 MSS. Many of the most famous German scholars have been professors here—Reuchlin, Œcolampadius, Spanheim, Puffendorf, Voss, Schlosser, Creuzer, Gervinus, Paulus, Kuno Fischer, Helmholtz, Bunsen, Bluntschli, &c. Heidelberg, originally an appanage of

the bishopric of Worms, was the seat of the Counts Palatine from the 12th till the 18th century. After the Reformation it was long the headquarters of German Calvinism. The trade is chiefly in books, tobacco, beer, and wine. The town suffered much during the Thirty Years' War, was savagely treated by the French in 1689, and was in 1693 almost totally destroyed by them. Pop. (1871) 19,988; (1900) 40,121, of whom two-fifths are Catholics.

Heilbronn, an old town of Würtemberg, on the right bank of the Neckar, in a beautiful and fertile region, 28 miles by rail N. of Stuttgart. The church of St Kilian, partly Gothic and partly Renaissance; the old town-hall; the *Diebsthurm* ('Thief's Tower'), in which Götz von Berlichingen was confined; and the house of the Teutonic Knights, now a barrack, are the principal buildings. The industries include the manufacture of silver-plate, paper, iron, sugar, salt, chicory, and chemicals. Pop. 39,000.

Heiligenstadt, a Catholic town of Prussian Saxony, situated on the Leine, 32 miles ENE. of Cassel by rail. Pop. 5861.

Heilsberg, a town of Prussia, 40 miles S. of Königsberg. Here the Russians and Prussians defeated the French in 1807. Pop. 5705.

Heilsbronn, a Bavarian village of Middle Franconia, 16 miles SW. of Nuremberg by rail, was the seat of a celebrated Cistercian monastery, founded in 1132, and suppressed in 1255.

Hekla. See HECLA.

Helder, THE, a strongly-fortified seaport in the Dutch province of North Holland, 51 miles by rail NNW. of Amsterdam. It stands on the Marsdiep, which connects the Zuider Zee and the German Ocean, and at the northern extremity of the North Holland Canal. First fortified by Napoleon in 1811, it has an arsenal, a college for cadets, a meteorological institute, and an excellent harbour. Pop. 25,760.

Helena, capital of Montana state, U.S., on the Northern Pacific Railway, is an important mining centre. The famous Last Chance Gulch gold-mine runs through the city. Pop. 10,800.

Helensburgh (*El'lenz-bur'row*), a Scottish watering-place in Dumbartonshire, on the right bank of the Firth of Clyde, at the entrance to the Gareloch. It was founded in 1777 by Sir James Colquhoun, and named after his wife Helen. Pop. about 8600, which is nearly doubled in summer. In 1871 it was barely 6000.

Helicon, a mountain-range (5736 feet) of SW. Bœotia, in ancient Greece, was celebrated as the favourite seat of the Muses. At the foot of the range stood the village of Ascra, the residence of Hesiod, and the seat of the earliest school of poetry in Greece. On the slopes were the famous fountains of Aganippe and Hippocrene.

He'ligoland ('Holy Land;' Ger. *Helgoland*), a small island in the North Sea, belonging since 1890 to Germany, is situated 36 miles NW. of the mouth of the Elbe. It is 1 mile long from N. to S., ½ mile from E. to W., and ¾ sq. m. in area. The *Oberland* is a rock 206 feet high, on which stands a town of 400 houses, and access to which is obtained by 192 steps or by a steam-lift; while the *Unterland* is a patch of shore with 70 houses south-east of the cliff. The resident pop. was hardly more than about 2500 in 1905; but in the bathing season Heligoland is visited by upwards of 12,000 summer visitors—attracted by the bathing facilities of the 'Sandy Island,' or *Düne*, once connected with the main island, separated from it by a channel about a mile wide. Denudating agencies are reducing Heligoland itself, which between 1890 and 1905 lost nearly a fourth of its area. The soil on the flat top of the rock of Heligoland suffices for a little pasture-land, and for growing potatoes and cabbages. The spit of the Unterland gives partial shelter to two harbours, one north, the other south. The inhabitants are supported chiefly by the lobster and other fisheries, and by the summer visitors; the public gaming-tables, established in 1830, having been suppressed in 1871. A light-house stands on the cliff near the village. The island, taken by the British from the Danes in 1807, and formally ceded to England in 1814, was ceded to Germany in 1890, in return for concessions made to Britain in East Africa. It has since been strongly fortified. A dialect of North Frisian is the native tongue, but German is currently spoken. Heligoland was anciently sacred to the goddess Hertha. Christianity was first preached here by St Willibrod in the 7th century. The fishers are Frisians, a tall and muscular race of hardy seamen. The merchants are immigrants from the mainland, or their descendants. The people, though they had been very loyal to Great Britain, accepted without opposition the annexation to Germany; and after a visit from the Emperor, Heligoland was formally incorporated with the kingdom of Prussia and the province of Sleswick-Holstein. See works by Black (1888), Lindemann (German, 1889), and Lipsius (German, 1892).

Heliopolis ('city of the sun'), the Greek name of the city called by the Egyptians On or An, which stood on the east side of the Pelusiac branch of the Nile, near the apex of the Delta, and was one of the most ancient and important of Egyptian cities. It was the chief seat of the wisdom of the Egyptians. See also BAALBEK.

Hellas. See GREECE.

Hellespont. See DARDANELLES.

Hell Gate, or HURL GATE, named by the Dutch settlers of New York *Helle Gat*, is a pass in the East River, between New York City and Long Island, formerly very dangerous to vessels from its rapid current and from its numerous rocks—blasted away only in 1885.

Hellin, a town of Spain, 69 miles by rail NNW. of Murcia. In the vicinity are productive sulphur-mines and sulphur-springs. Pop. 12,714.

Hell's Glen, an Argyllshire glen between Inveraray and Lochgoilhead.

Helmingham Hall, the fine moated Elizabethan seat of Lord Tollemache, in Suffolk, 9 miles N. by E. of Ipswich.

Helmond, a Dutch town, 23 miles NW. of Venlo by rail. Pop. 11,450.

Helmsdale, a Sutherland fishing-village, 83 miles by rail NNE. of Dingwall. Pop. 780.

Helmsley, a Yorkshire town, 31½ miles N. of York, with linen manufactures. Pop. 1500.

Helmstedt, a German town, 24 miles ESE. of Brunswick. From 1574 to 1809 it was the seat of a Protestant university. Pop. 14,260.

Helmund, or HELMAND, a river of Afghanistan, rises on the south slopes of the Hindu Kush, and flows 680 miles south-west, west, and north-west to the lake of Hamun or Seistan.

Helsingborg, a seaport of southern Sweden, 32 miles by rail NW. of Malmö, on the Sound, opposite Elsinore (Dan. *Helsingör*). It has a good harbour. Pop. 26,000.

Helsingfors, a fortified seaport and naval station, capital of the grand-duchy of Finland, is situated on a peninsula, surrounded by islands and rocky cliffs, in the Gulf of Finland, 191 miles W. of St Petersburg by sea and 256 by rail. A series of formidable batteries, called the fortifications of Sveåborg, protect the harbour. Helsingfors is the largest and handsomest town of Finland; the broad streets intersect at right angles, and there are several fine parks and public squares. Of the public buildings the most striking are the house in which the diet meets, the senate-house, and the university buildings. The university, removed hither from Åbo in 1828, has over 2500 students, a library of 300,000 volumes, a hospital, a botanic garden, and observatory. Helsingfors, truly 'a slumless city,' is a favourite bathing-place. It carries on trade in Baltic produce; exports timber, paper, and butter, and imports iron and steel goods, machinery, colonial wares, &c. Pop. (1870) 32,113; (1902) 100,812. Helsingfors was founded by Gustavus I. of Sweden in the 16th century. In August 1855, during the Crimean war, Sveåborg was bombarded, with no great result, for two days and nights by the allied fleet.

Helston, an old Cornish market-town, 10 miles WSW. of Falmouth. It was made a borough by King John in 1201; and from Edward I.'s reign to 1832 returned two members, then one till 1885. It has long been noted for its *Furry* or *Flora Dance*, held on 8th May. There is a branch railway (1887) from Gwinear Road. Pop. 3098.

Heluan, or HELWAN, a town 15 miles SE. of Cairo by rail, with well-appointed mineral springs, baths, and hotels. Pop. 5000.

Helvellyn, one of the highest mountains of England, in the west of Cumberland, between Keswick and Ambleside. It is 3118 feet high, is easy of ascent, and commands magnificent views.

Helvoetsluys, or HELLEVOETSLUIS, a fortified Dutch seaport, on the Haringvliet, an arm of the Maas, 17 miles SW. of Rotterdam. Here William III. embarked for England in 1688. Pop. 4362.

Hemel Hempstead, a market-town of Hertfordshire, 23 miles NW. of London, a centre of the straw-plaiting industry. It has also paper-mills, iron-foundries, tanneries, and breweries. Pop. of parish, 11,500.

Hems, HOMS, or HUMS (Lat. *Emesa*), a city of Syria, near the right bank of the Orontes, 63 miles NE. of Tripoli. In ancient times it was chiefly celebrated for its temple of the Sun. Pop. 60,000. See HAMAH.

Henderson, capital of Henderson county, Kentucky, on the Ohio, 10 miles S. of Evansville by rail, with tobacco-factories. Pop. 10,280.

Hengrave Hall, a splendid Tudor mansion (1538) in Suffolk, 3 miles NNW. of Bury St Edmunds.

Henley-in-Arden, a Warwickshire town, on the Arrow, 8 miles WNW. of Stratford-on-Avon. Pop. 1043.

Henley-on-Thames, a municipal borough of Oxfordshire, at the base of the Chiltern Hills, and on the left bank of the Thames, 8 miles NE. of Reading, 36 W. of London, and 24 SE. of Oxford by road (by river 47). The five-arch bridge was built in 1786 at a cost of £10,000; the parish church, Decorated in style, was restored in 1864; and the grammar-school was founded in 1605. Malting and brewing are carried on; and there is a considerable trade in corn, flour, and timber. The principal amateur regatta of England has been held here every summer since 1839. Pop. 6000.

Hennegau. See HAINAULT.

Herat', capital of the most westerly of the three divisions of Afghanistan, stands on the Hari-Rud, 2500 feet above sea-level, and 390 miles W. of Kabul, in 34° 50′ N. lat., 62° 30′ E. long. Situated near the boundaries of Afghanistan, Persia, and Russian Turkestan, Herat is one of the principal marts of Central Asia, and has manufactures in wool and leather. The vicinity, naturally fertile, is rendered much more so by irrigation. Long the royal seat of the descendants of Timur, Herat is fortified by a ditch and wall, and is commanded on its north side by a strong citadel built about 1837 under British direction. In modern times the place has acquired European importance, being, towards Persia and Russia, the key of Afghanistan, and so of western India. In 1856 the Shah captured Herat; but he was within a few months constrained to relinquish his prey by a British expedition. Since Russia, after having annexed Merv (1884), pushed her frontiers to within 40 miles of the city, Herat is the pivot of the Central Asian question. Indigo, dried fruits, dyes, asafœtida, rice, wool, carpets, raw hides, silk, and leather wares are the chief items of export, whilst chintzes, cloth, sugar, ironwares, and European arms are imported—recently from Russia. The town, once famous for its splendid buildings, is to-day a heap of ruins, amid which the citadel, the Charsu, the Tuma Musjid, and parts of the Musallah are prominent as remnants of a bygone glory. The population, chiefly Persians, Tajiks, and Chihar Aimaks—Afghans constitute only the garrison—has fluctuated within the century from 100,000 to 10,000; the average pop. now being about 40,000. See Malleson's *Herat* (1880), and Yate's *Northern Afghanistan* (1888).

Hérault, a maritime dep. in the south of France, washed by the Gulf of Lyons. Area, 2393 sq. m.; pop. (1872) 429,878; (1901) 489,421. It is divided into the four arrondissements of Béziers, Lodève, Montpellier (the capital), and Saint-Pons.

Herculaneum, an ancient city of Italy, so called from the local worship of Hercules, was situated at the north-western base of Mount Vesuvius, 5 miles E. of Naples. In 63 A.D. it was seriously injured by a violent earthquake, and in 79 buried, along with Pompeii and Stabiæ, by the memorable eruption of Vesuvius. It now lies at a depth of from 40 to 100 feet below the surface, and is filled up and covered with volcanic tufa. Above it, on the modern surface, are the villages of Portici and Resina. In 1738 systematic excavations were commenced, the chief building explored being the theatre, which has eighteen rows of stone seats, and could accommodate 8000 persons. Part of the Forum with its colonnades, a colonnade, two small temples, and a villa have also been discovered; and from these buildings many beautiful statues and remarkable paintings have been obtained. In 1880 ruins of extensive baths were brought to light. Among the art-relics of Herculaneum, which far exceed in value and interest those found at Pompeii, are the statues of Æschines, Agrippina, the Sleeping Faun, the Six Actresses, Mercury, the group of the Satyr and the Goat, the busts of Plato, Scipio Africanus, Augustus, Seneca, Demosthenes, &c.—mostly now in the National Museum at Naples.

Hercynian Forest (Lat. *Hercynia silva*), the wooded mountain-ranges of middle Germany, from the Rhine to the Carpathian Mountains.

Her'eford, the county town of Herefordshire, on the left bank of the Wye, 144 miles by rail WNW. of London, and 51 S. of Shrewsbury. Its noble cathedral was built between 1079 and 1535, and so exhibits every variety of style from Norman to Perpendicular. Measuring 342 feet by 146 across the transept, it has a central tower 165 feet high. It suffered much at Wyatt's hands after the fall of the western tower in 1786, but has been judiciously restored by Cottingham (1841–52) and Sir G. G. Scott (1856–63). Special features are the elaborate metal-work screen, the shrine of St Thomas de Cantilupe (1282), the organ, and the 'Mappa Mundi,' or map of the world (*c.* 1314). Hereford, with Gloucester and Worcester, is one of the meeting-places of the 'Three Choirs.' Other edifices are the Doric shire-hall (1817), in front of it a statue (1864) of Sir G. C. Lewis; the corn exchange (1858), the episcopal palace (formed out of a Norman hall), the college of vicars choral (*c.* 1474), the 14th-century grammar-school, the half-timbered 'Old House,' the guildhall, the butchers' guildhall, the Coningsby Hospital (1610), the free library (1876), &c. The Nelson column (1807) marks the site of the almost obliterated castle; and the White Cross, one mile out on the Hay road, commemorates the Black Death of 1347. Nell Gwynne and Garrick were natives. A large trade is done in agricultural produce; and the rose-gardens of Hereford are famous. The seat of a bishopric from 676, the city was chartered by Henry III., and returned two members to parliament—now only one—from Edward I.'s reign till 1885. It has stood many sieges from Stephen's time down to the Great Rebellion. Pop. (1851) 12,108; (1881) 19,822; (1901) 21,382. See works by Britton (1831) and Havergal (1869).

Herefordshire, an inland county in the west of England, bounded by Shropshire, Worcester, Gloucester, Monmouth, and South Wales. In length it measures 38 miles, in breadth 35, and its area is 833 sq. m. Pop. (1801) 89,191; (1871) 125,370; (1881) 121,062; (1901) 114,380. The surface is mostly hilly with occasional valleys opening into widespread plains, the chief hill-ranges being those of the Hatterell or Black Mountains (2631 feet) on the south-western, and the Malvern Hills (1395) on the eastern boundary of the county. It is watered by the Teme, and the beautiful Wye with its affluents the Lugg, Arrow, and Monnow. Hops are largely cultivated, and the area of the orchards exceeds 27,000 acres. Herefordshire is celebrated for its cattle, and its horses and sheep are in a lesser degree well known. Cider-making is the principal manufacture, and malting is also carried on; whilst sandstone, limestone, and marble have been largely quarried. The county, divided into 11 hundreds and 258 parishes, returns three members, one for each of its two divisions (Leominster and Ross), and one for the city of Hereford. The principal towns are Hereford, Leominster, Ross, and Ledbury. Of places of interest in the county mention may be made of Offa's Dyke (q.v.); of Dorstone, where there is a large and curious cromlech known as 'Arthur's Stone;' of the ruins of Clifford Castle, the birthplace of 'Fair Rosamond;' and of the Hereford Beacon on the Malvern Hills, on which is a camp, ascribed to Caractacus. Robert Devereux, Earl of Essex (Queen Elizabeth's favourite), Richard Whittington, David Garrick, John Kyrle ('The Man of Ross'), and Nell Gwynne, were all natives of Herefordshire; and Mrs Browning, the poetess, passed her childhood there. See the *Quarterly Review* for 1879, and works there cited, with one also by Thornhill Timmins (1892).

Herencia, a town of Spain, 40 miles NE. of Ciudad Real. Pop. 5968.

Hereros. See Damaraland.

Herford, a Prussian town in Westphalia, 59 miles SW. of Hanover by rail. It manufactures cottons, linens, sugar, &c. Pop. 25,902.

Heri-rud. See Hari-rud.

Herisau, a town, with cotton-mills, in the Swiss canton Appenzell, 2549 feet above sea-level, and 5½ miles SW. of St Gall by rail. Pop. 13,783.

Heristal, or Herstal, an industrial town of Belgium, on the Meuse, virtually a suburb NE. of Liége. It is mostly inhabited by workers in the coal-mines and the iron and steel works. Here King Pepin was born and Charlemagne often lived. Pop. 18,200.

Herkulesbad. See Mehadia.

Hermannstadt (Lat. *Cibinium*, Hung. *Nagy-Szeben*), a town of Hungary, formerly capital of Transylvania, at the terminus of a branch railway (28 miles long), 370 miles SE. of Pesth. It is the seat of a Greek archbishop and of a 'Saxon' university. The fine Bruckenthal palace contains a picture-gallery and a library of 30,000 volumes. Tanning, wax-bleaching, and the making of cloth, paper, candles, sugar, and hats are carried on. Pop. 26,500.

Hermitage Castle, a ruin in Liddesdale, Roxburghshire, 5½ miles N. by E. of Newcastleton. It has memories of Bothwell and Queen Mary.

Hermon, Mount (now *Jebel-es-Sheikh*), 9150 feet high, is the culminating point of the Anti-Libanus range. See Lebanon.

Hermopolis Magna (mod. *Ashmun* or *Eshmoon*), an ancient town of Egypt, on the Nile, at the border of the Thebaid, and near the frontier line of upper and middle Egypt.

Hermosillo, capital of the Mexican state of Sonora, on the Rio Sonora, 50 miles by rail N. of the port of Guaymas. Pop. 18,000.

Hermoupolis. See Syra.

Hermus, a river of Asia Minor, flowing through the plain of Sardis to the Gulf of Smyrna.

Herne Bay, a watering-place of Kent, 12 miles W. of Margate. Pop. 6800.

Herne Hill, a London suburb, 3½ miles S. of St Paul's.

Hernösand, a Swedish port on the Gulf of Bothnia, 250 miles N. of Stockholm, exporting timber, wood-pulp, and iron. Pop. 8500.

Herrnhut, a small town of Saxony, 18 miles SE. of Bautzen, the chief seat, from 1722, of the Moravian Brethren or Herrnhuters. Pop. 1225.

Hersfeld, an old town of Hesse-Nassau, on the navigable Fulda, 27 miles N. of Fulda by rail. Here are a fine Gothic church (1320); a ruined cathedral, destroyed by the French in 1761; and the once celebrated Benedictine abbey, founded in 769. Pop. 7871.

Herstmonceaux. See Hurstmonceaux.

Hertford, the county town of Hertfordshire, 26 miles N. of London by rail, on the Lea, which is navigable for barges up to this point. It has a town or shire hall (1768), an infirmary, a corn exchange and free library (1859), a grammar-school and several charity schools, whilst at the

entrance into the town on the London Road is a preparatory school in connection with Christ's Hospital in London. A considerable trade is carried on in corn, malt, and flour. Hertford, whose municipal boundary was extended in 1892, returned two members to parliament till 1867, and then till 1885 one. Pop. (1851) 6605; (1901) 9322. The New River (q.v.) has its source a mile east of the town, and 2 miles westward is Panshanger, the seat of Earl Cowper, with its valuable collection of pictures. Of the old castle of Hertford, commenced by Edward the Elder about 905 to protect the inhabitants from the Danes, and strengthened by the Conqueror, but a small portion now remains; the present castle was built by William Cecil, Earl of Salisbury, or Sir William Harrington, in the reign of James I., and in 1805–9 was occupied by the East India Company as a temporary college during the erection of Haileybury (q.v.). See Turner's *History of Hertford* (1830).

Hertfordshire, or HERTS, an inland county of England, bounded by Cambridge, Essex, Middlesex, and Bucks, is 35 miles long from NE. to SW., 20 miles in mean breadth, and 611 sq. m. in area, of which more than one-half is under tillage, one-fourth pasture, and one-seventeenth in wood. It is divided into 8 hundreds, 2 municipal boroughs (Hertford and St Albans), and 138 parishes, and has 11 market-towns, the chief of which are Hertford (the county town), St Albans, Watford, Hitchin, Hemel Hempstead, and Bishop-Stortford. Pop. (1801) 97,577; (1841) 156,660; (1881) 203,140; (1901) 250,152. The surface is mostly level, except in the north, where a branch of the Chiltern Hills skirts the county, Kensworth Hill (904 feet) being the highest point. The principal rivers are the Lea, Stort, and Colne, all affluents of the Thames, and the artificial New River (q.v.): the Grand Junction Canal, too, passes through the south-western extremity of the county. Straw-plaiting is largely carried on in the north and west portions, where the land is least adapted for agriculture; near Watford and Rickmansworth are paper and silk factories, and at Great Berkhampstead extensive chemical works. Ware is the chief seat of the malting trade in the kingdom; Cheshunt, Waltham Cross, and Bishop-Stortford are famous for their rose-gardens, and in some districts watercress is extensively cultivated for the London market. Herts is almost entirely in the diocese of St Albans and in the South-eastern Circuit, and since 1885 has returned one member to parliament for each of its four divisions—North or Hitchin, East or Hertford, Mid or St Albans, and West or Watford. Herts contains the battlefields of St Albans and Barnet; and other places of historic interest are Rye House, Kings Langley, Hunsdon House, Hatfield, and Theobalds. Amongst the worthies of Herts have been Nicholas Brakespeare, afterwards Pope Adrian IV.; Francis Bacon; Richard Gough, the antiquary; the poet Cowper; Bulwer Lytton; Charles Lamb; and John Leech. See Cussan's *History of Herts* (1880).

Hertogenbosch. See BOIS-LE-DUC.

Hervey Islands. See COOK ISLANDS.

Herzegovina. See BOSNIA.

Hesse (*Hes'seh*; Ger. *Hessen*), or HESSE-DARMSTADT, a German grand-duchy, divided by a strip of Hesse-Nassau into a northern part, Oberhessen, completely enclosed by Prussia, and a southern part, comprising Starkenburg, east of the Rhine, and Rheinhessen, west of the Rhine. Besides, there are eleven enclaves in Baden and Prussia. Oberhessen is partly occupied in the east by the Vogelsberg, culminating in Taufstein (2532 feet), in the south-west by a ramification of the Taunus, the fertile and undulating valley of Wetterau lying between them. Starkenburg, in the south-east, is covered by part of the Odenwald. The Bergstrasse divides the uplands of Starkenburg from the plain of the Rhine. Rheinhessen, fertile and populous uplands, laid out largely in vineyards, lies between Kreuznach, Mainz, and Worms. Except some streams draining into the Fulda and Weser, the waters of Hesse—Main, Neckar, and Lahn—belong to the Rhine system. Of the total surface, comprising 2966 sq. m., 50 per cent. is tilled land and garden, and 31 forest. The most important products are corn, pulse, potatoes, rape, poppy, tobacco, flax, fruit, vines, iron, manganese ore, and peat. The industries—mainly in Mainz, Offenbach, and Worms—include the making of leather, boots, upholstery, tobacco, cigars, chemicals, &c. The total pop. amounted in 1875 to 882,349, in 1900 to 1,119,893. Of these 489,512 belonged to Starkenburg, and 746,201 were Protestants. The chief towns are Mainz, Darmstadt (the capital), Offenbach, Worms, and Giessen. The Hessians were an ancient German tribe in Thuringia; but we first hear of the landgrave of Hesse in the 13th century. In 1806 Louis X. assumed the title of grand-duke. In 1866 Hesse, having sided with Austria, had to yield up Hesse-Homburg, &c., to Prussia.

Hesse-Cassel, once a German electorate, now the district of Cassel in the Prussian province of Hesse-Nassau (q.v.). Area, 3700 sq. m.; pop. nearly 900,000. The landgraviate of Hesse-Cassel was constituted an electorate in 1803, occupied by the French in 1806, incorporated with Westphalia in 1807, and reconstituted an electorate in 1813. The elector having joined Austria in 1866, Hesse-Cassel was incorporated with Prussia.

Hesse-Homburg, from 1596 to 1866 a landgraviate of Germany, consisting of Homburg vor der Höhe, on the right bank of the Rhine, and Meisenheim, on the left bank. Area, 106 sq. m.; population, 30,000. Since 1866 Hesse-Homburg has been incorporated with Prussia, the grand-duke having sided with Austria.

Hesse-Nassau, a province of Prussia, between Bavaria and Saxony on the east and the Rhine on the west, was formed (1867–68) out of parts of the former electorate of Hesse-Cassel, of the former duchy of Nassau, of the lordship of Homburg, of the larger part of the former free town of Frankfort-on-the-Main, and small parts of Bavaria. It comprises 5943 sq. m. The surface consists mostly of uplands, attaining 3096 feet in the Grosse Wasserkuppe. Among the minerals are iron, copper, lead, manganese, and building-stone. It is rich in mineral waters, such as at Wiesbaden, Ems, Kronthal, Homburg, &c. Population, now close on 2,000,000, mainly Protestants. The chief towns are Frankfort, Cassel, Wiesbaden, Hanau, Marburg, and Fulda.

Heves, a town of Hungary, 60 miles ENE. of Pesth. Pop. 6698.

Hexham, an ancient town of Northumberland, beautifully situated on the right bank of the Tyne, here spanned by a nine-arch bridge, 24 miles W. of Newcastle by rail. The noble 13th-century Abbey Church is represented only by the greater part of the choir, the transepts, and the central tower; it still retains its old 'frith-stool.' Its nave was destroyed by the Scots in

1296, and never rebuilt; but under its ruins has been discovered the Saxon crypt of St Wilfrid, who originally founded the monastery in 674—the seat of a bishopric (681–821). The refectory remains and the abbey gateway of Norman architecture. Near Hexham the Lancastrians were defeated in 1464. Pop. 7000. See works by Wright (1823), Raine (1865), and Hodges (1888).

Heysham, a village on Morecambe Bay, 5 miles SW. of Lancaster, made into a railway port for trade with the Isle of Man and Ireland in 1900–4. Pop. 2500.

Heywood, a municipal town of Lancashire, 3 miles E. of Bury and 9 N. of Manchester. It is connected with the Rochdale Canal by a branch canal. Incorporated in 1881, Heywood has increased with great rapidity, both in population and wealth, since the beginning of the 19th century, partly in consequence of extensive coal-mines in the neighbourhood and partly in consequence of the enterprise of the Peel family, who introduced the cotton manufacture. Iron and brass founding, boiler-making, and the manufacture of cotton, woollens, machinery, railway plant, and chemicals are also carried on. The Free Libraries Act was adopted in 1873; and the Queen's Park, 20 acres in extent, was opened in 1879. Pop. (1851) 12,194; (1901) 25,458.

Hierapolis, (1) a ruined city on the high-road from Antioch to Mesopotamia, 14 miles W. of the Euphrates. It had a great temple of Astarte. —(2) An ancient city of Phrygia, with hot springs, between the rivers Lycus and Meander, 5 miles N. of Laodicea. Epictetus was a native; and here St Paul founded a Christian church.

Higham Ferrers, a Northamptonshire market-town, till 1832 a parliamentary borough, 15½ miles ENE. of Northampton. Pop. 2810.

Highgate, a northern suburb of London, 4¼ miles NNW. of King's Cross Station by rail. Here Bacon and Coleridge died; Whittington's Stone at the foot of Highgate Hill marks the spot where Dick heard Bow Bells, and turned again; Coleridge's remains, buried in the old churchyard, are now covered by the chapel of the Highgate grammar-school; and in the great cemetery (consecrated 1839) have been buried Faraday, Lord Lyndhurst, 'George Eliot,' &c.

Highlands, that portion, roughly, of Scotland to the N. and NW. of a line stretching diagonally across the country from Nairn on the Moray Firth to Dumbarton on the Clyde. The mountainous parts, however, of the counties of Banff, Moray, Aberdeen, Kincardine, and Perth are understood to be included in the designation Highlands, whilst Caithness is excluded, as are Orkney and Shetland. Separated but vaguely from the Lowlands, the Scottish Highlands may best be defined as that portion of Scotland in which the Gaelic language and manners have more or less lingered until modern times.

High Wycombe. See Wycombe.

Hildburghausen. See Saxe-Meiningen.

Hilden, a town of Rhenish Prussia, 8 miles SE. from Düsseldorf, has woollen, silk, velvet, and carpet manufactures. Pop. 11,500.

Hildesheim, a town in the Prussian province of Hanover, stands on a feeder of the Weser, 24 miles by rail SSE. of Hanover. It is an antique town, with narrow streets, high-gabled houses, and many towers, its cathedral dating from the 11th century, and the bishopric from 822. The cathedral is rich in antiquarian and artistic treasures, as the bronze gates (1015) with bas-reliefs, the so-called Irmin pillar, a rose-tree said to be a thousand years old, the brazen Christ pillar (1022), the carillon, &c. The St Godehard Church (1133–72) and St Michael's are splendid examples of Romanesque architecture. The 'Templar House,' the town-house (*c.* 1440), and certain antique private houses are the most interesting among the secular buildings. The industries embrace sugar-refining, iron-foundries, brick-making, machine-shops, and the manufacture of tobacco, stoves, church-bells, &c. Pop. (1875) 22,581; (1900) 42,978.

Hillah, or Hilla, a town of Turkey in Asia, on the Euphrates, 60 miles S. of Bagdad, on the site of Babylon. Pop. about 10,000.

Hillsborough, a village of County Down, on the Lagan Canal. Pop. 618.

Hilversum, a town of North Holland, 18 miles by rail SE. from Amsterdam. Pop. 20,199.

Himalaya (properly *Himâ'laya;* from two Sanskrit words meaning 'snow-abode'), the southern escarpment of the great Central-Asian plateau in so far as it falls between the Indus and the Brahmaputra. Thus limited, it extends from 73° to 95° E. long., over a distance of some 1500 miles. The Himalayas are not a single range, but a system of for the most part parallel ranges lying obliquely to the general direction of the system. They front the plain of the Ganges in northern India like a stupendous mountain-wall. On the east the system is connected with the mountain-ranges of south-west China and northern Burma and Siam. On the north it is backed by the lofty plateau of Tibet, 10,000 to 17,000 feet high. At its north-western extremity it runs up into the Pamir plateau, from which radiate also the Hindu-Kush and the Kuen-Lun Mountains. The southern foot of the system rests upon the plain of the Ganges, which nowhere rises more than 1000 feet above sea-level. The edge of the outermost hills is skirted as far west as the Ganges by the Terai, a belt of swampy grass-land, 10 or 15 miles wide. Next above the Terai lies a belt of forest, called the Bhabar. Above the Bhabar rise the foot-hills of the Himalayan system, generally designated the Siwalik Hills. They vary in height from a few hundred feet up to 4000, and present steep faces to the plains. It is on the north side of the Siwalik foot-hills that the first mountains appear. They rise up abruptly to elevations from 7000 to 10,000 feet. On these ranges stand the sanatoriums, Simla, Darjiling, Almora, &c.

In the Himalayas proper two main axes can be determined with tolerable distinctness. One, the southern, contains the line of the great snowy peaks; the other, the northern, forms the watershed between the rivers of India and of Tibet. The mountains in the southern chain are amongst the loftiest in the world; a very great number of them exceed 20,000 feet (3¾ miles) in height. Mount Everest (29,002 feet) is the highest measured mountain in the world. Other lofty peaks are Godwin-Austen (28,265), Kinchinjinga (28,156), Dhawalagiri (26,286), Nanda-Devi (25,700), and Trisul (23,400). The chain of great snowy peaks is, strictly speaking, a series of mountain-groups, each of which is connected with the watershed chain to the north by a transverse snow-clad ridge. These transverse spurs form deep valleys on either side in the space between the two chains; and these deep valleys are the cradles of the great rivers of northern India—the Ganges, Indus, Brahmaputra, &c.

The snowy region of the Himalayas is plenti-

fully studded with glaciers, one in the western part of the system being 36 miles long. In the same region they descend to 11,000 and 12,000 feet, in the eastern part of the system not lower than 13,000 and 14,000 feet; and on the Tibetan side they are seldom found to come lower than 15,000 and 16,000 feet. The snow-line, too, ranges higher on the Tibetan side than on the Indian. Whereas, on the watershed chain, it seldom descends lower than 18,000 feet, and on the tableland remains at 20,000, on the southern faces of the mountains it runs at 15,000 or 16,000 feet. The watershed chain has been little explored; it lies chiefly within Tibetan territory. It forms an almost continuous line of peaks, its crest being probably over 18,000 feet in elevation. So far as is known, it is only broken by one pass of less altitude than 16,000 feet, namely the Dras pass (11,300) leading from Kashmir. The Niti Pass (16,676), SE. of Ladak, connects India with East Turkestan.

The Himalayas possess few lakes. In the east, north of Sikkim, are Yamdok-cho, or Palti, 45 miles in circumference, with an island, 2000 to 3000 feet high, in the centre; and Chomto-dong, 20 miles long by 16 broad, at an altitude of 14,700 feet. More to the west lie the holy Tibetan lakes of Manasarowar and Rakas Tal, which give birth to the river Sutlej. Besides these there are Nainital in Kumaon and the Lake of Kashmir. In nearly all parts of the Himalayas metallic ores exist; but only gold, iron, copper, and lead are extracted. Gold is largely mined in Tibet; copper and iron ore are worked in Kumaon and Garwhal.

Within Indian territory most of the inhabitants of these mountains are Hindus. The Tibetan portions are occupied by peoples of Turanian stock. In Hindu mythology these majestic mountains are invested with great sanctity; thousands of pilgrims travel year after year to the holy sources of the Ganges. The temples they visit stand beside the glaciers from which the river emerges, at Gangotri, Kedarnath, and Badrinath. See works by Medlicott and Blanford (3 vols. 1879), A. Wilson (1875), and Strachey (1890).

Hinckley, an ancient manufacturing town of Leicestershire (partly in Warwickshire), on the old Watling Street, 13 miles SSW. of Leicester, with a 13th-century church. Pop. 12,000.

Hindhead, a hill ridge, common, and health-resort in Surrey, 2 miles SW. of Haslemere. Pop. 2000.

Hindley, a Lancashire town, 3 miles SE. of Wigan, with coal-works and cotton manufactures. Pop. 25,000.

Hindu Kush (*Hindoo Koosh;* anc. 'Indian Caucasus'), the westward continuation of the Himalayan system, from which it is separated by the chasm through which the Indus breaks its way to the plains. It strikes off from the south-west angle of the Pamir plateau, and extends 365 miles westward to the Bamian valley in Afghanistan, separating that country on the south from Turkestan on the north. Near its point of origin several rivers take their birth; the Oxus goes off north-west through Turkestan, and the Helmund south-west through Afghanistan. The main range breaks into four subsidiary ridges, and has a total width of about 200 miles. Unlike the Himalayas, it sinks suddenly to the plains of Turkestan on the north. It is crossed by several passes, 12,000 or 13,000 feet high. From the Bamian valley the range is continued westwards as a low watershed elevation, known as Koh-i-Baba. (Koh-i-Baba is also the name of a peak in the Hindu Kush.) The peak of Hindu Koh, 80 miles N. of Kabul, rises more than 20,000 feet above the sea. The highest point exceeds 23,000. Minerals, especially iron, occur in great abundance. The inhabitants consist principally of Dards and Shins. A loose kind of Mohammedanism is the prevalent form of religion. See Biddulph, *Tribes of Hindu Kush* (Calcutta, 1880).

Hindustan, 'the land of the Hindus,' is a term of the same class as Turkestan or Afghanistan. It properly refers only to the plain of the Ganges and Jumna, but is loosely used for India at large. See INDIA.

Hinojosa-del-Duque, a town of Spain, 45 miles NNW. of Cordova. Pop. 10,000.

Hiogo. See HYOGO.

Hiroshima, a Japanese city and port on the Inland Sea, with a sacred island, 50 miles SW. of Hyogo. Pop. 125,000.

Hirschberg, a town of Prussian Silesia, 78 miles WSW. of Breslau, with textile, lace, and paper manufactures. Pop. 19,000.

Hispania. See SPAIN.

Hispaniola ('Little Spain'). See DOMINICAN REPUBLIC and HAYTI.

Hissar, a province of Bokhara, from which it is separated by a southern offset of the western prolongation of the Thian-Shan Mountains. The country consists of a series of southward valleys, traversed by streams which flow to the Oxus or Amu-Daria. The soil is fertile. Copper and rock-salt abound. The inhabitants (number unknown) are chiefly Usbegs and Tajiks. The main route from India to Bokhara passes through the province, which was annexed by Bokhara in 1869. The capital, Hissar (pop. 10,000), is on the Kafirnihan River. Its people are noted sword-makers.

Hissar, a town in the Punjab, on the Western Jumna Canal, 102 miles W. of Delhi. Pop. 17,000.

Hissarlik. See TROY.

Hit (anc. *Is*), a town of Turkey in Asia, on the Euphrates, 85 miles WNW. of Bagdad, with bitumen-pits and naphtha-springs. Pop. 2500.

Hitchin, a thriving market-town of Hertfordshire, on the Hiz, through the Ivel, a feeder of the Ouse, 32 miles NNW. of London. An important railway junction, it has a fine old parish church, a modern town-hall, a free school (1622), a Friends' school, &c. The principal trade is in corn, malt, and flour; there are several large breweries; and many females are employed in straw-plaiting. Lavender has been grown here since 1568, and commercially, for lavender-water, since 1823. Hitchin was a place of some consequence in the days of King Alfred. It was the original seat (1869) of Girton College (q.v.). Pop. (1851) 5258; (1901) 10,072.

Hit'teren, an island off the west coast of Norway. Area, 203 sq. m.; pop. 2900.

Hjelmar, a lake of Sweden (40 miles by 15) discharging into Lake Mälar.

H'Lassa. See LHASSA.

Hoang-ho ('Yellow River'), or simply Ho, one of the principal rivers of China, rises in the plain of Odontala, south of the Kuen-Lun Mountains, and winds more than 3000 miles. From the southernmost corner of the province of Chih-li, which it crosses, the Yellow River flowed eastward to the ocean, 650 miles distant, in 34° lat.; but in 1851–53 this wayward and turbulent stream, which is said to have shifted its course nine times in 2500 years, turned off north-eastward near Kaifung-foo. Since then it discharges its waters into the Gulf of Pechili, 320 miles

NNW. of its former mouth, the mountainous province of Shan-tung lying between the two. The river is little used for navigation. In some parts of its eastern course the river-bed is above the great plain through which it passes. The embankments are a source of never-ending expense to the government, and their yielding to floods a frequent cause of desolation to extensive districts. In 1887, by a dreadful inundation in Ho-nan, 'China's sorrow' destroyed millions of lives. The measures subsequently taken to regulate its course proved futile. About 170 miles of the upper course of the Hoang-ho were explored for the first time by Prejevalsky in 1880. The vast quantity of sediment conveyed to the sea by this river, giving it its colour and name, is taken up in that part of its course which lies between the provinces of Shan-hsî and Shen-hsî; beyond which its waters are remarkably clear.

Hobart (till 1881 known as Hobart Town), the capital of Tasmania, stands on the estuary of the Derwent, 12 miles from its mouth, in the south of the island. It forms nearly a square, built on several hills, covering an area of about 1300 acres. Besides Government House, the houses of parliament, and the government buildings, Hobart has a museum, library, and two cathedrals, and is well supplied as to churches, schools, water, lighting, and tramways. The park known as the Queen's Domain has fine drives, and covers 1000 acres. In Franklin Gardens, in the centre of the town, are statues to Sir J. Franklin, a former governor of Tasmania, and Dr Crowther. The fine natural harbour and quay accommodate ships of the largest size; and there are three first-class patent slips. The cooler and more invigorating air of Hobart attracts summer visitors from Australia. The chief industries are the manufacture of flour and jam, tanning, and iron-founding. Hobart has railway communication with Launceston, 133 miles distant, and frequent steam communication with Melbourne (443 miles NW.), Sydney, and New Zealand. Founded in 1804, it was incorporated in 1857. Pop. (1871) 19,092; (1901) 34,626.

Ho'boken (named from a southern suburb of Antwerp), a city in New Jersey, on the west bank of the Hudson River, adjacent to Jersey City, and opposite New York, with which it is connected by steam-ferries. It has a large shipping trade, especially in coal; iron-castings and lead-pencils are among the manufactures. The Stevens Institute of Technology here is an important school. Pop. (1880) 30,999; (1900) 59,364.

Hochelaga. See MONTREAL.

Hochheim, a town of Prussia, in Hesse-Nassau, on the Maine's right bank, 3 miles E. of Mainz. Here is produced the excellent white wine called *Hochheimer* (whence *Hock*). Pop. 2800.

Hochkirch, a Saxon village, E. by S. of Bautzen. Here Frederick the Great was defeated by the Austrians (14th October 1758).

Höchstädt. See BLENHEIM.

Hodeida, a seaport of Yemen, in Arabia, on the Red Sea. Pop. 25,000.

Hof, a town of Bavaria, on the Saale, 30 miles NE. of Baireuth. It manufactures ironwares, cottons, and woollens. Hof, almost entirely rebuilt since the great fire of 1823, is associated with Jean Paul Richter's earlier years. Pop. 33,500.

Hofhuf, a town and fortress of the Arabian district of El-Hasa, over against the islands of Bahrein in the Persian Gulf. Pop. 35,000.

Hogue, CAPE LA. See LA HOGUE.

Hohenems, a small town of Vorarlberg, Austria, 15 miles S. of Bregenz by rail. Pop. 4700.

Hohenlinden, a village of Bavaria, 20 miles E. of Munich. Here 70,000 French under Moreau defeated 60,000 Austrians, 3d December 1800.

Hohenlohe, a former German principality in Franconia, now comprised in Würtemberg and Bavaria.

Hohenschwangau, a royal castle in Bavaria, 55 miles SW. of Munich, near the Lech's right bank, 2933 feet above sea-level. It was purchased in 1832 by the crown-prince Maximilian, who restored it in the style of a magnificent feudal castle. On an opposite crag stands the castle of Neuschwanstein, which was built in 1869–71 on the site of the original Hohenschwangau by King Louis.

Hohenstein, a Saxon town, with textile industries, 12 miles NE. of Zwickau. Pop. 13,400.

Hohenzollern, two united principalities (Hechingen and Sigmaringen) of South Germany, but belonging to Prussia, consist of a narrow strip of land entirely surrounded by Würtemberg and Baden. Area, 441 sq. m.; pop. (1890) 66,085, mostly Catholics. The territory, generally mountainous, stretches south-east from the Black Forest, across the Neckar and the Danube. The seat of government is Sigmaringen. Frederick VI., of the younger line of the Hohenzollerns, in 1415 received from the Emperor Sigismund the electorate of Brandenburg, thus founding the reigning dynasty of Prussia. The two branches of the elder line continued unbroken till 1849, when the reigning princes ceded their principalities to the king of Prussia.

Hokitika, the capital of Westland, New Zealand, and the chief town on the west coast, is the centre of a gold-producing district. Pop. 1950.

Holbeach, (1) a market-town of south Lincolnshire, 7½ miles by rail ENE. of Spalding. It has a fine Decorated church, with a spire 189 feet high; and Roman remains have been found here. Pop. of urban dist. 4755.—(2) An old Staffordshire mansion, 3 miles W. by N. of Dudley. It was the final retreat of the Gunpowder conspirators.

Holderness, a parliamentary division (including Beverley) and a wapentake in the East Riding of Yorkshire. Pop. of former, (1901) 42,150.

Holkham, the splendid seat (1734–60) of the Earl of Leicester, in Norfolk, near the coast, 2 miles W. of Wells.

Holland, the popular name of a country officially described as 'Netherland,' or 'The Netherlands,' applies to a maritime kingdom bounded by the North Sea, Prussia, and Belgium. Its greatest length (N. to S.) is 195 miles, and its greatest breadth 110 miles. It contains 12,630 sq. m.—little more than one-tenth of the size of Great Britain and Ireland. Luxemburg (q.v.) was till 1890 connected with Holland.

Provinces.	Area in sq. m.	Pop in 1903.
North Brabant	1980	581,713
Gueiderland	1950	597,016
South Holland	1160	1,240,587
North Holland	1070	1,038,530
Zealand	690	223,427
Utrecht	530	268,159
Friesland	1280	350,744
Overyssel	1290	354,914
Groningen	800	312,451
Drenthe	1030	159,122
Limburg	850	304,318
	12,630	5,430,981

Holland is the most densely peopled country in Europe after Saxony (725 per sq. m.), England (without Wales, 606), and Belgium (589). While the average for the whole country is 429 per sq. m., it rises to 1064 in South Holland and 971 in North Holland. Three-fifths of the population are Protestants, 1¾ million Roman Catholics, besides 104,000 Jews. In 1903 Amsterdam (the old capital) had 546,534 inhabitants; Rotterdam, 357,474; The Hague, seat of government, 229,839; Utrecht, 110,648; other four towns above 50,000, eight above 30,000, and eight more above 20,000.

Mainly a delta formed by the alluvium from the great rivers that flow through it into the North Sea, Holland ('Hollow-land') is not only flat; it is actually hollow—much of the area lies below the level of the water, salt or fresh. Along the canals the meadows are often 10 or 12 feet beneath the water-line; between land and sea at high tide there may be a difference of 25 feet or more. Of course all these lands have to be protected by embankments or dykes, the tops thereof, broad and flat, being used for carriage-roads and foot-paths. The Hollanders have covered the country with a network of canals, which are mostly navigable for small craft, help to irrigate the land, and in winter are splendid ice highways. Large windmills are posted at the main points to pump out the superfluous water. The most ancient canal is the *Fossa Drusi* in the east, made in the time of Augustus. Many canals, regulated by locks, connect the parallel rivers, and the Yssel forms a link between the Rhine and the canals and meres of Friesland. Thus it is possible to travel on water through the whole of Holland. The principal canals are the North Holland Canal, from Amsterdam to Den Helder (51 miles); the William's Canal, through North Brabant and Limburg (71½ miles); the North Sea Canal, from Amsterdam to Ymuiden, on the German Ocean; and the canal from the Maas, near Rotterdam, to the Hoek van Holland, which now enables ocean-steamers to reach Rotterdam at all times. The cutting and maintaining of canals and dykes in Holland is one of the chief functions of the Waterstaat, a public department; another duty is the reclamation of land by the drainage of lakes, and the erection of 'polders' by pushing back the sea. These newly-reclaimed polderlands always fetch high prices. The draining of Haarlem Lake will be eclipsed, should the scheme of laying dry the Zuider Zee (q.v.), which involves an estimated outlay of £16,000,000, be carried out. This would give Holland a new province of 1200 sq. m.—a tenth of the area of the kingdom. The maintenance of dykes by the Waterstaat forms another task of vital moment. The rivers, when swollen by heavy rains or falls of snow, are much more dangerous to the dykes than the sea; and in times of peril a special dyke service is organised, and headquarters are kept informed night and day by a body of Waterstaat engineers. The most costly sea-dykes are round the western coast-line of Walcheren Island, and near Den Helder in North Holland. These dykes are veritable ramparts, formed by piles at the base, which support a superstructure of earth and stones. The annual cost of keeping one in repair frequently reaches £8000 to £10,000. Despite all precautions, disasters through inundations form but too familiar a feature in the history of Holland. Violent irruptions of the ocean created the Zuider Zee in the 13th century. In 1905 there were about 1800 miles of railway, about half owned and worked by the state. The country roads, mostly paved with bricks, are broad and excellent. The old-fashioned way of navigating the canals in *trekschuiten*, or boats drawn by horses, or men and even women, along a towing-path, is disappearing. The climate of Holland is much like the climate of England, especially in its frequent and rapid changes; but, as a rule, the Dutch summer is hotter and the Dutch winter colder. Ague is prevalent in the low-lying regions of the west.

Cattle-rearing and dairy-farming have been the Dutch farmer's chief occupations from time immemorial. The staple agricultural products are wheat, rye, oats, potatoes, beet-root, chicory, flax, and tobacco. The soil of Holland is not uniformly fertile. Large tracts of land, especially in the eastern provinces, are simply heath; and the waste lands cover 1,700,000 acres. The orchards of Boskoop should be mentioned, as also the culture of Dutch bulbs at and round Haarlem.

Minerals are scarce; but clay for tiles, bricks, and pottery is found everywhere. Coal is worked in Limburg, and also a soft sandstone. There are manufactures of linen, woollen, cotton, and silk fabrics, paper, leather, glass, &c. Iron-founding, rolling and hammering of lead and copper, and cannon-founding are carried on in some places. The distilleries of gin ('Hollands') form an important branch of Dutch industry, as also the liqueur-factories. Amsterdam has had the largest diamond-cutting trade in the world. Sugar-refining, salt-making, soap-boiling, and the manufacture of cocoa are large interests. North Brabant is the principal centre of the Dutch margarine trade. The fisheries, though less important than formerly, in 1903 employed 21,467 men and boys, and about 6000 vessels, and are estimated to yield annually £3,000,000. The total imports increased from £81,600,000 in 1882 to £189,810,364 in 1903; the total exports from £62,282,000 to £162,579,775. The imports from Great Britain vary from £8,500,000 to £11,000,000 a year; the exports thither from £30,400,000 to £35,000,000. Much of this trade, however, consists of goods in transit from and to Germany. Holland of all European countries does the largest amount of foreign trade per head of population. The revenue of 1902 was £13,428,534, and the expenditure £13,512,954. The East Indies revenue is nearly as large as that of the mother-country; but the East India colonies, once a burden, then long a source of profit, are now a burden again. The great bulk of the national debt—£95,032,537—is held in Holland. The colonies of Holland (separately treated under their own heads) have an area of upwards of 720,000 sq. m. (more than three times the area of the German empire), with a pop. of about 36,000,000. They fall into two groups: (1) the East Indian possessions, including Java and Madura, Sumatra, the Moluccas, Celebes, Timor, parts of Borneo, and the western part of New Guinea; and (2) the West Indies, of which the chief are Surinam and Curaçao.

The government of Holland is a limited constitutional monarchy. The crown is the executive power; legislation is vested in the States-general of two chambers. There is no state religion, but the state gives financial support to the different churches. There are ancient universities at Leyden, Utrecht, and Groningen, and since 1877 a new university at Amsterdam, supported by the municipality. The four universities have upwards of 3000 students. There are Latin schools in the leading municipalities, the Royal Military and Naval Academy (at Breda), that

for engineers and the Indian civil service (at Delft), besides seminaries for the training of the Roman Catholic clergy, &c. The state pays 30 per cent. of the expenditure on the public schools, and the communes or parishes 70 per cent. There is no compulsory attendance in Holland, and nearly 10 per cent. of the population can neither read nor write.

The strength of the regular army in Europe is about 70,000 men (on the permanent peace footing 30,000), and of the colonial army about 37,000 men, some 13,000 thereof being Europeans. Dutch troops are not allowed to be sent to the Indies. The Dutch home army is composed of volunteers, and of a varying proportion of men drawn by lot for five years' service. There is also a local force, called *Schutterij*, drawn by lot from those between twenty-five and thirty-four years of age, to assist in keeping order in peace, and in case of war to act as a mobile corps, and do garrison duty. North and South Holland can be inundated at short notice. The royal navy in 1905 consisted of 2 battle-ships, 5 coast-defence ships, 8 unprotected cruisers, and 41 torpedo-vessels; besides, 9 additional vessels were in process of building, and 17 more were projected.

The ancient inhabitants of the country, the Batavians and the Frisians, became subjects or allies of the Romans in the 1st century A.D., and so remained till in the 4th century their territories were overrun by the Saxons and Salian Franks. At the end of the 8th century the Low Countries submitted to Charlemagne, and various feudal dukedoms, counties, and lordships were gradually established (the countship of Holland in the 11th century). In 1384 the earldom of Flanders passed to the Dukes of Burgundy, and Philip the Good (*c.* 1450) made the Low Countries as prosperous as any part of his Burgundian state. The Emperor Charles V. inherited the Burgundian dominions; and under his son, Philip II. of Spain, broke out the bitter quarrel between Holland and Spain, between Dutch Protestantism and persistence and Spanish tyranny and persecution, which ended in 1581 in the establishment of the Dutch Republic as an independent state under William the Silent (of Orange), though the war continued with intervals till 1648, and the Belgian provinces abode by their allegiance to the kings of Spain. In the 17th century Dutch commerce, especially at sea, Dutch science, Dutch classical scholarship, Dutch literature and Dutch art attained an eminence hardly afterwards equalled. The rivalry of Holland and England at sea led to the unfortunate wars of 1652-54 and 1664-67. The accession of William III. of Orange to the Stadholdership of the United Provinces (1672) proved the salvation of the republic from France; in 1678 Louis XIV. signed the peace of Nimeguen. Ten years later William was hailed as the saviour of English liberties, and became king of Great Britain and Ireland. On William's death, the United Provinces became a pure republic once more; the hereditary Stadholdership was re-established in 1747; and when after the French Revolution, French armies overran Holland, the Stadholder William V. fled to England, and the United Provinces became the Batavian Republic. In 1806 Louis Bonaparte was made king of Holland by Napoleon; and on the fall of Napoleon, the Northern or Dutch (and mainly Protestant) Provinces were united with the Southern or Belgian (and purely Catholic) Provinces into the ill-assorted kingdom of the Netherlands, under the princes of the Orange dynasty. Belgium seceded in 1830, and Holland fully recognised the independence of the Belgian kingdom in 1839.

See works on Holland and its people by Havard (1876–80), De Amicis (1882), Lane Poole (1882), and others; and the historical works of Prescott, Motley, Thorold Rogers ('Story of the Nations' series, 1888), besides the works of the great Dutch historians, Bilderdijk, Arend, Blok, &c.

Holland, Parts of. See Lincolnshire.

Holland House, an historic mansion (1607) of Kensington, London.

Holloway, a district of London, in the parliamentary borough of Islington, on the north.

Holmby House, a fine Tudor mansion, 6½ miles NW. of Northampton, was built by Sir Christopher Hatton in Elizabeth's reign. Sold to James I., it was for four months the prison of Charles I. in 1647. It was dismantled in 1652.

Holmfirth, a Yorkshire town, at the Holme's and Rippleden's confluence, 6 miles S. of Huddersfield. It has woollen manufactures. Pop. 9000.

Holstein, formerly a duchy belonging to Denmark, and at the same time a member of the Germanic Confederation, was annexed in 1866 to Prussia, which incorporated it in the province of Sleswick-Holstein (q.v.). It is separated from Sleswick on the N. by the river Eider and the North Baltic Canal. Area, 3237 sq. m.; pop. about 660,000—mostly of Low German stock.

Holsworthy, a Devon town, 14 miles N. of Launceston. Pop. of urban district, 1371.

Holt, (1) one of the Denbigh district of boroughs, on the Dee, 5½ miles NE. of Wrexham. Pop. 1086.—(2) A town of Norfolk, 10 miles E. by N. of Walsingham. It was the birthplace of Sir Thomas Gresham. Pop. of parish, 1850.

Holy Cross. See Thurles.

Holyhead, a seaport of Anglesey (q.v.), on the small island of Holyhead, 60 miles E. of Dublin, 85 W. of Chester, and 264 NW. of London. Although recently much improved, it is still a primitive, irregularly-built town. It is the terminus of the London and North-Western Railway (1850), and the port for the mail steam-packets to Dublin. The harbour was extended in 1873–80, and the quay lengthened to 4000 feet. The roadstead or harbour of refuge (1847–73), with an area of about 400 acres, is protected on the north by a solid masonry wall, rising 38 feet 9 inches above low-water mark, and backed by a strong rubble mound. Pop. (1875) 5622; (1901) 10,079, employed in the coasting trade and in shipbuilding and rope-making.

Holyhead Island, lying west and forming part of Anglesey, is 8 miles long by 3½ broad. Area, 9658 sq. acres; pop. 9610. It is separated from Anglesey by a narrow sandy strait, crossed by a causeway, which carries over the highroad and the railway, and is arched in the centre for the tide to pass beneath. The surface is rocky and barren. On the north-west coast are two islets, the North and South Stacks, the latter with a lighthouse, whose light, 197 feet above high-water, is seen for 20 miles. The Stacks and the north coast are hollowed out into magnificent caves, the haunt of sea-fowl.

Holy Island, or Lindisfarne, a small island of Northumberland, 9½ miles SE. of Berwick-on-Tweed. It is 3 miles long by 1¾ broad, and has an area of 2457 acres, and a pop. of 700. At low-water it can be reached by walking across the sands, a distance of 3½ miles; at high-water the strait covered by the sea is 1½ mile wide. The

village is guarded by the castle, built about 1500, and still in good repair. The island is chiefly interesting for its ruined Benedictine priory church. This was built in 1093 out of the materials of the ancient cathedral, founded here in 636 by Bishop Aidan. Here a company of Columban monks established themselves, and grew into the famous priory of Lindisfarne, the Iona of England. It reached its greatest glory under St Cuthbert. The cathedral suffered severely from the Danes, and gradually fell into ruins as Durham grew into importance. In August 1887 three thousand barefooted pilgrims crossed the sands to Lindisfarne. See works by G. Johnston (1853) and F. R. Wilson (1870).

Holy Land. See PALESTINE.

Holy Loch, an inlet (2½ miles by 1) of the Firth of Clyde, near Dunoon.

Holyoke, a city of Massachusetts, 8 miles N. of Springfield, on the Connecticut River, which is here crossed by a dam over 1000 feet long and falls 60 feet in less than a mile, supplying immense water-power. Holyoke has paper-mills, cotton-factories, woollen-mills, grist-mills, and manufactures of metal and wooden wares. It contains a fine city-hall of granite. Pop. (1870) 10,733; (1890) 35,637; (1900) 45,712.

Holyrood. See EDINBURGH.

Holytown, a mining-town of Lanarkshire, 5½ miles SSE. of Coatbridge. Pop. 4811.

Holywell (Welsh *Treffynnon*), a parliamentary borough and market-town of Flintshire, on an eminence 15 miles NW. of Chester. It is the seat of numerous lead, iron, copper, and zinc mines, and has smelting-works, manufactures of paper, flannel, and Roman cement, tanyards, and breweries. The borough unites with those of Flint, Mold, &c. in returning one member. Population, about 2650. Holywell owes its origin to the renowned well of St Winifred, which, until diminished by drainage works, delivered 4700 gallons of water per minute. The Perpendicular chapel over the well is attributed to Margaret, mother of Henry VII. It is still a place of Catholic pilgrimage. See Pennant's *History of Holywell* (1796).

Holywood, a seaport and watering-place, 4½ miles NE. of Belfast. Pop. 3889.

Homburg, a town in the Prussian province of Hesse-Nassau, at the foot of the Taunus Mountains, 8 miles NNW. of Frankfort-on-the-Main. It has beautiful environs, and its five saline and chalybeate springs attract about 12,000 visitors annually. They are good for disordered liver and stomach, gout, rheumatism, scrofula, and skin diseases. About 400,000 bottles are sent away yearly. The gaming-tables were suppressed in 1872. Pop. 9663.

Homerton, a district in Hackney, E. London.

Homildon Hill, an eminence in Northumberland, 1 mile NE. of Wooler, where on 14th September 1402 Earl Douglas and 10,000 Scots were defeated by an English army under Hotspur.

Homs. See HEMS.

Honan, a central province of China, desolated in 1887 by the inundation of the Hoang-ho.

Honawar, a seaport on the Malabar coast of India, 340 miles SSE. of Bombay. Pop. 6658.

Honduras, a republic of Central America, lies between Nicaragua and San Salvador and Guatemala, and is bounded on the N. and NE. by the Bay of Honduras and the Caribbean Sea, having here a coast-line of some 400 miles; while on the S. the Bay of Fonseca, over 50 miles long and about 30 wide, opens to the Pacific. The area is calculated at 46,500 sq. m.; the population at 750,000. Except for a narrow strip of swamp-land along either coast, the country is a table-land, its series of elevated plateaus broken by broad and fertile plains and valleys, or rising to mountain-ridges that culminate in the Montaña de Selaque (10,120 feet). The Cordilleras proper traverse the country irregularly in a north-west and south-east direction. Honduras is watered by innumerable (seldom navigable) streams; the Wanks or Segovia, part the boundary with Nicaragua, has a length of 350 miles. Roatan and the other fertile Bay Islands (q.v.), off the north coast, belong to Honduras. The climate is hot on the coast, where also fever prevails; but the highlands are cool, and frost is not unknown. The flora and fauna are like those of Guatemala. Cattle-raising is an important industry. Honduras is the richest of the Central American republics in minerals—silver, gold, iron, copper, antimony, platinum, zinc, tin, lignite, and opals. The exports, mostly to the United States, include cattle, fruits and cocoa-nuts, india-rubber, sarsaparilla, timber, and indigo.

Honduras (Span., 'depths') was discovered by Columbus on his fourth voyage, in 1502, and named from the difficulty of anchorage. There are numerous pyramids and other remains of the ancient inhabitants. Honduras threw off the yoke of Spain, with the rest of Central America, in 1821, and became independent on the dissolution of the confederation in 1839. Revolutions and frequent wars with Guatemala and San Salvador have been almost constant. The whites are very few in number, the Indians (including Caribs), negroes, and mixed races including all but some 6000 or 7000 of the population. The capital is Tegucigalpa, with 35,000 inhabitants. The ports are Amapala, on the Bay of Fonseca, Puerto Cortez or Puerto Caballos, Omoa, and Truxillo. See works by Squier (1870), Soltera (1884), and Lombard (New York, 1887).

Honduras, BRITISH. See BELIZE.

Honfleur, a seaport in the French dep. of Calvados, on the southern side of the Seine estuary, opposite and 7 miles from Havre. The commerce has been absorbed in great measure by Havre; but the harbour and its approaches were greatly improved in 1874–81. Pop. 9400.

Hong-kong, or HIANG-KIANG ('sweet waters'), a British island of southern China, on the east side of the Canton River, 90 miles S. by E. of Canton city. It consists principally of a rugged ridge of granitic rocks, extending from north-west to south-east, and has an area of 29 sq. m. Barren and desolate, the island presents a striking contrast with the beauty of its harbour, a magnificent sheet of water, 10 sq. m. in extent, which stretches between Hong-kong and the peninsula of Kowloon on the mainland. The straits that separate the two are scarcely half a mile wide on the east. To the excellence of its harbour and to its free port it owes its importance as the principal commercial entrepôt of southern China, if not of eastern Asia. The annual value of the trade of Hong-kong (exclusive of that which merely passes through the harbour) amounts to about £20,000,000. The trade between Hong-kong and Great Britain amounts to ¾ of a million pounds for exports from Hong-kong, and 2¾ million for imports. The principal items are opium, cottons, woollens, and machinery (imported), and tea and silk (exported).

The mean annual temperature is 75° F. The summer is hot and generally rainy; but the island is not unhealthy, except at certain seasons. Pop. (1841) 5000; (1851) 37,058; (1861) 123,511; (1901) 283,905, of whom only 77,743 were females. For purposes of defence, 376 sq. m. of adjacent territory on the Chinese mainland was leased for ninety-nine years in 1898. Hong-kong is the seat of a British governor and is a British naval station. The city of Victoria, the capital of the island, stretches some 4 miles along the northern shore, and from its situation on the slopes and terraces of the hills overlooking the harbour and its handsome streets and houses, is justly called one of the finest cities in the East. On the mainland the extremity of the peninsula of Kowloon, of 2⅝ sq. m. in area, was ceded to Great Britain in 1861, and now forms administratively part of the dependency of Hong-kong. The island was first occupied by Great Britain in 1841, and was secured to her next year by the treaty of Nanking.

Hon'ister Pass, a mountain way (1190 feet) in the Lake Country, Cumberland, leading to Buttermere, and flanked by Honister Crag (1750 feet).

Hon'iton, a market-town and municipal borough (1846) of Devonshire, near the left bank of the Otter, 17 miles by rail ENE. of Exeter. Four times devastated by fire between 1747 and 1797, it is a modern well-built place; but its old parish church, on a hill, contains a fine oak-screen, erected in 1482 by Bishop Courtenay of Exeter. The famous Honiton pillow-lace, a manufacture introduced here by Flemish refugees in the middle of the 16th century, is still a specialty of the district. The beautiful vale of Honiton is famous for its butter. Honiton was disfranchised in 1868. Pop. 3300.

Honolu'lu, the capital of the Hawaiian or Sandwich Islands, on the southern coast of the island of Oahu. Its spacious harbour, the only really well-protected port in the archipelago, is entered through an opening, 150 yards wide. The town stands close to the shore, on a narrow plain at the mouth of the Nuuanu valley. The mountains, which protect the harbour from the north-easterly trade-winds, also keep off the rain, so that the rainfall at Honolulu is much smaller than in some other parts of the islands. Waterworks, however, supply irrigation, which keeps the gardens of the town bright with flowers and foliage. The centre of the town is well laid out in rectangular streets, with houses built in European style; most of the appliances of civilisation are to be found, notably telephones; there are fine government buildings, and an interesting public library. Pop. 39,907, including a large number of foreigners; for the trade is almost entirely in foreign hands.

Hood, Mount. See Cascade Range.

Hooghly, or *Húglí*, a river of Bengal, the most westerly and important of the channels by which the Ganges reaches the sea. Taking its distinctive name near the town of Santipur, it has a southerly course of 64 miles to Calcutta, and a further course of 81 miles to the Bay of Bengal. Being a deltaic river, the Hooghly is much subject to being silted up, and is only kept open to navigation by vigilant works. Vessels, however, drawing 26 feet of water are safely taken up to Calcutta. At its mouth the Hooghly is 15 miles wide. Its 'bore' often attains a height of 7 feet.

Hooghly (*Húglí*), a city of Bengal, on the river Hooghly's right or western bank, 25 miles by rail N. of Calcutta. Pop. with Chinsurah, immediately to the south, 29,400.

Hooker, Mount, a peak in the Canadian Rockies, 10,500 feet high, situated on the east boundary of British Columbia.

Hook of Holland (*Hoek van Holland*), a landing-place N. of the northernmost mouth of the Maas.

Hoorn, a decaying seaport of North Holland, on a bay of the Zuider Zee, 27 miles NNE. of Amsterdam by rail. Pop. 10,711.

Hoosac Mountain, a part of the Green Mountain range in western Massachusetts, through which is pierced the most notable railway tunnel in America. Nearly 5 miles long, it was commenced in 1851 for the line between Boston and Albany, was twice abandoned, and was finally opened in 1875, having cost about $18,000,000.

Hopeman, a fishing-village (founded 1805) of Elginshire, 6½ miles NW. of Elgin. Pop. 1404.

Hopetoun House, the Earl of Hopetoun's seat in Linlithgowshire, near the Firth of Forth, 3 miles W. by N. of South Queensferry.

Hor, Mount. See Edom.

Horbury, a village of the West Riding of Yorkshire, 4 miles SW. of Wakefield, manufactures woollens, worsteds, flannels, &c. Pop. 6673.

Hörde, a town of Westphalia, 2½ miles SE. of Dortmund, has large ironworks (employing more than 4000 men) and coal-mines, with iron, steel, and zinc manufactories. Pop. 25,598.

Horeb. See Sinai.

Horn, Cape, commonly spoken of as the southernmost point of America, is a steep, black, bare mountain-headland of one of the small islands of the Fuegian Archipelago, 55° 59′ S. lat., 67° 14′ W. long. Sighted by Drake in 1578, it was named Hoorn, anglicised 'the Horn,' when rounded in 1616 by the Dutch navigators, Lemaire and Schouten. To avoid the dangerous doubling of Cape Horn, steamers now pass through the Strait of Magellan.

Horncastle, an ancient market-town of Lincolnshire, at the foot of the Wolds, between the confluent Bain and Waring, 21 miles E. of Lincoln by a branch-line (1855). It has a handsome Perpendicular church (restored 1861), a corn exchange (1856), a grammar-school (1562), and a great August horse-fair. Roman remains have been found here, and in the neighbourhood are Scrivelsby, long the seat of the Dymokes, champions of England; Winceby, the scene of a Royalist defeat (1643); Woodhall Spa, with a salt-spring discovered in 1820; and the site of the Cistercian abbey of Revesby (1142). Population, about 4000. See a work by Weir (1820).

Hornellsville, a town of New York, 91 miles SE. of Buffalo by rail, with railway workshops, and manufactures of mowing-machines, shoes, &c. Pop. 12,000.

Hornsea, a Yorkshire town, near the sea, 16 miles NE. of Hull. Pop. 2380.

Horodenka, a town of Austria, in East Galicia, 106 miles SE. of Lemberg. Pop. 11,226.

Horsens, a Danish seaport, at the head of the Horsensfiord, 32 miles SSW. of Aarhuus by rail. Pop. 22,250.

Horsforth, a township of Yorkshire, on the Aire, 5 miles NW. of Leeds. Pop. 7782.

Horsham, a market-town of Sussex, near the source of the Arun, 26 miles NNW. of Brighton and 35 SSW. of London. The noble parish church, Early English in style, was restored in 1865;

other buildings are the corn exchange (1766), grammar-school (1540; rebuilt 1840-57), &c. Christ's Hospital was transferred hither from London in 1902. Horsham returned two members from the 14th century till 1832, and then one till 1885. Pop. 9500.

Horten, the chief naval port of Norway, on the Christiania Fjord, 30 miles S. of Christiania. It has an arsenal and shipbuilding yards. Pop. 8500.

Horwich, a Lancashire town, 4 miles WNW. of Bolton. It has cotton, bleaching, paper, terra-cotta, and other industries. Pop. (1881) 3761; (1901) 15,084.

Hoshangabad, a town in the Central Provinces of India, on the Nerbudda River, 40 miles SSE. of Bhopal by rail. It trades in English piece-goods, cotton, grain, &c. It has been in British hands since 1817. Pop. 13,863.

Hoshiarpur, a Punjab town, near the Siwalik Hills, 90 miles E. of Lahore. Pop. 21,552.

Hospital, a Limerick village, 3 miles NW. of Knocklong station. Pop. 695.

Hot Springs, a town of Arkansas, 56 miles WSW. of Little Rock. It has over fifty thermal springs (95° to 148° F.). Pop. 10,000.

Houghton-le-Spring, a town in the county, and 6½ miles NE. of the city, of Durham. Its rapid growth is mainly due to the extension of neighbouring collieries. The fine cruciform parish church contains the altar-tomb of Bernard Gilpin, who founded here a grammar-school (1574); later rectors were Peter Heylin and Archbishop Sancroft. Pop. 8000.

Hounslow, a town of Middlesex, 10 miles W. by S. of London, was formerly a place of much importance in the old coaching days, it being the first stage out of London on the Bath and Southampton roads. As many as 800 horses were then maintained here, 500 coaches passed through daily, whilst a most extensive business in posting was carried on. With the opening of the railways, however, the place gradually declined, and now it contains but little of interest. West from Hounslow, stretching for 5 miles along the road, and in 1546 containing an area of 4293 acres, was Hounslow Heath, the scene of many military encampments, and notorious in the annals of highway robbery. It now is mostly enclosed. Near the town are large gunpowder-mills and cavalry and militia barracks, and at Kneller's Hall, once the painter Sir G. Kneller's residence, are the quarters of the Royal Military School of Music (1857). Pop. (1851) 3514; (1901) 11,380.

Hourn, Loch, the 'Lake of Hell,' an Inverness-shire sea-inlet, striking 14 miles off Sleat Sound.

Housaton'ic River rises in Massachusetts, flows through Connecticut, and enters Long Island Sound near Bridgeport. In its course of 145 miles, it affords abundant water-power.

Houssa. See Haussa.

Houston, capital of Harris county, Texas, on the navigable Buffalo Bayou, 49 miles by rail NW. of Galveston. It is the great railway centre of the state, stands in the midst of a fertile country, and ships cotton, grain, and cattle, besides the products of the great pine-forests, which are prepared here. Other manufactures are machinery, iron-castings, railway carriages, farming implements, fertilisers, cotton-seed oil, &c. Pop. (1870) 9382; (1890) 27,557; (1900) 44,633.

Howden, a town of Yorkshire, 8½ miles ESE. of Selby. Pop. of parish, 1964.

Howrah, or Haura, a town of India, with growing manufactures, on the Hooghly's right bank, opposite Calcutta. It is connected with it by a floating bridge (1874), and is the Bengal terminus of the East Indian Railway. Pop. (1872) 97,784; (1891) 116,606; (1901) 157,600.

Howth, a peninsula on the east coast of Ireland, forming the north side of the Bay of Dublin, terminates in a lofty cliff, the 'Hill of Howth' (563 feet), at whose foot nestles the fishing-village of Howth (pop. 1160).

Hoxton, a district of London, partly in Hackney, but mainly in Shoreditch.

Hoy (Scand. *Hoey*, 'high island'), one of the Orkneys, 1¼ mile SW. of Mainland or Pomona. It is 13¼ miles long, 3 furlongs to 6¼ miles broad, and 53 sq. m. in area. Unlike the rest of the group, Hoy rises abruptly from the sea, with stupendous cliffs that attain 1140 feet in Bracbrough or St John's Head, and 595 in Bervy Hill; inland are Cuilags Hill (1420 feet) and the Ward Hill (1564), commanding a splendid view. Near the south end is the fine natural harbour of Long Hope (5½ × 1⅝ miles). The 'Dwarfie Stone' is 28 feet long, 14½ broad, 6½ high, with a chamber hollowed out of it; and the 'Old Man of Hoy' is an insulated pillar of rock, 450 feet high. Pop. 1200.

Hoylake, a small watering-place of Cheshire, at the extremity of Wirral peninsula, 8 miles by rail W. of Birkenhead. It has a celebrated golf-links, opened in 1869. Pop. 10,900.

Hradschin. See Prague.

Hualla'ga, a river of Peru, 650 miles long, rises near the Cerro de Pasco, over 14,000 feet above the sea, and flows north on the east side of the Central Cordillera, breaking through the range at the gorge of Chasuta, to the Marañon. It is navigable as far as Yurimaguas.

Huamanga. See Ayacucho.

Huancaveli'ca, the capital of a Peruvian dep., 150 miles SE. of Lima. Near it are famous quicksilver mines. Pop. 3000.

Huan'uco, the capital of a Peruvian dep., lies in a lovely valley on the Huallaga. Pop. 7300.

Hubertusburg, a royal Saxon hunting-seat, 25 miles E. by S. of Leipzig, built in 1721. It was much injured during the Seven Years' War; and here in 1763 was signed the treaty ending that war. Since 1840 it has served as prison, hospital, and lunatic asylum.

Hubli, a town of Dharwar, in Bombay presidency, 102 miles NE. of Karwar on the Malabar coast. It is an important cotton-mart. Pop. 60,500.

Hucknall-Torkard, a village 8 miles NNW. of Nottingham. Byron is buried here.

Huddersfield, a 'clothing town' in the West Riding of Yorkshire, a parliamentary, municipal, and county borough, 26 miles NE. of Manchester, 15 S. of Bradford, 17 SW. of Leeds, and 189 NNW. of London. Well built of stone and regular, it occupies a considerable extent of high ground, sloping down to the left bank of the Colne, which here receives the Holme; and it owes its rapid extension to its situation in a rich coal-district, to its abundant water-power, and to its transit facilities by rail and canal. Among the chief edifices are the circular cloth-hall (1768–80); the railway station (1848), with a marble statue of Peel (1875) before it; the classical town-hall (1880);

the technical college (1883; developed from the mechanics' hall, *c.* 1840); the market-hall (1880); and the infirmary (1831–74). The first parish church was built before 1110, and rebuilt in Tudor times, and again in 1835; St John's Church (1853) was designed by Butterfield, and St Thomas' (1859) by Sir G. G. Scott. The Beaumont Park, 21 acres in area, was opened by the Duke of Albany in 1883, and there is also Greenhead Park of 26 acres. The chamber of commerce (1880) is an important local body. Huddersfield is the chief seat in the north of England of the 'fancy trade,' and every description of plain woollen goods is also manufactured; whilst other industries are cotton and silk spinning, iron-founding, machine-making, &c. The Roman station of *Cambodunum* was in the parish, and remains have been found here; but Huddersfield has no history to speak of. In 1750 Bishop Pococke described it as 'a little town.' It was enfranchised by the Reform Act of 1832, and made a municipal borough in 1868, the boundary having been greatly extended in 1867. Pop. (1861) 34,877; (1881) 86,502; (1901) 95,047.

Hudson, a river in New York, and one of the most beautiful and important in America. It rises in the Adirondack Mountains, 4326 feet above sea-level. At Glen's Falls it has a fall of 50 feet, and thence runs nearly due south to its mouth at New York City. It is tidal up to Troy, 151 miles from its mouth, and magnificent steamboats ply daily between New York and Albany. Below Newburg, 60 miles from New York, the river enters the beautiful highlands, which rise abruptly from the water to the height of 1600 feet. Here was the scene of Arnold's treason and of André's fate; and West Point is 8 miles below Newburg. Emerging from the highlands, the river widens into a broad expanse called Tappan Bay, 4½ miles wide and 13 long. Below, on the right bank, a steep wall of trap rock, called the Palisades, rises from the river's brink to a height of 300 to 510 feet, and extends for nearly 20 miles to the upper portion of the city of New York. The river from here is known as the North River, and is from 1 to 2 miles wide; and after passing between New York and Hoboken and Jersey City, it falls into New York Bay. Its whole length is 350 miles, and its principal tributaries are the Sacondaga, Mohawk, and Walkill. The Hudson has valuable shad and sturgeon fisheries. It is connected by canals with Lakes Erie and Champlain, and with the Delaware River. Henry Hudson, the English navigator, explored it in 1609. Robert Fulton's first successful experiment in steamboat navigation was made on it in 1807.

Hudson, capital of Columbia county, New York, on the Hudson River's left bank, 116 miles N. of New York City. It extends along a high ridge ending in a bold promontory, and has an active river-trade, a fine court-house, a city-hall, blast-furnaces, and manufactures of fire-engines, paper, leather, flour, &c. Pop. 9570.

Hudson Bay, a gulf, or rather inland sea, in the north-east of North America, is completely landlocked except on the north, where Southampton Island and Fox Channel lie between it and the Arctic Ocean, and where Hudson Strait, running 500 miles south-east, connects it with the Atlantic. Including its south-eastern extension, James's Bay (q.v.), it measures about 1000 miles in length and 600 in average width, and has an area of some 500,000 sq. m. The eastern shore, called the East Main, is for the most part rocky, and is fenced with several small islands; the western shore, the West Main, is flat. This sea is the great drainage reservoir of the Canadian North-west Territories, its chief feeders being the Churchill, whose deep and narrow mouth forms the best harbour on the shores of Hudson Bay, and the Nelson, of whose total course of 400 miles only 70 or 80 are navigable. The fur trade began with the Hudson Bay Company (founded 1670); fish-oil has also been exported. It has been proposed to open up direct communication from England with Manitoba and the North-west of Canada by way of Hudson Bay and Strait (navigable only about three months annually, by reason of the ice); the scheme providing for a railway from Winnipeg to Fort Nelson on the bay, a distance of 650 miles.

Hué, the capital of Annam, 10 miles from the mouth of the Hué River, or Truongtien. In 1801 it was strongly fortified by French officers. The heart of the city is occupied by the palace; much of the rest is composed of mud huts. Since 1884 there has been a French garrison in Thuanan, the port of Hué. Pop. 50,000 (with suburbs, 90,000), including many Chinese.

Huelva, a thriving town of Spain, near the confluence of the Odiel and the Tinto, 68 miles by rail WSW. of Seville. Fishing and the plaiting of esparto grass are the chief industries. Huelva is the port for the Rio Tinto copper-mines, in British hands, and a shipping place for wine. An iron pier was erected in 1889–90. Pop. 19,677.—Huelva province has an area of 3913 sq. m., and a pop. of 262,000.

Huesca, a picturesque town of Spain, 55 miles by rail NE. of Saragossa. Among its chief buildings are the beautiful Gothic cathedral (1400–1515); the Romanesque church of San Pedro (1150–1241); the university, founded in 1354; and a former palace of the kings of Aragon. Huesca is the *Osca* of the Romans, where Sertorius was murdered in 72 B.C. Pop. 11,764.—Huesca province has an area of 5848 sq. m., and a pop. of 250,000.

Huescar, a town of Spain, 75 miles NE. of Granada. Pop. 7737.

Hughenden (locally *Hitchendon*), a parish of Buckinghamshire, among the Chiltern Hills, 2 miles N. of High Wycombe. Hughenden Manor, a large brick three-story mansion, mostly modern, was purchased before 1847 by Benjamin Disraeli, Earl of Beaconsfield. It is rich in interesting portraits; and in its terraced gardens are trees planted by Queen Victoria in 1877 and the Prince of Wales in 1880. The ancient parish church, much restored in 1874, contains a monument to the earl, erected by the Queen; and in its vault he lies buried by the side of Lady Beaconsfield.

Hugh Town. See SCILLY ISLANDS.

Húglí. See HOOGHLY.

Hull, or KINGSTON-ON-HULL, a river-port, a parliamentary and municipal borough, and (since 1897) a city and county of itself, is situated in the East Riding of Yorkshire, in a low, level plain on the north bank of the Humber, here 2 miles wide, and here joined by the Hull, 42 miles ESE. of York and 173 N. of London. Of churches the most notable are Holy Trinity, Decorated and Perpendicular in style, with a central tower 140 feet high; and St Mary's Lowgate (1333), one-half of which was removed to make room for the mansion-house of Henry VIII., who stayed here in 1540. Both were restored by Sir G. G. Scott. The most important educational establishments are Hull and East Riding College; the Hull

grammar-school (1486), where Andrew Marvell was educated; and Trinity House School (1716), which gives a nautical education; besides the Literary and Philosophical Society, the Royal Institution, &c. An equestrian statue (1734) of William III. stands in the market-place, and in Junction Street is a column (1834) surmounted by a statue of Wilberforce, who was a native, as also was Mason the poet. The Trinity House, instituted in 1369 for decayed seamen, was rebuilt in 1763, and the Charterhouse, an endowed institution for the poor, in 1645. There are three prettily laid out public parks. A town-hall, Italian Renaissance in style, was opened in 1866, as also was a new exchange. There are also a spacious jail (1869), a new post-office (1877), the Theatre Royal (1873), the dock-office (1871), public baths (1850), a new market-hall (1887), and the James Reckitt Free Library (1889). The docks and basins, comprising an area of upwards of 200 acres, have been constructed since 1774. The Victoria Dock (1850–64) covers 20 acres, exclusive of two large timber ponds and tidal basins which cover 9 acres. The Albert Dock (24½ acres) was opened in 1869; and the Alexandra Dock (40 acres) in 1883. Hull was one of the first ports in England to engage in the whale-fishery, an enterprise now abandoned; but its fisheries employ, in conjunction with those of Grimsby, large fleets of boats, attended by steam auxiliaries. Hull is a principal steam-packet station, and ocean-steamers ply regularly to many of the principal ports of Belgium, Holland, Denmark, Russia, Germany, Scandinavia, America, Australia, and India. It is the great outlet for the woollen and cotton goods of the midland counties, and the chief entrepôt for German and Scandinavian oversea trade. Hull ranks third among British ports in the value of its trade, its imports exceeding £32,000,000, and its exports £20,000,000. Shipbuilding yards are in operation; and, in addition to iron ships, important ironclads have been built here. The chief manufactures are ropes, canvas, chain, chain-cables, machinery, &c. Many mills of various kinds are carried on, as well as chemical factories, tanneries, and sugar-refineries. Seed-crushing for oil is also an important staple industry. Constituted the free borough of Kingston-on-Hull by Edward I. in 1299, the town owed much to its great merchant-house, the De la Poles, whose head, Michael, in 1385 was created Earl of Suffolk. In 1642 the refusal of its governor, Sir John Hotham, to admit Charles, marked the outbreak of the Civil War, during which Hull was twice besieged by the royalists. It was made the seat of a suffragan bishop in 1534, and again in 1883. In April 1893 it was the scene of the strike of 8000 dockers. Since 1885 Hull has returned three instead of two members to parliament. Pop. (1851) 84,690; (1901, extended in 1897) 240,259.

Hull, the chief town of Ottawa county, Quebec, is on the Ottawa River, opposite Ottawa City, with which it is connected by a suspension bridge. It was almost entirely burnt down in 1900, but was quickly rebuilt. Pop. 14,000.

Humber, the estuary of the rivers Ouse and Trent (and so of the Dove, Derwent, Wharfe, &c.), runs 38 miles E. and SE., separating the counties of York and Lincoln, with a breadth varying from 1 to 7 miles. Its drainage basin, with an area of 9770 miles, is the largest in England; and by means of navigable streams and canals the Humber is connected with the Mersey, the Severn, and the Thames. The navigation is obstructed, especially on the north side, by banks and shoals. By way of the Humber Danes and Northmen made many terrible incursions into England, notably in 867, 1013, 1066, and 1069. The great port on the Humber was anciently Ravenser or Ravenspur, just inside Spurn Head. The process of erosion by the sea was already at work when Henry Bolingbroke landed here in 1399; soon after the place was wholly covered by the encroaching waters, and Hull (q.v.) became the great port on the north shore, as Grimsby (q.v.) now is on the southern side. See *The Rivers of England* (Cassell, 1889), and Boyle's *Lost Towns of the Humber* (1889).

Humbleton. See HOMILDON.

Humboldt, a river rising in the NE. part of Nevada, and flowing 350 miles WSW. to Humboldt Sink, a lake over 40 miles in circumference, with no outlet. Unnavigable even for canoes, it is strongly impregnated with alkaline matter.

Hume Castle, Berwickshire, 6 miles N. by W. of Kelso, on Hume Crags (700 feet), is now a mere sham antique, on the site of the old stronghold of the lords of Home.

Hû-nan, a province of China (q.v.).

Hungary (Hung. *Magyarország*, Ger. *Ungarn*, Lat. *Hungaria*) is the eastern and larger half of the Austro-Hungarian monarchy, with an area of 124,633 sq. m., and a pop. (1900) of 19,254,559. With Transylvania, Croatia and Slavonia, and Fiume, it forms the realm of the crown of St Stephen or Transleithania, which is a coequal factor with Austria or Cisleithania in the empire-kingdom ruled over by the Hapsburg dynasty. The two have been united since 1526, and since 1867 have been reconstructed as a dual empire, each with its own laws, parliament, ministers, &c., but both under one monarch for military, diplomatic, and customs purposes. The geographical, industrial, and statistical features of Hungary have been dealt with in the article AUSTRIA. The Hungarians or Magyars, who entered Europe in 884, and established themselves in their present country five years later, speak a non-Aryan language, reckoned to belong to the Ugric branch of the Finnish stock. Hungary became a regular Christian kingdom in 1000 under King Stephen. Mathias Corvinus in the 15th century waged war successfully with the Turks and with the Bohemians. At the battle of Mohacs in 1526 Louis II. was utterly defeated by the Turks, and after an intestine struggle the Austrian Ferdinand became king. Since then the chief event in Hungary's history has been the great Magyar rising of 1848–49. See Felbermann, *Hungary and its People* (1892).

Hungerford, a town of Berkshire, partly also in Wiltshire, is situated on the river Kennet, 26 miles WSW. of Reading. It is a hunting centre, and a favourite resort of anglers, having been even in Evelyn's time 'a towne famous for its troutes.' In the town-hall (1870) is a horn gifted by John of Gaunt in 1362. Pop. 3000.

Hüningen (Fr. *Huningue*), a town of Alsace, on the Rhine's left bank, 2½ miles N. of Basel, is celebrated for its fish-breeding establishment (1852). Vauban's fortifications (1679–81) were razed in 1815. Pop. 2500.

Hunstanton (pron. *Hunston*), a watering-place of Norfolk, on the Wash, 18 miles NE. of King's Lynn by a railway (1862). It has a broad beach of firm sand, and good bathing and sea-fishing, a pier, a lighthouse (1840), and a splendid Decorated church (*c.* 1330). Hunstanton Hall,

dating from the Tudor period, but greatly injured by fire in 1859, was the seat of Sir Roger L'Estrange. Pop. 1725.

Huntingdon, the county town of Huntingdonshire, on the left bank of the Ouse, and the Ermine Street of the Romans, 59 miles N. of London. It became the seat of a royal castle in 917, and was incorporated in 1189. It has the Buckden Library (1890), breweries, brickworks, carriage-works, and nursery gardens. Here Oliver Cromwell was born (1599), and here the poet Cowper lived (1765–67); the chronicler, Henry of Huntingdon, from 1110 to 1155 was Archdeacon of Huntingdon. With the municipal borough of Godmanchester (pop. 2095), on the opposite bank, it formed a parliamentary borough, returning till 1867 two members, till 1885 one. Pop. (1851) 3882; (1901) 4261.

Huntingdon, a town of Pennsylvania, 34 miles E. of Altoona. Pop. 6053.

Huntingdonshire, or HUNTS, an inland county of England, 30 miles long and 23 broad, is bounded N. and W. by Northampton, Cambridge, and Bedford shires. Area, 359 sq. m., almost all arable or in pasture. Pop. (1801) 37,568; (1861) 64,250; (1901) 57,773. Huntingdonshire is watered chiefly by the Nene and the Ouse, and comprises four hundreds and the municipal boroughs of Huntingdon, Godmanchester, and St Ives, with part of Peterborough. It is almost entirely in the diocese of Ely and the Southeastern Circuit, and returns two members. Two Roman roads traverse Huntingdonshire; at Alwalton, Earith, and Chesterton are remains of camps; and in many places Roman remains have been found. Among places of interest are the ruins of Ramsey Abbey and Buckden Palace, formerly the residence of the bishops of Lincoln; Hinchinbrook House, anciently the seat of the Cromwell family; Kimbolton Castle, the seat of the Duke of Manchester, where Queen Catharine resided for some time after her divorce from Henry VIII.; Horeham Hall, the residence of the Princess Elizabeth during Mary's reign; Denton, the birthplace of Cotton the antiquary; Little Gidding (q.v.); and Brampton, where lived for some years Samuel Pepys.

Huntington, the name of several towns in the United States. The largest are (1) capital of Cabell co., W. Virginia, on the Ohio River, 18 miles from Ironton. It has a college and many factories. Pop. 11,970.—(2) A town of New York, 30 miles E. by W. of New York City. Pop. 9483. —(3) A city of Indiana, on the Little River, 24 miles SW. of Fort Wayne. Pop. 9491.

Huntingtower, or RUTHVEN CASTLE, a ruin, 3 miles WNW. of Perth. James VI. was kidnapped here in the 'Raid of Ruthven' (1584).

Huntly, a Scottish town, 41 miles NW. of Aberdeen. Near it is ruined Huntly Castle, the seat of the earls and marquises of Huntly. Dr George Macdonald was born here. Pop. 4150.

Huntsville, capital of Madison county, Alabama, in the valley of the Tennessee, 212 miles ESE. of Memphis by rail. It manufactures cotton, oil, ice, iron, and flour. Pop. 8100.

Huon Gulf, an inlet on the east side of New Guinea, in Kaiser Wilhelm's Land.

Hú-peï, one of the central provinces of China, watered by the Yang-tsze.

Hurdwár. See HARDWÁR.

Hurlford, an Ayrshire town, on the Irvine, 2 miles ESE. of Kilmarnock. It has ironworks, collieries, &c. Pop. 4605.

Hurlingham, at Fulham (q.v.) in Middlesex, on the Thames below the bridge, the headquarters of aristocratic pigeon-shooting.

Huron, the second largest of the five great lakes on the frontier between the United States and Canada, is connected at the north-west by St Mary's River with Lake Superior, and through the strait of Mackinaw with Lake Michigan. On the south it has an outlet by way of the St Clair River. It is bounded on the W. and SW. by Michigan, and elsewhere by Ontario. The lake is divided into two unequal parts by the Cabot's Head peninsula and Grand Manitoulin island, the parts to the north being called North Channel and Georgian Bay. Its extreme length is 263 miles; its greatest breadth, exclusive of Georgian Bay, 105 miles; average breadth, 70 miles. The total area is 23,800 sq. m.; and its mean elevation is $581\frac{5}{10}$ feet above sea-level, it being $20\frac{1}{2}$ feet below Lake Superior, and $8\frac{4}{10}$ above Lake Erie. Huron has a mean depth of about 250, and a maximum depth of 750 feet. There is an average difference between high and low water (due to winds and rain) of $1\frac{5}{10}$ foot. Huron, like the other lakes, is subject to violent storms. It contains about three thousand islands, nearly all Canadian. The waters are very clear and pure, and abound in fish. There are numerous good harbours and roadsteads, most of them on the Canadian side; at Sand Beach, Michigan, there is a harbour of refuge.

Hursley, a village of Hampshire, 5 miles SW. of Winchester. John Keble, author of the *Christian Year*, was vicar here from 1835 till his death in 1866. In 1848, with the profits of that celebrated work, he restored the church, which is rich in modern stained glass. Keble himself lies buried in the churchyard, and in the chancel is the grave of Richard Cromwell.

Hurst Castle, a Hampshire fortress, dating from 1535, at the west entrance of the Solent, 4 miles S. by W. of Lymington. Charles I. was imprisoned here.

Hurstmonceaux (*Hurst'mon-sō*), a village of Sussex, 5 miles N. of Pevensey, with the extensive ivy-covered ruins of a fine castle, built of brick by Sir Roger de Fienes, one of the heroes of Agincourt. It passed in 1727 into the hands of the Hares or Hare-Naylors. The famous Broad Church leader, Archdeacon Hare, was rector from 1832 till 1855, and lies buried in the churchyard.

Hurstpierpoint, a market-town of Sussex, 8 miles N. by W. of Brighton. Here is St John's College (1849), a middle-class school in connection with Lancing (q.v.). Pop. of parish, 2883.

Husch, or HUSI, a town of Moldavia, near the Pruth, 38 miles SSE. of Jassy. Fugitive Hussites founded it in the 15th century. Pop. 18,500.

Husum, an old town in the Prussian province of Sleswick-Holstein, 23 miles W. of Sleswick by rail and $2\frac{1}{2}$ from the North Sea. Pop. 8267.

Hutchinson, a town of Kansas, on the Arkansas River, 48 miles NW. of Wichita. Pop. 9682.

Huy (*Hoo-ee*; Flem. *Hoey*), a town of Belgium, is romantically situated amid lofty rocks on the Meuse, 19 miles SW. of Liége by rail. Its citadel (1822) commands the passage of the river, and its trade depends on ironworks, coal-mines, and manufactures of paper, leather, beer, spirits, &c. Pop. 14,403. Peter the Hermit founded here the former abbey of Neufmoustier (*Novum Monasterium*), and here in 1115 he died.

Hybla, three cities of ancient Sicily.

Hydaspes. See JHELUM.

Hyde, an important manufacturing town of Cheshire, 7 miles ESE. of Manchester, and 5 NE. of Stockport. Standing in a coalfield, and enjoying ample facilities of communication by road, rail, and canal, it has risen from a mere village to a considerable town, which in 1881 was incorporated as a municipal borough. Cotton is of course the staple manufacture; then come the felt-hat industry, engineering, boiler-making, &c. The town-hall is a handsome building. Pop. (1811) 1806; (1861) 13,722; (1901) 32,768.

Hyde Park, a manufacturing town of Massachusetts, on the Neponset River, 8 miles by rail S. by W. of Boston. Pop. 13,293.

Hyderabad (*Haidarábád*), or the NIZAM'S DOMINIONS, a feudatory state of India, occupies the greater part of the Deccan proper or central plateau of southern India, between the provinces of Madras and Bombay. Area, 82,698 sq. m. (excluding the British assigned districts of Berar, q.v.); pop. (1901) 11,141,142. Only 1,138,666 are Mohammedans, found mainly in the capital, though the Nizam and state are Mohammedan. Telugu, Kanarese, and Marathi are the principal languages spoken. Education is making rapid strides. The surface is a slightly elevated tableland. The chief rivers are the Godavari, with its tributaries the Dudna, Manjira, and Pranhita; and the Kistna (Krishna), with the Bhima and Tungabhadra. In 1687 the territory, long called the Nizam's Dominions, became a province of the Mogul empire; but soon after 1713 the viceroy of the Deccan made himself independent.

HYDERABAD, the capital of the state, stands on the Musi's right bank, 1700 feet above the sea, 390 miles by rail NW. of Madras. It is 6 miles in circumference, and is surrounded by a stone wall. Population, 450,000. The palace of the Nizam, though architecturally unimportant, is of vast size. Hyderabad is a great stronghold of Mohammedanism. The principal mosque was fashioned after the model of the Great Mosque at Mecca; in the interior are fine monolithic granite columns, and outside the building is crowned by lofty minarets. Another remarkable edifice is the Char Minar or College, with four minarets resting on four connected arches, at which the four principal thoroughfares converge. On the opposite side of the river is the magnificent British Residency; it stands in the midst of fine gardens, and communicates with the Nizam's palace by a bridge. The neighbourhood boasts of wild and picturesque scenery, and abounds with huge tanks and beautiful gardens.—Secunderabad (*Sikandarábád*) is a British military cantonment 6 miles NE. of Hyderabad.

Hyderabad, the historical capital of Sind, and chief city of a district, stands 3½ miles E. of the left bank of the Indus. On the other side is the Sind railway, terminating at Kurrachee. Hyderabad is famous for its silks, gold-work, pottery, lacquered ware, and arms. Pop. 70,000.

Hydra, a bleak, rock-bound Greek island, lies 4 miles from the coast of the Peloponnesian department of Argolis and Corinth. It is a narrow rocky ridge, 11 miles long, 1960 feet high, and 20 sq. m. in area. On the north-west coast is the seaport of Hydra (6446). The 7342 islanders, mostly of Albanian origin, make excellent seamen, and carry on cotton and silk weaving, tanning, shipbuilding, sponge-fishing, and commerce. Prior to the war of Greek independence the Hydriotes numbered 28,000.

Hyères, a town of Provence, in the French dep. of Var, on a southern hill-slope, crowned by a ruined castle, 3 miles from the Mediterranean, and 13 E. of Toulon by rail. Embosomed in palm-groves and orange-orchards, it is celebrated for the beauty of its situation and its mild, dry climate, and is therefore growing more and more in favour as an invalid resort between October and May. An English church was built in 1884; and since 1875 great improvements have been carried out in the way of drainage, water-works, boulevards, &c. Massillon was a native. Pop. (1872) 5881; (1901) 15,236. Near the coast lie the wooded Iles d'Hyères or d'Or (anc. *Stœchades*).

Hymettus (now *Trelo Vouni*), a mountain (3368 feet) in Attica, SE. of Athens, was famous of old for its honey and bluish marble.

Hyndlee, the Roxburghshire farm, 10 miles SE. from Hawick, of James Davidson, the prototype of 'Dandie Dinmont.'

Hyōgō, or KOBE, a port of central Japan, on the west shore of the Gulf of Osaka, 20 miles S. of that city. Population, 285,000. The foreign settlement is finely laid out, and the town is one of the most attractive and prosperous in Japan. It has been open to foreign trade since 1860, and has wharves, shipbuilding-yards, and a paper-mill.

Hythe, a parliamentary and municipal borough and market-town of Kent, 5 miles WSW. of Folkestone, and 67 SE. by E. of London by rail, is one of the Cinque Ports, although Lympne or Lymm (anc. *Portus Lemanis* of the Romans), now 3 miles inland, was probably the original harbour. The town, which is pleasantly situated some distance from the sea, is built on the side of a hill. Its church, a cruciform building of great beauty, in part Romanesque, has been restored since 1866, and contains in a crypt an extraordinary collection of human skulls and bones. Near to Hythe are the headquarters of the School of Musketry and Shorncliffe camp, both established in 1854; the picturesque ruins of Saltwood Castle, with memories of Becket; and the obsolete Royal Military Canal, 23 miles long, constructed in 1805 for the conveyance of military stores to Rye. In 1881 a sea-wall and parade, extending from Hythe to Sandgate and Folkestone, was opened. These and some smaller places are included in the parliamentary borough of Hythe, which since 1832 has returned only one member. Pop. of that borough (1851) 13,164; (1901) 46,619, of whom 5557 were within the municipal limits, which include West Hythe.

IBADAN, chief commercial town of Yoruba in Africa, in the British colony of Lagos, 124 miles from Lagos by rail. Pop. 200,000.

Ibague, capital of the department of Tolima in Colombia, 60 miles W. of Bogota, on a fertile plain 4000 ft. above the sea. Pop. 12,000.

Ibajay, a town of Panay, in the province of Capiz, in the Philippines. Pop. 12,000.

Ibarra, capital of Imbabura province, Ecuador, 7000 feet above the sea. Pop. 10,000.

Ibea, a word coined from the initials of Imperial British East Africa, was disused when in 1898 the company was superseded by the British Foreign Office. British East Africa consists of the East Africa Protectorate (200,000 sq. miles on the mainland; pop. 4,000,000), with the Uganda

(q.v.) Protectorate, and the islands of Zanzibar and Pemba, governed through their sultan.

Iberia, the name by which Georgia (q.v.) was known to the Greeks and Romans; and also an ancient name for Spain.

Ibrail. See BRAILA.

Ibrox, a south-west suburb of Glasgow.

Ica, a coast dep. of Peru, with an area of 6295 sq. m. and a pop. of 90,111. The capital, Ica, is 50 miles by rail SE. of Pisco, its port. Pop. 9000.

Iceland, an island in the North Atlantic immediately south of the Polar Circle, which just touches its northernmost point. It lies between 63° 23′ and 66° 33′ N. lat., and between 13° 22′ and 24° 15′ W. long. The distance from Iceland to Greenland is about 250 miles, to Norway 600, to the Faröe Islands 250, and to Scotland 500. Its area is 40,300 sq. m. (more than a third larger than Scotland); its length from east to west 300 miles, and its breadth from north to south 200. The south coast from east to west is entirely wanting in bays and fjords. Other parts of the coast, especially the north-west and east coasts, are very much indented by fjords and bays, so that the coast-line, measured from point to point, is only 900 miles, but following the indentations would be over 2000.

Taken as a whole, Iceland may be said to be a tableland about 2000 feet high. In some parts it slopes pretty evenly down to the coast—e.g. on the south side between Eyafjallajökull and Reykjanes. Here is the largest extent of lowland, about 1400 sq. m. The fjords in the north-west, north, and east are mostly narrow cuttings, and hills rise to about 2000 feet abruptly from the water, ending in steep precipices, which afford breeding-places to myriads of sea-fowl. In the north, and in some parts of the east, there are several broad valleys running from the fjords into the interior. Iceland is throughout volcanic. The interior and highest part of the island consists of volcanic tufa; the hills of the east and west are mainly basaltic. The whole of the interior is occupied by barren sands, lava tracts, and icefields. The largest of these lava tracts is Odáthahraun, about 1200 sq. m. The largest icefield is that of Vatnajökull, about 3000 sq. m., and all the icefields together cover 5360 sq. m. At the south-east corner of Vatnajökull is the highest mountain in Iceland, called Öraefajökull (6550 feet); its upper part is covered with everlasting snow or ice, as more or less are all mountains above 4000 feet, the snow-line being usually at from 3000 to 4000 feet. There are twenty volcanoes which have been active since the island was inhabited; the eruptions of Hecla (q.v.) have been most frequent. Laki, near Skaptá, in 1783 threw out a lava stream 45 miles long and nearly 15 broad—an outpour unexampled anywhere else. The south-west peninsula, Reykjanes, has frequently been disturbed by volcanic outbursts; and islands in the sea round it have been thrown up or submerged alternately by submarine volcanic action. As a result of this volcanic activity, 2400 sq. m. of Iceland are covered with lava. Many of the ice-hills have been active volcanoes during the last 600 years, such as Öraefajökull and Eyafjallajökull. These ice-volcanoes never throw out any lava, but mud and ashes.

The numerous hot springs scattered about the island are in many parts made use of by the inhabitants for cooking and washing purposes; some are just warm enough for bathing, others convert their water into steam at a degree far above the boiling-point. The most famous is the Great Geyser, near Hecla. Earthquakes sometimes do much damage. Many rivers, all too rapid to be navigable, and the longest over 100 miles, run from the interior either north or south. Lakes also are numerous, and pretty waterfalls. The climate of the south of Iceland is somewhat like that of the north of Scotland—i.e. rather wet and changeable, but colder. In the north the climate is drier and colder still. The winter is mild considering the latitude, but spring and summer are frequently cold. The greatest peculiarity of the climate is the varying mean temperature of the same month, the difference sometimes being 27°. This is owing to the arrival or non-arrival of the Greenland ice, which not unfrequently blocks up the north and east coasts from April to September. Sulphur, lignite, and brown coal are found, as well as iron and lime. The only cereal is melur, a kind of wild oats. Turnips, carrots, cabbages, and potatoes thrive well, and are cultivated to some extent. The grasses, both wild and cultivated, however, are the principal product. Of trees there is the birch, seldom exceeding 12 feet in height, and some willows and juniper bushes; amongst the heather are found crowberries and whortleberries. Iceland moss, a kind of lichen, is plentiful, and is available for food. There are both white and blue foxes; and of reindeer, introduced in 1770, there are still a few herds running wild on the hills in the interior. Large numbers of sheep are now exported alive to Scotland and England. The cows are small, but yield abundant milk. Thousands of ponies are brought to Scotland every year. The genuine Iceland dog resembles the Eskimo dog and the Scotch collie. There are about 22,000 cattle, 1,000,000 sheep, and 40,000 ponies. Of birds there are immense numbers, especially of water-fowl; the most important the eider-duck. The ptarmigan is the only game-bird. The most remarkable bird of prey is the Icelandic falcon. The whooper or wild swan breeds largely. The neighbouring sea is very rich in fish, especially cod and herring; the fisheries, very important to the islanders, also attract French and Norwegians. Finbacked whales and seals are also numerous. Many of the salmon and trout rivers are rented by Englishmen.

Iceland was discovered about 800 by Irishmen or Scots, but they did not make any permanent settlement. In 874 it was rediscovered and colonised by Norwegians, who preferred to leave their native land rather than submit to the rule of Harold Haarfager. In about sixty years the whole island was inhabited, and an aristocratic republic was formed. In 1262–64 the Icelanders acknowledged the sovereignty of the king of Norway; in 1388, when Norway was united with Denmark, Iceland shared the same fate; but when Denmark had to give up Norway in 1814, Iceland remained with Denmark. In 1874 a new constitution was granted, and in 1893 a form of home rule. Christianity was introduced in 1000, and the Reformation about the middle of the 16th century. Church matters are now superintended by one Lutheran bishop at Reykjavík. The most notable events in the recent history of Iceland are calamities caused by volcanic outbursts, severe seasons, epidemics, and, in some cases, misgovernment. Pop. (1801) 46,240; (1880) 72,442; (1901) 78,470. Since 1870 there has been considerable emigration to America. In the 12th and 13th centuries the Icelanders produced more vernacular literature than any other nation in Europe; the present-day elementary education is so general that a child of ten unable to read is

quite an exception. The Icelandic still spoken is practically the old Norse tongue once spoken in Norway, Sweden, and Denmark. Reykjavik (pop. 6000), on the south-west coast, is the capital. Isaljord in the north-west and Akureyri in the north have each about 500 inhabitants. For the rest the population is scattered all round the island on isolated farms. The principal means of support of the Icelanders are the rearing of live-stock and fishing. The only native industry consists in working the wool of the sheep into various articles of clothing; this is chiefly done by the women in winter. The Icelanders make a sort of tweed, the principal clothing material of the inhabitants. See works by C. S. Forbes (1860), Baring-Gould (1864), Sir R. Burton (1875), and W. L. Watts (1877).

Ichang, a walled Chinese town, stands on the Yang-tsze-kiang, where it escapes from the limestone gorges of its middle course, and 1000 miles from Shanghai at its mouth. In 1877 it was declared open to foreign trade. Pop. 35,575.

Icknield Street, an ancient Roman road, crossing England from Norfolk to Land's End.

Ickworth House, the splendid seat (1792) of the Marquis of Bristol, in Suffolk, 3 miles SW. of Bury St Edmunds.

Icolmkill. See Iona.

Iconium, an ancient town of Asia Minor, situated on the W. edge of the plateau skirting the northern slopes of the Taurus Mountains, 310 miles E. of Smyrna. In 1832 Ibrahim Pasha defeated the Turks there. The modern Konieh or Koniya, the capital of a Turkish vilayet, has a pop. of 20,000 or 30,000. Here is the chief monastery of the Mevlevi or 'dancing' dervishes. Ruins of mosques, madrasas (colleges), &c. attest its decayed splendour.

Ida, a mountain-range in Asia Minor, extending from Phrygia through Mysia into the Troad. Troy stood at its base. On the highest peak (5749 feet) was a temple of Cybele, the *Idæan Mother*. From Ida flow the Granicus, Simois, and Scamander.—On another Ida (8055 feet) in Crete, Zeus was said to have been educated.

Idaho, till 1890 a territory, now a state of the American Union, lies between 42° and 49° N. lat., and mainly between 111° and 114° W. long. Its greatest length is 490 miles; the breadth varies from 42 miles at the 'pan-handle' which forms the northern part, to 300 miles along the southern boundary. Its area is 84,800 sq. m. One of the main ranges of the Rocky Mountains separates Idaho from Montana, and in the south is part of the continental divide between the Atlantic and Pacific oceans. About 70,000 sq. m. of the area is situated in the drainage basin of the Columbia River, the rest in the Great Basin. Except a small area in the south, the entire surface is rugged and mountainous, traversed by spurs of the high range in the north-east, of which Salmon River Mountains separate northern Idaho from the plateau-region in the centre and south. Most of these ranges reach elevations of 10,000 feet and upwards; the average height of the state is about 5000 feet. The lowest level is the valley of Snake River, which at Boisé City (the capital) is 2000 feet above the sea-level. Snake River, Shoshone, or Lewis River drains by far the largest part of the state. In its course (about 850 miles in length), open valleys alternate with narrow cañons through which the river flows in 'dalles' and cataracts. Shoshone Falls almost rival those of Niagara. Salmon River, a tributary, drains the central part. There are two lake-regions: one in the pan-handle, the other in the south-east. The former includes Pend d'Oreille, Cœur d'Alene and Kaniksu lakes; the latter, John Day and Bear lakes. These lake-regions abound in game. Vegetation is abundant in the northern and central parts, but not in the arid lands of the south, where irrigation is necessary. Forests of conifers cover the western slopes of the Bitter Root and Cœur d'Alene mountains. In the central and southern part the forests give place to extensive mesas overgrown with sage brush, and rolling lands covered with bunch grass. The mineral wealth consists chiefly in silver, lead, gold, copper, and coal. In the basin-region of the south-east soda, gypsum, sulphur, &c. abound. Mineral springs are numerous. The climate is exceedingly healthy. Grain-farming is of necessity confined to the narrow river-valleys, and, as a whole, Idaho is best adapted to stock-raising. Pop. (1870) 14,999; (1880) 32,610; (1890) 84,385, nearly a fifth being Mormons; (1900) 161,772, including 2297 Indians.

Iddesleigh, a Devon parish, 4 miles NE. of Hatherleigh. It gave his earl's title (1885) to Sir Stafford Northcote.

Idle, in 1899 incorporated with Bradford, was till then a distinct Yorkshire town, lying to the east of Bradford.

Idria, an Austrian town in Carniola, celebrated since 1497 for its quicksilver mines, lies 1093 feet above sea-level in the deep valley of the river Idria, 23 miles W. by S. of Laibach. Pop. 5984.

Idumæa. See Edom.

If, a rocky island in the Gulf of Marseilles, crowned by the Château d'If, built by Francis I. Here were confined Mirabeau and Philip Égalité, not to mention 'Monte Cristo.'

Iffley, a village, with a fine Norman church, on the Isis, 1¾ mile below Oxford.

Ifni, a small seaport of southern Morocco, 35 miles S. of Aguilon, ceded to Spain in 1883.

Iglau (Bohm. *Jihlava*), the second largest town of Moravia, is situated 1703 feet above sea-level, on the river Iglawa, close to the Bohemian boundary, 123 miles NNW. of Vienna by rail. It has some old churches (one founded in 799). Its staples are cloth and woollen goods, besides glass and tobacco. Pop. 24,378.

Igloolik, an island near the east end of Fury and Hecla Strait in the Arctic Ocean. Here Parry passed the winter of 1822–23.

Igualada, a town of Spain, 32 miles NW. of Barcelona. Pop, 10,218.

Ilala, a place near the south shore of Lake Bangweolo in British S. Africa, where Dr Livingstone died.

Ilchester, a decayed village of Somerset, on the Yeo, 5 miles NW. of Yeovil. Supposed to be the *Ischalis* of Ptolemy, it was an important Roman station, and a flourishing Saxon town. Roger Bacon was a native. Till 1832 Ilchester returned two members. Pop. 664.

Île-de-France, an old province of France, having Paris for capital, and now mostly comprised in the deps. of Seine, Seine-et-Oise, Aisne, Seine-et-Marne, Somme, and Oise. Île-de-France was the former name of Mauritius.

Iletzk, a town in the Russian government of Orenburg, near the confluence of the Ilek with the Ural. Pop. 9769. Close by is the richest salt-bed in Russia.

Ilford, a town of Essex, on the Roding, 3½ miles ENE. of Stratford. Pop. (1901) 41,234.

Ilfracombe (*Il'fra-coom*), a watering-place of North Devon, is finely situated on a cove of the Bristol Channel, 11 miles NNW. of Barnstaple (15 by a branch-line). Its air 'combines the soft warmth of South Devon with the bracing freshness of the Welsh mountains' (Charles Kingsley). This and its fine rocky coast-scenery and admirable sea-bathing annually attract large numbers of visitors. On the north side of the good harbour there is a lighthouse, the light, 127 feet above high-water, being visible for 10 miles. In the 14th century it was a port of some consequence, and contributed six vessels to the siege of Calais. Population, 8700.

Ilhavo, a Portuguese town, 40 miles S. of Oporto. Near it are the glass and porcelain works of Vista Alegre. Pop. 12,600.

Ili. See KULJA.

Ilkeston, a market-town of Derbyshire, near the Erewash River, 9 miles ENE. of Derby, and 20 S. of Chesterfield. It enjoys repute from its alkaline spring and baths (opened in 1830). The parish church, with a lofty pinnacled tower, has interesting Norman and Early English features. The town-hall was built in 1868. Ilkeston has manufactures of hosiery, lace, silk, and earthenware, with coal and iron mines in the vicinity. In 1251 a charter for holding a market and fair here was granted to Hugh Fitz-Ralph; and in 1887 Ilkeston was incorporated as a municipal borough. Pop. (1861) 3330; (1881) 14,122; (1901) 25,383.

Ilkley, a watering-place in the West Riding of Yorkshire, on the Wharfe, among heathery hills, 13 miles NNW. of Bradford and 16 NW. of Leeds by a branch-line (1865). Since 1846 it has become the seat of several hydropathic establishments—Ilkley Wells House, Ben-Rhydding (q.v.), &c. It occupies the site of a Roman station, and in the churchyard are three curious Saxon crosses; whilst Bolton Abbey (q.v.) is 5 miles north-west. Pop. (1851) 811; (1901) 7455.

Ill, a river of Alsace, flowing 127 miles NNE. to the Rhine, 9 miles below Strasburg.

Ille-et-Vilaine, a maritime French dep., formed out of the north-eastern portion of the old province of Brittany. Area, 2596 sq. m.; pop. (1872) 589,532; (1901) 611,477, mostly of Celtic race. It is watered chiefly by the Vilaine and its tributary the Ille, which unite near Rennes.—The dep. is divided into six arrondissements—Rennes (the capital), Fougères, Montfort, St Malo (the chief seaport), Vitré, and Rédon.

Illima'ni, a chief summit (21,150 feet) of the Bolivian Andes, 40 miles SE. of La Paz.

Illinois (*Ill-i-noy'*), seventeenth in area of the United States, but third in population, extends from Wisconsin and Lake Michigan on the N. and NE. to the junction of the Ohio and Mississippi rivers at the extreme SW.—a distance of nearly 400 miles. It is bounded E. by Indiana, from which it is partly separated by the Wabash River; S. it is separated from Kentucky by the Ohio; and on the W. the Mississippi flows between it and Iowa and Missouri. The area is 56,650 sq. m., or nearly that of England and Wales. The surface of Illinois is the most level of any state, except Delaware and Louisiana; and its wide grassy plains, though broken by numerous streams fringed with belts of fine timber, have gained for it the name of the Prairie State. The Illinois River is formed by the union of two streams, 45 miles SW. of Lake Michigan, and flows 500 miles SW. to the Mississippi. The fertile soil—a heavy black loam—with a favourable climate, makes this the richest agricultural state in the Union; and Illinois ranks first for the production of corn, cattle, hogs, and horses. The mineral output, especially of bituminous coal, is also large, nearly a fifth of the entire coalfield of the United States being found in this state. Other minerals are lead, limestone, salt, and fluor-spar. The position of Illinois presents unusual facilities for commerce. The rivers that cross or touch the state are navigable for over 400 miles, while by way of the great lakes Chicago has also a water-highway to the Atlantic. Moreover, Illinois has more railroads than any other state, upwards of 10,800 miles. Formerly a part of the North-west Territory, Illinois was organised as a territory in 1809, and admitted as a state in 1818, with a pop. of 34,620. Pop. (1830) 157,445; (1850) 851,470; (1870) 2,539,891; (1880) 3,077,871; (1900) 4,821,550. Chicago is by far the largest city; its limits embrace more than a fourth of the entire population of the state. Peoria, Quincy, Springfield (the capital), and Rockford rank next in population. During the civil war the state contributed 259,092 men to the Union armies, of whom over 29,000 were killed in action or died of wounds or disease. See works by S. Breese (Chicago, 1884), and J. Moses (Chicago, 1889).

Illyria (Lat. *Illyricum*), the country that stretched along the eastern side of the Adriatic Sea, from Epirus northwards, coinciding now with Bosnia, Dalmatia, Montenegro, &c.

Ilmen, a lake of Russia, with an area of 354 sq. m., discharging through the river Volkhof to Lake Ladoga.

Ilmenau, a town and summer resort in Saxe-Weimar, 30 miles S. of Erfurt, manufactures glass, pottery, toys, and ironware. Pop. 11,000.

Ilminster, a market-town of Somerset, on the Isle, 11 miles SE. of Taunton. Pop. 2300.

Il Obeid. See OBEID.

Ilori, or ILLORIN, capital of a territory in Nigeria, and an important commercial centre, stands at an elevation of 1300 feet, 160 miles NNE. of Lagos on the coast, and 50 SW. of the Niger. Once an independent Yoruba state, it became subject to Sokoto, and so came into the sphere of the Niger Company; since 1897 it gives name to a province of (British) Northern Nigeria.

Ilsley, EAST, a Berkshire market-town, amid bleak downs, 9 miles N. of Newbury and 6½ S. of Didcot. Its sheep-markets count among the most important in the kingdom. Pop. 519. Archbishop de Dominis was rector of West Ilsley, 2 miles north-west. Pop. 376.

Imbros, a Turkish island of the Ægean Sea, 14 miles NE. of Lemnos, and 14 W. of the mouth of the Dardanelles. Area, 98 sq. m.; pop. 9000, mostly of Greek descent. It attains 1959 feet above sea-level. The chief village, Kastro, on the north coast, occupies the site of the ancient town of Imbros.

Imeritia. See CAUCASUS.

I'mola (anc. *Forum Cornelii*), a picturesque town of Italy, on an islet formed by the river Santerno (*Vatremis*), 22 miles SE. of Bologna by rail. Its cathedral has been spoiled by modern restoration. Pop. 12,500.

Imphail, the native name of Manipur (q.v.).

Inaccessible Island. See TRISTAN DA CUNHA.

Inagua. See BAHAMAS.

Inchaffray, a ruined Augustinian abbey (1200) of Perthshire, 6½ miles E. by N. of Crieff.

Inchcape. See Bell Rock.

Inchcolm ('Columba's island'), a Fife islet, in the Firth of Forth, 1½ mile S. by W. of Aberdour. It has remains of a 12th-century Augustinian abbey and an earlier hermitage.

Inchgarvie. See Forth Bridge.

Inchkeith, a strongly fortified islet of Fife, in the Firth of Forth, 2¾ miles SSE. of Kinghorn Ness. It rises to 182 feet, and is crowned by a lighthouse, dating from 1803.

Inchmahome. See Menteith.

India, the Indian empire of the British crown, is an extensive region of southern Asia, and next after China the most populous area in the world. The name India is a Greek word from the Persian *Hind*, the Persian form of Sindhu, a Sanskrit name for the Indus River. Hindustan is properly only a province—the region of the Jumna and the Ganges. 'Further India' is the Indo-Chinese peninsula.

India is the central peninsula of southern Asia, and lies in 8° 4′—35° N. lat. and 67°—92° E. long., with a length of some 1900 miles, a breadth of 1600, and an area—inclusive of Burma—of 1,766,650 sq. m. The natural boundaries of this vast region are, on the N., the range of the Himalaya Mountains, which separates it from Tartary, China, and Tibet; on the W. the mountainous frontiers of Afghanistan and, further south, of Persia; on the SW. and S. the Arabian Sea and the Indian Ocean; on the E. the hill-ranges which border upon Burma and the Bay of Bengal. The region presents a diversified surface and scenery. It has indeed been called 'an epitome of the whole earth,' consisting as it does of mountains far above the level of perpetual snow, broad and fertile plains, bathed in intense sunshine, arid wastes, and impenetrable forests. Its natural divisions are the Himalaya, the sub-Himalayan ranges, the plains of the Ganges and the Brahmaputra, the basin of the Indus, the highlands of Hindustan, the Vindhya and Satpura ranges, and the peninsula south of those ranges. The Himalaya (q.v.) is the dominating factor in the geography of northern India, being the source of the Indus, the Ganges, the Brahmaputra, and of their principal affluents. The sub-Himalayan ranges, between the Himalaya and the plains of the Ganges and Indus, occupy Cashmere, the Simla hill-states, Gurhwal, Kumaon, Nepál, Sikkim, and Bhutan, which, owing to their elevation above the sea (5000 to 9000 feet), have a climate like central Europe in summer and cold as Switzerland in winter. The plains of the Ganges and the Brahmaputra, which include Bengal, Behar, the Doab, Oudh, and Rohilcund, form an alluvial flat, terminating in a delta at the Bay of Bengal. The Punjab occupies the northern portion of the basin of the Indus. South of the Punjab, and parallel with the river, the great sandy desert of the Indus extends for nearly 500 miles. The valley of the Indus is continued through Sind to the Arabian Sea. Between the Indus region and the Aravalli Hills lies the Thur desert, 400 miles long and 100 broad. It is only in the neighbourhood of the Indus and some of its tributaries that the surface can be cultivated by means of river-irrigation. The highlands of Hindustan include the tableland of Malwa and Rajputana or Rajasthan, which has an elevation of about 2000 feet.

The Vindhya and Satpura ranges, running from east to west, with an elevation from 2500 to 4000 feet, form, with the Nerbudda River between them, a broad wall dividing northern from southern India. The peninsula south of the Satpura range is in two divisions. The first, the Deccan (q.v.), is a central tableland rising from 1500 to 2000 feet above the sea, and enclosed on all sides by mountain-ranges. These ranges are the Satpuras, the Eastern Ghâts, and the Western Ghâts. Between the Eastern Ghâts and the sea are fertile littoral tracts known to history as the Northern Circars and the Carnatic. Between the Western Ghâts and the sea is a similar tract known geographically as the Konkan. As a northern continuation of this tract is Gujarat, with its offshoots the peninsulas of Kathiawar and Cutch. From the low land of the Konkan to the Deccan plateau the mountains rise in a succession of gigantic terraces. The rivers of the Deccan rise in the Western Ghâts, and, after traversing the tableland, descend to the sea by passages through the Eastern Ghâts. The slope of the country corresponds with the course of the rivers; it has a gradual eastward inclination. The second division begins geographically from the hills south of Cuddapah, extends right down to Cape Comorin as to the apex of an inverted triangle, and includes Madras, Tanjore, Trichinopoli, and Tinnevelli.

There are auriferous deposits in parts of the Deccan. Silver has never been discovered in appreciable quantity within the country; in the Shan dependencies of Burma, however, it is extracted from lead ore. Coal is obtained largely in western Bengal, in the Satpura Hills to a considerable extent, and in the Deccan to some extent. Iron and copper are found and worked in many parts of the country. Diamonds are still found in the central hills, and ruby-mines are worked near the Irawadi. The mineral resources on the whole are less important than the agricultural. In a country extending over 26° of latitude—one extremity of which runs far into the torrid zone, and the other terminates in a range of mountains rising far above the line of perpetual snow—a country embracing lowland plains, elevated plateaus, and alpine regions, the climate must be extremely varied. The whole country has three well-marked seasons—the cool, the hot, and the rainy. This characteristic applies even to the Himalayas, which have otherwise a climate like that of Switzerland. The cool months are November, December, January, and a part of February; the dry hot weather precedes, and the moist hot weather follows the periodical rains. The rainy season falls in the middle of summer; its beginning is earlier or later according to circumstances, its ending is in September. The winter is the pleasant period; the spring is generally hot and healthy; the summer depends on the duration of the rains; the autumn is close, malarious, and unhealthy. The occasional failure of the monsoon causes the periodical famines to which the country is liable. The central tableland is cool comparatively. In the north-west there is burning heat with hot winds in summer, and frost at night in winter. In the south the heat is more tempered, but the winter is cool only, and not cold. In the north-eastern and other outlying parts the rainfall exceeds 75 inches (at Cherra Punji 600 inches) in the year; in the Deccan, in the upper basins of the Ganges and the Indus, it is 30, and in the lower regions of the Indus less than 15 inches. The remainder of India is placed between the extremes represented by these damp and dry belts, but is, as com-

pared with Europe, an arid country. Hence the necessity of tanks and irrigation canals.

The domesticated animals are, first, the cattle —cows, buffaloes, oxen; the last two do the work of agriculture. The bull and cow are sacred animals to Hindus, and by them are never killed for food. The indigenous breeds of horses in India are being improved by the importation of foreign sires. They have never been employed in agriculture. The pony, the donkey, and the mule are largely used. Sheep and goats are abundant. The pig is plentiful, but is despised by the upper and middle classes of the people. The wild animals include the tiger, panther, cheetah, boar, bear, bison, elephant, and rhinoceros. The crocodile and alligator infest most of the rivers. Deer of all sorts abound everywhere, and mainly supply sustenance to the carnivorous animals. The monkeys are tame and are held sacred. The lion, the hyæna, the lynx, and the wolf are unimportant. The elephant is used for purposes of war or of state. The ibex and the ovis-ammon (the wild goat and the wild sheep) are found only in the highest parts of the Himalayas. Poisonous snakes abound, the worst being the cobra da capello (the black-hooded): many thousands of the natives die from snake-bite in the year. The birds are infinitely various. Nearly half of the country is tropical, though none of it is equatorial, and a part is not only temperate, but cold; accordingly the vegetation varies greatly. As compared with equatorial regions, the country has tropical products plentiful and good, but not first-rate, such as tobacco, sugar, ginger, and spices of all sorts. Rice has from time immemorial been a staple. Maize and millet are articles of food for the stronger races. Oil-seeds are largely exported. The cultivation of wheat has greatly developed for exportation since the development of railways and the opening of the Suez Canal. Tea is grown largely under European supervision in the Eastern Himalayas, and already surpasses the China teas. Coffee is grown in the south, but with chequered success. Among the dyes, indigo and lac (red) are noteworthy. The indigenous flowers are not rich, the water-lilies being the best; the flowering shrubs are very fine. Of trees in the plains near the coasts the palm order with its several varieties strikes the observer. Inland the mango fruit-tree and the orange, the umbrageous banyan, the sacred peepul, and the bamboo are features in the landscape. In the hills the teak and other useful timber trees are obtained. In the Himalayas are the cedar, the pine, the fir, the juniper. Conservation of forests is now carefully attended to. Barely one-third of the whole country is cultivated or grazed. Of the remainder a portion is available for cultivation; the rest is uncultivable—hillsides, deserts, river-beds, &c.

At the census of 1881, the total pop. was 253 millions for the British territories and the native states; in 1901, 294 millions including Burma, but excluding Ceylon, Nepál, Sikkim, Bhutan, and the small French, Portuguese, and Dutch territories. Including these the population may be stated at 300 millions. But though populous, the country is not as a whole densely peopled; the average per sq. m. being 213 for the British area, 98 for native states, and 167 for the whole country. Only 30 millions are urban. Calcutta has 1,026,987 inhabitants, Bombay 976,006, and Madras 509,346; below these there are other 26 cities with more than 100,000 inhabitants, and 49 more with over 50,000. The inhabitants of India speak languages belonging to four very different stocks—Aryan, Dravidian, Kolarian, and Tibeto-Burman. The Aryans, the dominant people of India, speak tongues derived from the ancient Sanskrit, the more important being Bengali, Uriya, Hindi, Sindhi, Kashmiri, and Gujarati (Sinhalese is the language of Ceylon). Urdu or Hindustani, formed after the Moslem conquest, is Hindi mixed with Persian and Arabic words. Of the Dravidian tongues of the Deccan, the chief are Tamil, Telugu, Canarese, and Malayalam. The Kolarian tongues are named from the Kol hill-tribes in the Central Provinces. The Tibeto-Burman tongues are agglutinative. Of the total pop. 207,147,026 are Hindus or Brahminists in faith, 62,458,077 Mohammedans, 8,584,148 aboriginal pagans, 9,476,759 Buddhists (almost all in Burma), 2,195,339 Sikhs (modified Hindus), 1,334,148 Jains (also a modified Hindu sect), 94,190 Parsees (chiefly in Bombay), 2,923,241 Christians (of whom 1,202,169 are Roman Catholics), and 18,228 Jews. The inhabitants of India, accordingly, so far from being one nation or people, are a congeries of peoples differing widely in blood, physique, character, language, and religion.

Since Queen Victoria was proclaimed Empress, India is an empire, including the British territories and the Indian allies, feudatories, and vassals from the Tibetan and Tartar watershed of the Himalayas to Cape Comorin. The empire is under one supreme authority in India—the Viceroy and Governor-general in Council. It may thus be divided into two categories—the British territories, comprising about three-fifths of the total area, and four-fifths of the total population; and the native states. The Himalayan states of Nepál, Sikkim, and Bhutan do not ordinarily appear in the official tables, though they are in communication with British political agents. In their internal affairs they are uncontrolled. The native states which appear in the official tables occupy more than a third of the area of the empire, and contain more than one-fifth of its entire population:

Native States and Agencies.	Area in sq. miles.	Population, 1901.
Beluchistan (*Agency Tracts*)	86,511	502,500
Baroda State.....	8,099	1,952,692
Bengal States.....	38,652	3,748,544
Bombay States.....	65,761	6,903,648
Central India Agency.....	78,772	8,628,781
Central Provinces States	29,435	1,996,383
Hyderabad State.....	82,698	11,141,142
Cashmere State.....	80,900	2,905,578
Madras States.....	9,969	4,188,086
Mysore State.....	29,444	5,539,399
Punjab States.....	36,532	4,424,398
Rajputana Agency.....	127,541	9,723,301
United Provinces States.....	5,079	802,097
Total Native States....	679,393	62,461,549

Hyderabad as given above is exclusive of Berar, which, though part of the Nizam's dominions, is administered as part of British India. The United Provinces Native States comprise those that were formerly (till 1901) described as in the North-west Provinces and Oudh.

The relations of the native princes to British authority differ very widely. Some are practically independent sovereigns, except that the suzerain power does not permit any of them to make war on one another, or to form alliances with foreign states; while some are under tolerably strict control. As a rule they govern their states under the advice of an English resident appointed by the Governor-general. There are in all about 300 states, allied or feudatory, great and small; they are divided into allied, tributary,

and protected. Another classification is according to the religion and race of the native dynasty: Mahratta states, other Hindu states, Mohammedan states, and frontier states.

The British territories, containing 1,087,249 sq. m. and 231,899,507 souls, are broken up into nine divisions and six minor ones. They were originally in three divisions, called presidencies—Bengal, Madras, and Bombay. The old presidencies of Madras and Bombay still survive under governors in council as of yore; the Bengal Presidency, being much the largest, has been subdivided. The four main subdivisions are: Bengal, with Behar and Orissa; Eastern Bengal, with Assam; the United Provinces of Agra and Oudh; the Punjab, with Delhi. Each of these is under a lieutenant-governor. The Central Provinces and Burma have each a chief-commissioner. The North-west Frontier Province is under an agent to the governor-general; Ajmer-Merwara, British Beluchistan, Coorg, Berar, and the Andamans have each its commissioner.

Provinces.	Area in sq. miles.	Population, 1901.
Ajmer-Merwara	2,711	476,912
Andamans and Nicobars	3,188	24,649
Assam	56,243	6,128,343
Beluchistan	45,804	308,246
Bengal	151,185	74,744,866
Berar	17,710	2,754,016
Bombay Presidency	123,064	18,559,561
Burma	236,738	10,490,624
Central Provinces	86,459	9,876,646
Coorg	1,582	180,607
Madras	141,726	38,209,436
North-west Frontier Province	16,466	2,125,480
Punjab	97,209	20,330,339
United Provs. of Agra and Oudh	107,164	47,691,782
Total	1,087,249	231,899,507

Burma includes the Shan States, the Chin Hills, and the Karen country. The North-west Frontier Province was formed in 1901 out of Peshawar, Kohat, and parts of three other Punjab districts, and areas occupied by frontier tribes. Agra and Oudh (till then in the North-west Provinces and Oudh) now constitute the United Provinces. In 1905 Bengal (q.v.) was divided into Bengal with Behar and Orissa, and Eastern Bengal with Assam.

In 1858 the government was transferred from the East India Company to the crown. In 1877 the Queen assumed the title of Empress of India (Kaisar-i-Hind). The government of India is in the highest resort vested in a Secretary of State in London, who is a member of the cabinet, and has a parliamentary under-secretary and a council of ten to fifteen members. The executive government in India is administered by the Viceroy and Governor-general in Council, acting under the control of the Secretary of State for India. The Viceroy and Governor-general, appointed by the crown, is assisted by an executive council, consisting of six ordinary members (appointed by the crown), each of whom has charge of a department of the executive; together with one extra-ordinary member, the commander-in-chief of the army. This council virtually sits as a cabinet. The legislation for the empire is conducted by a 'legislative council,' composed of the members of the executive above mentioned, together with members, from six to twelve in number, appointed by the Viceroy and Governor-general. The larger units of administration are the districts or collectorships, of which there are in all the provinces above mentioned about 250, each under a collector-magistrate or deputy-commissioner. The head of the district has most multifarious and responsible duties; he is fiscal-officer, charged with collecting the revenue, as well as magistrate, and besides superintends police, jails, education, sanitation, and roads. The administration is conducted by members of the Indian civil service, the great majority of whom are European, though some are natives. The service is recruited from the successful candidates at competitive examinations held in London; but while the direction is in European hands, the local civil service, constituting the great mass of civil officials, consists of natives. In 1859 the troops of the East India Company became the Indian military forces of the British crown. The relations of the governor-general to the commander-in-chief in India and his other military advisers were rearranged in 1905. In 1904 the total strength of the army in India was 324,650. Of these 74,450 were British regulars, and 154,110 Indian regulars. In 1904 Lord Kitchener (commander-in-chief) made considerable changes in the organisation of the army. There are now three principal commands—the Northern, Western, and Eastern Army Corps, each under a lieutenant-general. The East Indies Squadron of the royal navy (4 cruisers and 3 attached vessels) is stationed at Bombay and Colombo.

The educational system, dating from 1854, comprises three principal universities at Calcutta, Madras, and Bombay, each having many affiliated colleges; there are also two new universities at Allahabad and Lahore. The other educational institutions are of several kinds, public, aided, private and unaided; together they number 148,525, with 4,529,491 scholars. The total imports in 1890–91 had a value of near £94,000,000, in 1903–4 of £88,481,000; the exports in 1890–91 were valued at £102,300,000, in 1903–4 at £113,193,000. Of the imports more than four-fifths, and of the exports more than half, pass by the Suez Canal. Again, of the imports nearly all come from the United Kingdom; but of the exports a considerable portion is sent to other countries. Of the imports the principal item consists of cotton goods; next metals; then machinery, railway plant and rolling-stock, manufactured silk, sugar, and woollen manufactures. The principal items of export are coffee, raw cotton, cotton twist, yarn, manufactures, dyes, grains, including rice and wheat, hides and skins, jute raw and manufactured, seeds (oil chiefly), tea, wool. Of shipping, about 4550 vessels, with a tonnage of between 4,300,000 and 5,500,000 tons, enter the ports annually; of these almost the whole are British. All this is exclusive of the coasting trade, valued at 70 millions annually. The length of railways open is over 25,950 miles, largely state lines (19,673 miles), the rest mainly guaranteed and assisted by the state. There are 56,000 miles of telegraphs. Of the total length of roads in India (160,000 miles) about one-third has been bridged and macadamised. The manufactures, whether in metals or in fibres, have always been very fine, and are still maintained. The local manufactures of cotton goods are very extensive; but foreign trade has during the 19th century checked the development of indigenous manufactures, while it has stimulated new manufactures, especially in jute and cotton. The total length of the irrigation canals and their branches is calculated at 14,000 miles. The irrigated area in its grand total is reckoned at 33 millions of acres, of which over 14½ millions are watered from canals. Owing to extensive failures of the monsoon rains at periodically recurring intervals, droughts and famines have occurred. In years of plenty a sum varying

from 1 to 1½ million sterling is set aside out of current income to meet the cost of relieving distress in time of famine. The revenue of the empire has since increased from £60,419,138 in 1891-92 to £76,355,400 in 1903-4, the expenditure from £59,107,699 to £75,406,500. The total debt in 1902 was £226,232,105, including 114½ millions for railways and 24 millions for irrigation works. The depreciation of the rupee has greatly embarrassed Indian finance; it is now fixed at 1s. 4d., or Rs15=£1. The largest item of taxation is the land-tax (18¼ millions); the next salt (6 millions), opium (4¾ millions), and smaller amounts for stamps, excise, customs, &c. Owing to the excessive density of population in several parts of the empire, government has for many years past encouraged and facilitated emigration to the tropical and sub-tropical colonies. In the decade ending 1905, about 100,000 Indians emigrated as coolies to Mauritius, Natal, British Guiana, British West Indies, Fiji, French West Indies, and Surinam. There is also migration from the central regions to the rice-plains of Burma, and to the tea-plantations in Assam and in the Eastern Himalayas.

It is impossible to speak positively as to the aboriginal prehistoric populations of India; probably the most primitive peoples now left—the Dravidian hill-tribes represented by the Gonds, and Kolarians such as the Santals and Bhils—represent waves of invasion from the north. The history of civilisation in India may, however, be traced from the invasion—probably 1000 years or more B.C.—of the Aryan race from Central Asia, a race of the Indo-Germanic type in physique and speech. Their language was Sanskrit, their religion and civilisation that of the Vedas or ancient Hindu Scriptures. Out of the union of the Aryans with the earlier inhabitants, the modern races of India have sprung. Buddhism arose in India with the teaching of Buddha about 500 B.C., and for a while superseded the Vedic faith, corrupted as it had been by the degraded aboriginal superstitions; and India was substantially Buddhist till the revival of Hinduism, in its modern or Brahmanic form (more idolatrous and superstitious than the ancient faith), in the 6th century A.D. In 1001 A.D. came the first wave of Mohammedanism, and soon all India fell under Mohammedan domination, though the bulk of the people clung to the Hindu religion. By the beginning of the 18th century a new Hindu power, that of the Mahrattas, arose, and seriously weakened the Moslem emperor, the Grand Mogul. The Dutch, Portuguese, and French, as well as the British established themselves in the empire; in the 18th century the French more than rivalled the British in power. But the power of the British East India Company, originally traders, became dominant after the battle of Plassey in 1757. Gradually English power as represented by the Company, its diplomatists, and its soldiers, extended over great part of India, and the governors—Clive, Warren Hastings, Wellesley, Amherst, Bentinck, Dalhousie, Canning—consolidated what was really the empire of Britain in the East. Then in 1857 came the great mutiny, stamped out in blood, and the government was assumed by the British crown in 1858. British rule in India has been steadily consolidated, but no great annexation has since taken place, except that of Upper Burma in 1886.

See the *Imperial Gazetteer of India* (2d ed. 1887), Sir W. Hunter's *India* (3d ed. 1893), and works on India by Campbell, Monier Williams, Temple, Tupper, Strachey, Cotton, Holdich (1905); for history, Mill, Thornton, Marshman, Wheeler, Keene, Boulger, Frazer, Hunter (1903); and for the Mutiny, Forrest (1904).

Indiana, the thirty-first state of the American Union in area, and the eighth in population, is centrally situated between Lake Michigan, Michigan state, Ohio, Kentucky (from which it is separated by the Ohio River), and Illinois. Its greatest length (N. and S.) is 276 miles, its average breadth 140 miles, and its area 36,350 sq. m. The surface has a slight slope towards the west and south-west, the highest point, near the eastern boundary, being 1250 feet above sea-level. Drainage is in four main directions: to Lake Michigan, to Lake Erie, to the Mississippi, and to the Ohio. The northern half of the state is generally level, except for occasional irregular ridges forming 'divides' between streams. Hills increase in frequency from the centre of the state to the south and south-east, and along the Ohio 'knobs' 200-500 feet high are almost continuous, with deep gorges and river-bottoms between. Much of the north-western regions is flooded most of the year; but this land is being actively reclaimed by drainage. The fertility of the soil, whether clay or sandy loam, is greatly increased by a vast system of under-draining. The minerals include coal, bog and hematite iron ores, and stratified limestones and sandstones in abundance, ochre beds, kaolin, fireclays, and some gold. The actual workable coalfield covers an area of 6000 sq. m. The natural-gas field, the centre of which is in Delaware county, 40 miles NE. of Indianapolis, has been largely developed since 1886. In the gas region, and in the districts within reach of its pipes, it is used both as fuel and as illuminant. The principal industry of Indiana is agriculture. More than 10,000,000 acres are cultivated, the chief crops being maize, wheat, and oats, with barley, rye, flax, hay, potatoes, sweet potatoes, and tobacco. Wool, honey, maple-sugar, sorghum-sugar, cider, and wine are also largely produced. Among the largest manufactories are the wagon and plough factories at South Bend, the manufactories of flour-mill machinery and carriages at Indianapolis, the plate-glass works at New Albany, and the encaustic tile works at Indianapolis. Indianapolis is great in pork-packing and in making sofas and other furniture. There are some 6500 miles of railway in the state. The Wabash and Erie Canal, the largest in the United States (476 miles), has 374 miles in Indiana. The Ohio is here navigable throughout; the Wabash is navigable to Lafayette. The pop. of Indiana (known as the 'Hoosier state,' *Hoosier* being a nickname for an inhabitant of Indiana) in 1800 numbered 4577 whites and 163 coloured, 135 of the latter being slaves. In 1860 the pop. was 1,350,428; in 1880, 1,978,301; in 1900, 2,516,462. Indianapolis had in 1900 169,164 inhabitants, Evansville had 59,000, Fort Wayne 45,115, Terre Haute 36,673, and South Bend 36,000. In the state university at Bloomington, the Purdue University and state institute of technology at Lafayette, and the state normal school at Terre Haute, as well as a hundred high schools, instruction is free. Not under state control are some fifteen universities and colleges, and numerous academies and special schools. Indiana was discovered by La Salle in 1671; in 1763 France ceded the country to Great Britain: by the treaty of 1783 it became a part of the United States; and in 1816 it was admitted to the Union.

Indianap'olis, the capital of Indiana, on the west fork of White River, in a level plain, 195 miles SSE. of Chicago by rail. It is a regularly-built and beautiful city. Its streets, many of them 100 feet wide, for the most part cross at right angles; but four main avenues, radiating from a central park, cross the others diagonally. The principal buildings include a handsome new state capitol (1888), a fine county court-house, a city-hall, the Propylæum (a women's literary institute), asylums for the insane, blind, &c., besides an imposing monument to those who fell in the civil war. Indianapolis is a great railway centre, fifteen main lines converging here. The trade in agricultural produce is very considerable. Pork-packing is the leading industry, but there are also large flour and cotton and woollen mills, numerous foundries, and manufactories of furniture, carriages, tiles, &c. The site of Indianapolis, then covered with dense forest, was selected for the future capital in 1820, and the city was founded in 1821. Pop. (1860) 18,113; (1880) 75,056; (1890) 105,436; (1900) 169,164.

Indian Ocean, bounded W. by Africa, N. by Asia, E. by Australia and the Australasian Islands, according to modern geographers is limited to the S. by the 40th parallel of south latitude, in which region it opens widely into the Southern Ocean. It gradually narrows towards the north, and is divided by the Indian peninsula into the Bay of Bengal on the east and the Arabian Sea on the west, the latter sending northward two arms, the Persian Gulf and the Red Sea. Within these limits the Indian Ocean has an area of 17,320,500 sq. m. Its mean depth is about 2300 fathoms, or slightly greater than that of the Atlantic. The greatest depths are in the eastern part to the south of the equator, where there are fully 50,000 sq. m. with a depth of over 3000 fathoms. The area of land draining into the Indian Ocean is 6,813,600 sq. m., and the annual rainfall on this land is equal to 4379 cubic miles of water. The rivers flowing from the Asiatic continent are by far the most important, and they carry an immense amount of detrital matter into the Bay of Bengal and Arabian Sea, these forming extensive deposits of blue mud. The temperature of the surface waters varies much in different parts of the ocean, and at the same place at different times of the year or states of the wind. In tropical regions the temperature usually varies from 70° to 80° F., and the yearly range is only 7° or 8° F. Off the Cape of Good Hope and off Cape Guardafui, however, the annual range of temperature may be from 20° to 30° F. The temperature of the water at the bottom of the Indian Ocean is very uniform, and subject to little, if any, annual variation. In the Bay of Bengal and Arabian Sea temperatures of 33°·7 F. and 34°·2 F. have been recorded at the bottom; these are not more than the fraction of a degree higher than those observed by the *Challenger* in 50° of south latitude. It is certain, therefore, that this deep cold water is slowly drawn into the Indian Ocean from the Antarctic to supply the place of the warm surface currents that are driven southward by the winds. The currents of the Indian Ocean are less constant than in the other great oceans, and are largely controlled by the direction and strength of the monsoons. Some of the most characteristic coral atolls and islands are to be found towards the central part of the Indian Ocean, such as the great Maldive group, the Chagos, Diego Garcia, and the Keeling Islands. Almost all the tropical shores are skirted by fringing and barrier reefs. Christmas Island is an upraised coral formation. St Paul's, Mauritius, Rodriguez, and others are of volcanic origin, while Madagascar, Ceylon, and Socotra are typical continental islands.

Indian Territory, a portion of the region originally set apart by the United States government as a home for Indian tribes, is bounded by Kansas, Missouri, Arkansas, Texas, and in 1906 was incorporated with Oklahoma, then made into a state. The Cherokee Outlet, S. of Kansas, is sometimes described as a part of Indian Territory, although it is under the jurisdiction of Oklahoma (q.v.). The area, not including the Cherokee Outlet, is 31,000 sq. m. The surface of the territory consists mainly of rolling prairie land rising gradually from the south-east toward the N. and W. In the south-east the surface is broken by low ranges of the Ozark Mountains which cross the Arkansas border. In the south-west are the Arbuckle Mountains. The mineral resources are practically undeveloped, but coal, copper, iron, marble, and building-stones are known to exist in considerable quantities. The territory is well watered, and is drained by the Red and Arkansas Rivers and their numerous tributaries. The river-bottoms are wide and fertile, subject to overflow in the spring. The Indian Territory, designed for occupation by all the tribes east of the Mississippi, originally extended west to 100°, and included portions of Kansas and Nebraska. In 1833 and 1834 the Creeks, Choctaws, Chickasaws, and Cherokees were removed hither; the Seminoles in 1838, and portions of tribes from west of the Mississippi have been subsequently settled there. By purchase or consent of the Indians the territory has been gradually reduced to its present limits, Oklahoma (q.v.) having been thrown open in 1890. Most of the tribes have made considerable progress in civilisation, and have farms, schools, churches, &c. There are three districts. Pop. (1900) 392,060, of which total 97 per cent. is distributed amongst four of the five Indian civilised nations.

Indigirka, a river in the Siberian government of Yakutsk, rises in a western offset of the Stanovoi Mountains, and flows 870 miles northward through a frozen desert to the Arctic Ocean.

Indo-China, the eastern of the two great Asiatic peninsulas which extend southwards into the Indian Ocean, sometimes called Further India. It is washed on the east by the Gulfs of Tongking and Siam and the Chinese Sea, and on the west by the Bay of Bengal. For its various states see ANNAM, BURMA, CAMBODIA, COCHIN-CHINA, MALACCA, SIAM, and TONQUIN.—The term *Indonesia* is sometimes used for the Indian Archipelago, the islands to the SE. of Asia.

Indore, a Mahratta principality of India, comprising the territories of the Holkar dynasty, and consisting of several detached tracts, covers an area of 8402 sq. m. The bulk of it lies between Sindhia's dominions on the north and Bombay Presidency on the south. It is traversed from east to west by the Nerbudda, which almost bisects it; by the Vindhya Mountains, here 2500 feet above the sea; and by the Satpura Mountains. Principal products, poppy, cotton, tobacco, wheat, rice, millets, &c.; principal industries, cotton and opium manufacture. Pop. (1901) 850,700. The state was founded about the middle of the 18th century; in 1818 its ruler became a feudatory of the British Indian empire.—INDORE, the capital, is situated in 22° 42′ N. lat. and 75° 54′ E. long., 1786 feet above sea-level. Population,

88,000, mostly Hindus. During the revolt of 1857, though the maharaja remained faithful, his troops mutinied, holding their prince a prisoner in his own palace, and butchering many Europeans.

Indre, a French dep., formed principally out of the western portion of the old province of Berri, lies immediately south of the dep. of Loir-et-Cher. Area, 2623 sq. m. Pop. (1872) 277,693; (1901) 288,788. The dep. is quite flat, and well watered by the Indre (which flows, from the dep. of Creuse, 152 miles north-westward to the Loire) and the Creuse. The dep. is divided into four arrondissements—Châteauroux (the capital), Le Blanc, Issoudun, and La Châtre.

Indre-et-Loire (*Angdr-ay-Lwar*), a dep. of France, formed chiefly out of the ancient province of Touraine, is crossed by the Loire from NE. to SW. Area, 2360 sq. m.; pop. (1872) 317,027; (1901) 335,541. The dep. is watered by the Loire and its tributaries, the Cher, Indre, and Vienne, all of them navigable. It is divided into the three arrondissements of Tours (the capital), Chinon, and Loches.

Indus (Sansk. *Sindhu*), a river of India, rising in an unexplored region in Tibet, near the sources of the Sutlej, in 32° N. lat. and 81° E. long., and at about 16,000 feet above sea-level. Its general course is at first north-westward, through Tibet and Cashmere, where it turns abruptly south-south-westward, and follows that direction right down to the sea. In the mountains its current is very rapid; the river passes through wild gorges (one in north-west Cashmere, having a depth of 10,000 feet), and is liable to tremendous floods. The Indus enters the Punjab 812 miles from its source. Near Attock (q.v.), 48 miles lower down, it receives the Kabul River from Afghanistan, and then becomes navigable; 450 miles below Attock it receives, on the left, the accumulated waters of the Punjab through the single channel of the Panjnad. Each of the 'five watercourses,' as well as the Kabul, is practicable for inland craft to the mountains. Below its confluence with the Panjnad the Indus, instead of increasing in volume, becomes gradually less. Its basin is narrow, and the affluents are insignificant, while there is a great loss by evaporation. The river also divides into numerous channels, many of which become lost in the sand, while others return much shrunken in volume. The delta of the river covers an area of about 3000 sq. m., and extends for 125 miles along the Arabian Sea. The main channel is constantly shifting. The delta is bare and not fertile. In both Punjab and Sindh the bed of the river is littered with islands and sandbanks. The cultivation of the arid plains through which the lower Indus passes is dependent upon the annual overflow of the river and artificial irrigation. The total length of the river is over 1800 miles, and the area of its drainage basin 372,700 sq. m. The Indus abounds with excellent fish, and is infested by crocodiles. Since the opening of the Indus Valley Railway in 1878 the navigation has been greatly superseded.

Ingatestone, a town of Essex, 5 miles NE. of Brentwood. Pop. 1688.

Ingleborough, a mountain (2373 feet) in the West Riding of Yorkshire, 8 miles NW. of Settle. On its south skirt is a splendid stalactite cave, penetrating nearly a thousand yards, and mainly discovered in 1837.

Inglewood Forest, Cumberland, a former royal forest between Carlisle and Penrith.

Ingolstadt (called *Aureatum* and *Chrysopolis*—i.e. 'the golden city'), a fortified town of Bavaria, on the Danube's left bank, 53 miles by rail N. of Munich. It contains two castles of the former dukes of Bavaria-Ingolstadt (now used for military purposes); the Gothic church of Our Lady (1425); and the former Jesuit college. Brewing, cannon-founding, and the manufacture of gunpowder and salt are the only industries. Pop. 22,390, mostly Roman Catholics. A university founded here in 1472, reckoned Reuchlin among its professors, and a century after its foundation had 4000 students. It was removed to Landshut in 1800, and to Munich in 1826. Ingolstadt was the first German town at which the Jesuits were permitted to teach publicly; Loyola called it 'his little Benjamin.' Dating the 9th century, it was first fortified in 1539. In 1827 the fortifications, destroyed by the French in 1800, were restored upon a first-class scale, and have since been strengthened.

Inhamba'ne, the Portuguese capital of a district on the east coast of Africa, lies just south of the tropic of Capricorn, beautifully situated on its bay, but unhealthy. Pop. 2500, of whom only 70 were Europeans.

Inishail, an islet in Loch Awe, with remains of a nunnery. Here Mr Hamerton pitched his camp in 1857.

Inishannon, a village of County Cork, on the Bandon, 16 miles SW. of Cork city.

Inishmore, one of the Aran Islands (q.v.).

Inkermann, a village in the Crimea, situated near the eastern extremity of the harbour of Sebastopol. Here, on 5th November 1854, was fought the 'Soldiers' Battle,' when 8000 British sustained a hand-to-hand fight against six times that number of Russians, till 6000 French came to their aid, and completed the rout of the enemy.

Inn (anc. *Œnus*), the most important Alpine affluent of the Danube, rises in the south of the Swiss canton of Grisons, and flows 317 miles north-east through the Engadine, and onwards through Tyrol and Bavaria, to its junction with the Danube at Passau.

Innellan, an Argyll village, on the Firth of Clyde, 3¾ miles S. by W. of Dunoon. Pop. 836.

Innerleithen, a police-burgh (1869) of Peeblesshire, near the Tweed's left bank, 6 miles ESE. of Peebles, and 12 W. of Galashiels. Its first woollen-factory was established in 1790, about which time its saline spring (Scott's 'St Ronan's Well') came into celebrity; but the great extension of its woollen industry dates from fifty years later. Pop. 2200.

Innsbruck, the capital of Tyrol, 109 miles by rail S. of Munich, stands on the Inn at its junction with the Sill, 1880 feet above sea-level, surrounded and overhung by mountains 7500 to 8500 feet high. It is a beautiful place, with broad tree-shaded streets, arcaded shops, and four squares adorned with statues. The Franciscan church, or Hofkirche, built in the Renaissance style in 1553–63, contains a beautiful and elaborate cenotaph to the Emperor Maximilian I. It consists of a marble sarcophagus supporting the emperor's kneeling effigy in bronze; while on both sides of the aisle are twenty-eight bronze figures of royal personages, by Peter Vischer and others. In the same church are monuments to Andreas Hofer and to the Tyrolese who fell in the wars against France (1796–1809). Other buildings are the imperial castle, built by Maximilian I. and restored by Maria Theresa in 1766–

70; the 'Golden Roof Palace;' the national museum, the Ferdinandeum; and the university (1677, reorganised 1826), with over 800 students, 105 professors and lecturers, a library of 92,000 volumes, a botanical garden especially rich in Alpine flora, laboratories, &c. Amongst the eight monasteries is the first that the Capuchins founded in Germany (1594). A colossal statue of Hofer was unveiled in 1893. Innsbruck manufactures cloth, machines, glass, and stained glass. Population, 27,000; or, including the suburbs of Hötting and Wilten, 35,800. The Romans had here their principal colony in Rhætia. From 1180 the town belonged to the Counts of Meran; in 1363 it passed with Tyrol to Austria.

Inowraclaw (*I-nov'ratz-lav*), INOWRAZLAW, or JUNG BRESLAU ('YOUNG BRESLAU'), a town of Prussia, near the Polish frontier, 66 miles NE. of Posen. It carries on salt-mining, iron-founding, &c. Pop. 26,548.

Insterburg, a town of East Prussia, on the Angerap River, 55 miles E. of Königsberg, had its origin in a castle of the Tuetonic knights, built in the fourteenth century. It has important manufactories. Pop. 27,300.

Interla'ken ('between the lakes'), a Swiss village in the Aar's beautiful valley, between Lakes Thun and Brienz. Pop. 3000.

Invera'ray, the county town of Argyllshire, is picturesquely seated on the north-west shore of Loch Fyne, 16 miles SSW. of Dalmally station, and 45 NNW. of Greenock (*viâ* Loch Eck). Removed to its present site in 1742, it has a sculptured stone cross from Iona (*c.* 1400), and an obelisk to seventeen Campbells, executed here without trial in 1685 for their share in Argyll's expedition. Inveraray Castle, the Duke of Argyll's seat, was rebuilt in 1744-61. A royal burgh since 1648, Inveraray with Ayr, &c. returns a member. Pop. (1841) 1233; (1901) 678.

Inverbervie. See BERVIE.

Invercar'gill, a town in the province of Otago, New Zealand, capital of the county of Southland, stands on an estuary called the New River Harbour, 139 miles by rail SW. of Dunedin. It has fine wide streets, and steam trams, public parks, the government buildings, an athenæum, a hospital, sawmills, foundries, steam flour-mills, breweries, manufactures of boots, bacon, cordials, extensive meat-freezing works, &c. Pop. 9962.

Inveresk. See MUSSELBURGH.

Invergordon, a seaport and police-burgh of Ross-shire, on the NW. shore of the Cromarty Firth, 12¾ miles NE. of Dingwall. Pop. 1117.

Inverkeithing, a royal burgh of Fife, at the head of Inverkeithing Bay, 13 miles WNW. of Edinburgh. With Stirling, &c., it returns one member to parliament. Pop. 1976.

Inverloch'y, a ruined castle of Inverness-shire, 2 miles NE. of Fort William, near which on Sunday, 2d February 1645, Montrose completely routed his rival, Argyll.

Inverness', the county town of Inverness-shire, and capital of the northern Highlands, stands on the Ness, near its mouth in the Moray Firth and the north-east end of the Caledonian Canal, 108 miles by rail WNW. of Aberdeen, 144 NNW. of Perth, and 190 NNW. of Edinburgh. Its wooded environs, hemmed in by hills (Tomnahurich, 223 feet; Torvean, 300; Craigphadrick, 430; Dunean, 940, &c.), form a picturesque and interesting landscape. Visited by Columba about 565, and by Malcolm Canmore made the seat of a royal castle, by Cromwell of a citadel (1652), Inverness has a wealth of memories. It was garrisoned by the English in 1296; in 1411 was burned by Donald of the Isles on his way to Harlaw; and figures repeatedly in the history of the Stuarts, down to their final overthrow at Culloden, hard by. In front of the Scoto-Flemish town-hall (1882), protected now by a fountain, is the Clach-na-Cudain, or 'stone of the tubs,' the palladium of the burgh. The Episcopal cathedral (1867) is a fine Decorated edifice; other features of the place are the county hall (1835) on the site of the castle, the infirmary (1804), the lunatic asylum (1860), the royal academy (1792), barracks (1884), the suspension bridge (1855), and the Islands, a favourite promenade. Malting, thread-making, and bleaching have given place to woollen manufacture, shipbuilding, distilling, &c., with considerable shipping and commerce, the harbour having been much improved in 1847. The great wool fair (established in 1817) is held in July; and the Northern Meeting (1788) in September. A royal burgh since about 1067, Inverness unites with Forres, Fortrose, and Nairn to return one member to parliament. Pop. (1831) 9663; (1901) 23,066, of whom 6500 were Gaelic-speaking, though Inverness still is famous, as in Defoe's and Dr Johnson's day, for the purity of its English.

Inverness-shire, a Highland county, the largest in Scotland, and larger than any in England but Yorkshire, stretches from sea to sea, and has a total area of 4323 sq. m., of which 1284 belong to the Outer Hebrides—Skye, Harris, North and South Uist, Benbecula, Barra, Raasay, Eigg, St Kilda, and thirty-seven other inhabited islands. The mainland portion, measuring 85 by 55 miles, is intersected NE. and SW. by the Great Glen and the Caledonian Canal (q.v.). It includes Badenoch, Glenroy, and the valley of the Spey on the east; Lochaber on the south; Glenelg, Glengarry, Arasaig, and Moidart on the west; Strathglass on the north; Glenurquhart and Glenmoriston towards the centre. It is truly a 'land of the mountain and the flood,' for it contains Ben Nevis (4406 feet), the highest point in Britain, with twenty-six other summits exceeding 3500 feet, whilst the chief of its rivers are the Spey, Ness, and Beauly, and of ninety good-sized lakes Lochs Ness, Archaig, Shiel, Lochy, Morar, Laggan, and Ericht. The west coast is indented by salt-water Lochs Hourn, Nevis, and Moidart. Only 4·6 per cent. of the whole area is in cultivation; and 255 sq. m. are under wood, the rest being sheep-walks, deer-forests, moss, and barren heath, valuable only as grouse-moors. Sheep, numbering some 700,000, are the principal live-stock; and there are five deer-forests of 50 sq. m. and upwards. The rivers and lakes afford splendid fishing. The county returns one member to parliament. Inverness is its only town of any size; Kingussie and Fort William, though police-burghs, are mere villages, as also are Beauly, Fort Augustus, and Portree. Pop. (1801) 72,672; (1841) 97,799; (1901) 90,674, or less than twenty-one inhabitants per square mile.

Inversnaid, a place on the east shore of Loch Lomond, 3 miles NE. of Tarbet.

Inverugie (*g* hard), a ruined castle of Aberdeenshire, 3 miles NW. of Peterhead. It was the birthplace of Marshal Keith.

Inverurie, a royal burgh of Aberdeenshire, at the influx of the Urie to the Don, 16 miles NW. of Aberdeen. With Elgin, &c. it returns one member to parliament. Pop. 3625.

Iona, the most famous of the Hebrides, 1¼ mile W. of the south-western extremity of Mull. Its

modern name is believed to have originated in a mistaken reading of *n* for *u;* the word in the oldest manuscripts being clearly written *Iova.* From the 6th century to the 17th century the island was most generally called *I, Hi, Y,* &c.—that is, simply, 'the island;' or *Icolmkill, I-Columb-Kille,* &c.—that is, 'the island of Columba of the church.' It is 3½ miles long, 1½ mile broad, and 3½ sq. m., or 2264 acres in area, of which more than a fourth is under tillage. Dunii, the highest point, is 327 feet above the sea. Pop. 247. In 563 St Columba sailed from Ireland for Iona with twelve disciples. Having obtained a grant of the island, he built upon it a monastery, which was long regarded as the mother-church of the Picts, and was venerated not only among the Scots of Britain and Ireland, but among the Angles of the north of England, who owed their conversion to the self-denying missionaries of Iona. Neither piety nor learning availed to save it from the ravages of the fierce and heathen Norsemen, who wasted it and massacred the monks in 795, 802, 806, 825, and 986. About 1074 the monastery was repaired by St Margaret, the queen of Malcolm Canmore; and in 1097 it was visited by King Magnus Barefoot of Norway, of which kingdom it now formed part. In 1203 a Benedictine monastery was founded here, and a Benedictine (afterwards Augustinian) nunnery. In 1506 Iona became the seat of the Scottish Bishop of the Isles, the abbey church being his cathedral. St Oran's Chapel, now the oldest church in the island, may probably be of the latter part of the 11th century. The Cathedral, or St Mary's Church (*c.* 1203), has a choir, with a sacristy on the north side, and chapels on the south side; north and south transepts; a central tower, 70 feet high, and a nave. On the north of the cathedral are the chapter-house and other conventual remains. The ruin was given by the Duke of Argyll to the Church of Scotland in 1899, and in 1902–5 partly restored. See books by the Duke of Argyll (1871), Macmillan (1898), and others.

Ionia, the ancient name of the coast districts and islands of western Asia Minor.

Ionian Islands, a group, or rather chain, of about forty islands, stretching along the west and south coasts of Greece. Corfu (Corcyra), Paxo, Santa Maura, Ithaca (Theaki), Cephalonia, Zante, and Cerigo (Cythera) are the largest, and are all separately noticed. Total area, 1010 sq. m.; pop. (1879) 244,433, (1896) 265,280, mostly of Greek descent. The surface is generally mountainous, the plains and valleys being fertile. The collective term 'Ionian' is of modern date. In 1081 Corfu and Cephalonia fell into the hands of Robert Guiscard; from 1401 Corfu and most of the other islands came into the possession of the Venetians, who retained them until 1797, and then ceded them to France. They were seized by Russia and Turkey in 1799; and created the Republic of the Seven United Islands, under the protection of Turkey. But in 1807 they were given back to France. In 1809 Great Britain seized Zante, Cephalonia, and Cerigo, in 1810 Santa Maura, in 1814 Paxo, and after Napoleon's fall Corfu; in 1815 were constituted the United States of the Ionian Islands, under the protectorate of Great Britain; and in 1863 they were incorporated in Greece—after which their prosperity declined. There have been great earthquakes, as in 1867 and 1893. See works by Ansted (1863), Kirkwall (1864), Von Warsberg (Vienna, 1878–79), and Riemann (Paris, 1879).

Io'wa, one of the United States of America, with an area of 56,025 sq. m., is bounded by Minnesota, the Mississippi River, the state of Missouri, and the Missouri and Big Sioux rivers. The climate is continental, with cold winters, hot summers, and sudden changes of temperature; the autumns are beautiful and of long duration; and Iowa is noted for its healthfulness. The surface is a rolling prairie; there are no mountains, and hills or bluffs can only be found along the principal streams. The average elevation is not far from 900 feet; the highest point 1694 feet. Iowa has extensive and valuable mineral deposits, as coal, lead, gypsum, limestone, clay, and mineral paints. The coal, which is bituminous and of good quality, extends over an area of nearly 20,000 sq. m., and above 4 million tons are raised annually. There are several small lakes in the north. Iowa is preeminently an agricultural state, its fertile soil producing vast quantities of maize, wheat, oats, with barley, flax, buckwheat, rye, hay, sorghum, potatoes, butter, cheese, wool, and eggs. Nearly 93 per cent. of the total land area is under farms. The importance of live-stock in the state results in the growth of large quantities of hay and other forage crops. Manufactures are comparatively unimportant, the principal industries, after agriculture, being meat-packing and the preparation of other food-products. Amongst the principal exports are, besides agricultural and dairy products, considerable quantities of coal, gypsum, and lead. The territory of the state formed part of the 'Louisiana Purchase' (see LOUISIANA). Iowa was organised as a territory in 1838, and as a state in 1846. Pop. (1850) 192,214; (1880) 1,624,615; (1900) 2,231,853. The capital is Des Moines (pop. over 62,139); and there are five other cities with over 25,000 (Dubuque, Davenport, Sioux City, Council Bluffs, and Cedar Rapids).

Iowa City, capital of Johnson county, Iowa, and the seat of government from 1839 to 1856, is situated on the Iowa River, 120 miles by rail E. of Des Moines. The old capitol is now the state university. Pop. 7986.

Ipsambul. See ABU-SIMBEL.

Ipsden, an Oxfordshire parish, close to the Chilterns, 4 miles SE. of Wallingford. Charles Reade was a native.

Ipswich, the county town of Suffolk, a parliamentary, municipal, and county borough, 69 miles NE. of London by rail, is situated on the side of a hill on the left bank of the river Gipping, which, taking here the name of the Orwell, becomes tidal, and after a south-easterly course of 12 miles more falls into the German Ocean at Harwich. In the older portions of the town, principally grouped near the river, the streets are narrow and irregularly built, and still retain many picturesque old buildings, decorated with carved work, such as Sparrowe's House (1567), the Neptune Inn (1639), Archdeacon's Place (1471), and Wolsey's Gateway (1528). Of public buildings the principal are a town-hall (1868), in the Italian Renaissance style of architecture, surmounted by a clock-tower 130 feet high; post-office (1881), and corn exchange (1882), both close by, and in the same style; public hall (1868); museum, schools of science and art, and free library (1881–87), the first of which, founded in 1847, is notable for its splendid collections of Suffolk Crag fossils and British birds; custom-house (1845); mechanics' institute (1824); hospital (1835–69–77); artillery and militia barracks; a theatre (1891), in whose predecessor Garrick, Mrs Keeley, and Mr Toole made their début; St Mary Le Tower, with a spire 176 feet high, and a fine peal of

twelve bells; and the grammar-school (*c.* 1477; reorganised by Queen Elizabeth in 1565, rebuilt in 1851, and reconstituted in 1881). Near it are two arboretums, charmingly laid out, and Christchurch Park, with its fine Tudor mansion (1549). Another favourite resort is the promenade by the river-side, skirting the west side of the dock. This latter, opened in 1842, covers 30 acres, and is approached from the Orwell by an entrance lock (1881) capable of admitting vessels of 1400 tons. The principal manufactures are those of agricultural implements, railway plant, artificial manures, and clothing. Cardinal Wolsey was a native, and Gainsborough a resident for fifteen years. Ipswich has returned two members to parliament since 1447. Pop. (1801) 11,336; (1841) 25,264; (1901) 66,622. See works by Clarke (1830), Wodderspoon (1842–50), Glyde (1850–87), and Dr J. E. Taylor (1889).

Ipswich, a town of Queensland, on the Bremer, 23 miles W. of Brisbane by rail. It stands in a rich coal-mining district. Pop. 11,190.

Iquique (*Ee-kee'kay*), the port and capital of the Chilian territory of Tarapacá (Peruvian till 1881). It has amalgamating works in connection with neighbouring silver-mines. Pop. 35,391.

Iquitos, a town in the Peruvian dep. of Loreto, on the left bank of the Marañon, 75 miles above the mouth of the Rio Napo. Pop. 8000.

Irak-Ajemi, a central province of Persia, nearly coincident with ancient Media. Area, 138,190 sq. m.; pop. 1,000,000.

Irak-Arabi (Arabian Irak), the most south-easterly district of Turkey in Asia, almost conterminous with ancient Babylonia, lies between the lower courses of the Tigris and the Euphrates. Pop. 2,000,000.

Iran, or ERAN, originally the great Asian plateau bounded N. by the Hindu Kush and the Elburz, E. by the Indus, S. by the Persian Gulf, and W. by Kurdistan and the Tigris. The term is now the official designation of Persia.

Irawadi, or IRRAWADDY, the principal river of Burma, long believed by many to have its origin in the Sanpo (q.v.), the great river of Tibet, which was shown in 1878–82 to be the upper waters of the Brahmaputra. In 25° 50′ N. lat., a short distance above Bhamo, two arms, the Mali-kha and the Meh-kha, unite to form the river that is undoubtedly the Irawadi of Burma. From Bhamo the Irawadi winds 700 miles southward, throughout navigable for small boats, in spite of islands, sandbanks, and two rock-bound defiles. Its waters are muddy and its current generally rapid. Before reaching the sea, in nearly a dozen mouths, in the west of the Bay of Martaban, the river spreads out in a wide delta, 18,000 sq. m. in extent. Of its mouths two only are used by sea-going vessels, the Bassein on the west and the Rangoon on the east. The valley and plain of the Irawadi are very fertile, and grow vast quantities of rice. The river is the chief artery of the country: on its banks stand the principal towns, Bassein, Rangoon, Prome, Ava, Mandalay, Bhamo; its banks were the home of Burmese civilisation; its waters have served as the main means of communication not only to the interior of Burma, but to the south-western provinces of China and of Tibet. The river drains at least 158,000 sq. m. Its largest affluent, coming from the right hand, is the Chindwin. This and the two left-hand tributaries, the Shweli and Myitnge, are alone navigable. The plain for 150 miles from the sea, being liable to inundations, has been protected by embankments since 1863.

Irbit, a town of the Russian government of Perm, 1170 miles nearly due E. of St Petersburg. Its February fair is next in importance to that of Nijni-Novgorod. Pop. 20,000.

Ireland, an island forming part of the United Kingdom of Great Britain and Ireland, is washed on the N., W., and S. by the Atlantic, and on the E. by the North Channel (13 miles wide), the Irish Sea (138 miles), and St George's Channel (47 to 69 miles), which separate it from the larger island of Great Britain. Its greatest length is 302 miles; its average breadth 110 miles. *Eirinn* was known to the Greeks as *Ierne*, to the Romans as *Hibernia* and *Juverna*, in the 6–13th centuries as *Scotia* and the 'Isle of Saints.' It is divided into the four provinces of Ulster, Leinster, Munster, and Connaught, and subdivided into thirty-two counties. The total area is 20,819,928 acres, or 32,531 sq. m., or nearly two-thirds of that of England without Wales. In 1801 the pop. was 5,395,456 (166 per sq. m.); in 1841, 8,175,124 (251 per sq. m.); in 1901, after a steady decrease from emigration, only 4,458,775 (137 per sq. m.).

Provinces and Counties.	Area in Stat. Acres.	Pop. 1841.	Pop. 1881.	Pop. 1901.
LEINSTER.				
Carlow	221,344	86,228	46,568	37,748
Dublin	236,895	372,773	418,910	448,206
Kildare	418,496	114,488	75,804	63,566
Kilkenny	509,732	202,420	99,531	79,159
King's	493,935	146,857	72,852	60,187
Longford	269,409	115,491	61,009	46,672
Louth	202,123	128,240	77,684	65,820
Meath	579,861	183,828	87,469	67,497
Queen's	424,854	153,930	73,124	57,417
Westmeath	453,453	141,300	71,798	61,629
Wexford	576,588	202,033	123,854	104,104
Wicklow	500,178	126,143	70,386	60,824
Total	4,876,918	1,973,731	1,278,989	1,152,829
MUNSTER.				
Clare	827,994	286,394	141,457	112,334
Cork	1,849,686	854,118	495,607	404,611
Kerry	1,185,918	293,880	201,039	165,726
Limerick	680,842	330,029	180,632	146,098
Tipperary	1,061,731	435,553	199,612	160,232
Waterford	461,552	196,187	112,768	87,187
Total	6,067,723	2,396,161	1,331,115	1,076,188
ULSTER.				
Antrim	762,080	360,875	421,943	461,532
Armagh	328,086	232,393	163,177	125,392
Cavan	477,399	243,158	129,476	97,541
Donegal	1,197,154	296,448	206,035	173,722
Down	612,399	361,446	272,107	289,627
Fermanagh	457,369	156,481	84,879	65,430
Londonderry	522,315	222,174	164,991	144,404
Monaghan	319,741	200,442	102,748	74,611
Tyrone	806,658	312,956	197,719	150,567
Total	5,483,201	2,386,373	1,743,075	1,582,826
CONNAUGHT.				
Galway	1,569,505	440,198	242,005	192,549
Leitrim	392,363	155,297	90,372	69,343
Mayo	1,360,731	388,887	245,212	199,166
Roscommon	607,691	253,591	132,490	101,791
Sligo	461,796	180,886	111,578	84,083
Total	4,392,086	1,418,859	821,657	646,932
General Total	20,819,928	8,175,124	5,174,836	4,458,775

In 1901 there were eight towns with pops. over 20,000 (Dublin 290,638, and Belfast 349,180); when there were 631,629 persons of Irish birth in England and Scotland, 1,618,567 in the United States, 227,561 in Australasia, 4184 in Cape Colony, and in Canada 989,858 persons of Irish origin. In 1851–1902, 3,921,222 persons emigrated from Ireland, over three-fourths to the United States.

The surface of Ireland is, generally speaking, an undulating plain, relieved, more particularly towards the coasts, by detached groups of low hills. The principal ranges are the Mourne Mountains in Down, which attain their highest elevation in Slieve-Donard (2796 feet); the mountains of Wicklow, which rise in Lugnaquilla to a maximum height of 3039 feet; and Macgillicuddy's Reeks, in Kerry, their highest peak, Carran-Tual (3414 feet), being the loftiest in all Ireland. The mountains are built up of relatively hard crystalline schists and disturbed Lower Palæozoic rocks, while the low grounds are nearly co-extensive with less indurated and comparatively undisturbed Upper Palæozoic strata. The interior and larger portion of the island is quite flat, its centre being only 250 feet above the sea; it belongs almost exclusively to the carboniferous system. Ireland is not rich in minerals, but some coal (about 100,000 tons a year), a little iron, lead, besides salt, stone, limestone, &c. are wrought. The coasts on the N., W., and S. are in many places rocky and high, and indented with deep inlets, many of which form admirable harbours. The islands are small. Bogs or morasses occupy altogether 1,772,450 acres, or nearly one-ninth of the entire area—the largest being the Bog of Allen. The principal river of Ireland, and the largest in the United Kingdom, is the Shannon (q.v.). Others are the Liffey and Boyne, the Suir, Barrow, and Nore, the Blackwater, Erne, Foyle, Bann, &c. Dublin has water-communication with the Shannon by means of the Grand (165 miles) and Royal (76) canals, and Lough Neagh with the same river by the Ulster Canal and river Blackwater. The largest lake is Lough Neagh (100,000 acres); others are Erne and Derg, also in Ulster; Conn, Mask, and Corrib, in Connaught; Allen, Ree, and Derg, expansions of the river Shannon; and the lakes of Killarney (q.v.) in Munster. The name lough is also applied to many salt-water inlets.

The climate of Ireland bears a close resemblance to that of Great Britain, but is modified by the marked difference in the configuration of the surface, the greater distance from the continent of Europe, and the fact that it is more directly under the influence of the Gulf Stream. The mean annual temperature is 50·0° (that of England is 49·5°, that of Scotland 47·5°); and the temperature in Ireland is more equable. The eastern half of the island has a rainfall of from 30 to 40 inches, and the western half from 40 to 50 inches.

Ireland is mainly an agricultural country, but agriculture is backward, and farms and capital small; relations between landlord and tenant were very bad from of old; the landlords seldom erected buildings, repaired farmsteads, or made permanent improvements. In 1879–80 the distress amongst the poorer sections of the community reached such a pitch that in 1881 the Land Law (Ireland) Act was passed. Its principal measures were designed to protect the tenant from paying more than a 'fair rent,' and to provide for loans being made to tenants to enable them to purchase their holdings on fair and equitable terms. Several subsequent amending acts have been passed, that of 1903 giving increased facilities for the purchase of holdings, and providing an aid fund of £12,000,000. The Local Government (Ireland) Act, 1898, established county councils in Ireland, reduced the poor assessment on agricultural land to half of its value, &c. Agriculture has benefited largely (especially small farms) by the development of co-operative agricultural societies, of which there were 908 in 1904, 376 of them being creameries. Above 10,000,000 acres are permanently under grass, some 1,300,000 being devoted to cereals (oats 110,000, barley 158,000), 618,500 acres to potatoes, and 286,000 to turnips. The seas around the coasts of Ireland teem with fish; but, except that for salmon, the fisheries are not flourishing. The bulk of the commerce of Ireland is the exportation of agricultural produce and animals, principally to Great Britain.

Manufactures are few, except in Ulster, where linen is the staple industry; but little of the flax used is Irish-grown, most of it being now imported from Belgium, &c. Shipbuilding is centred at Belfast; and brewing and distilling are also important industries.

Ireland is represented in the imperial parliament by 28 peers elected for life in the House of Lords and 103 members in the House of Commons. The executive is vested in a lord-lieutenant, who is assisted by a chief-secretary and a privy-council (appointed by the crown). Most of the inhabitants (over 3,310,000 in 1901) belong to the Roman Catholic Church, which has four archbishops (Armagh, Dublin, Cashel, and Tuam) and 24 bishops. Until 1871 the established church of Ireland was a branch of the Church of England; since its disestablishment the Church of Ireland is presided over by two archbishops (Dublin and Armagh) and eleven bishops. Next in importance come the Presbyterians and Methodists. The most important university in Ireland is that of Dublin (q.v.) or Trinity College. The Royal University of Ireland (1880) is not a teaching, but only an examining body. Teaching institutions are the three Queen's Colleges of Belfast, Cork, and Galway (1849), and the Royal College of Science (1867) in Dublin. The Roman Catholic University of Ireland (1854) is supported by private contributions. St Patrick's College, Maynooth (q.v., 1795) educates Roman Catholic priests. And there are Presbyterian theological colleges at Belfast and Londonderry. There are over 8700 elementary schools in Ireland under the Commissioners of National Education, with 726,550 enrolled pupils and an average attendance of about 482,500. Of the schools 4199 were Roman Catholic, 1523 were Protestant, and 2981 were mixed. Seven training-colleges had over 1000 students. There are 3300 miles of railway in Ireland.

In prehistoric times Ireland seems like Britain to have been inhabited by peoples of the Iberian stock, who were successively invaded and subdued by Nemedians, Firbolgs, Tuatha Dé Danann, and Scots or Milesians. Most of these invaders seem to have been Celtic, some of the Cymric (British), and some of the Goidelic branch. The Scots were distinctly Goidelic. Ultimately the resulting races, Iberian at base but Celticised by degrees, had assumed the Celtic type of civilisation and the Erse (Goidelic) language. The septs, tribes, or kingdoms were numerous, and constantly at war; though with curious permutations and combinations, some, or many of them, at times accepting the over-lordship of an Ard-righ or chief king. Irish history really begins with the christianisation of Ireland by St Patrick, a Briton of Strathclyde, early in the 5th century. In the 8th century came Danish or Norse sea-rovers, who established themselves in the east of Ireland, and, weakened by Brian Boru, and utterly defeated by him at Clontarf in 1014, were ultimately absorbed in the

mass of the population. The intestinal strifes of the Irish potentates still went on as before, and led in 1167–72 to the Norman invasion. Ireland had to undergo just 100 years later, and under Henry II., the fate England underwent under Henry's great-grandfather, William the Conqueror. Much of the Irish soil was parcelled out, as England had been, amongst Norman nobles; but this change, so far from tending to consolidate Ireland into one kingdom, or into an organised province of the English monarchy, seemed but to have introduced additional elements of faction, feud, and warfare. The Norman chiefs fought with the Irish ones, and with one another; and became, as was said, 'more Irish than the Irish themselves.' Henry VII. made an effort to reduce Ireland to order on Tudor lines; rebellions, expeditions, slaughterings, and confiscations went on in the reigns of Henry VIII. and Elizabeth, the Reformation providing a new element of hostility between the English government and the Irish people. Under James I. vast confiscations took place, and great settlements, especially in Ulster, of English and Scottish immigrants. 'The massacre of 1641' was directed against these aliens. Cromwell made a re-settlement with a vengeance. The adhesion of the Irish to James II. brought William III. on them; and after the battle of the Boyne and the surrender of Limerick (1691) came the penal laws, which with many vastly more cruel provisions, debarred Catholics from all share in the Irish parliament. In 1782 the Irish Protestant parliament had greater powers and dignities conferred on it; and under Grattan's influence, the emancipation of the Catholics seemed near. But Irish hopes were blighted by the obstinacy of George III. Hereupon the society of the United Irishmen became a distinctly rebellious organisation, and fomented the short and futile rebellion of 1798. The union of the parliaments came into force in 1801. The next great events in Irish history are Roman Catholic Emancipation in 1829; O'Connell's agitation for the repeal of the union, begun in 1842; the Potato Famine of 1846; the Fenian movement of 1867; the Disestablishment of the Irish Church (1871); Mr Gladstone's Land Act (1881); the Home Rule movement under Parnell; the Home Rule Bill of 1886, defeated in the House of Commons; and that of 1893, defeated in the House of Lords.

There are histories of Ireland by Darcy M'Gee (1869), Keating (1880), J. H. M'Carthy (1883), Lady E. Lawless (1888), Joyce (1893 and 1903), Walpole (1893), O'Grady (1893), O'Connor Morris (1898), and Father D'Alton (1904).

Irish Sea, between the north of Ireland and the north of England, with the south-western counties of Scotland on the north, is connected NW. with the Atlantic by the North Channel, and S. by St George's Channel. Between the coasts of Louth (Ireland) and Lancaster it has its greatest width of 150 miles; its greatest length north and south is about the same. Within it lie the Isle of Man and Anglesey.

Irkutsk, a mountainous government of southern Siberia, to the NW. of Lake Baikal, occupies an area of 287,061 sq. m. The pop., 550,000 in 1905, consists of Buriats, Tunguses, and Russians (one-third exiles). The towns are Irkutsk, Kirensk, Nijniudinsk, and Verkholensk.

Irkutsk, the capital, on the Angara, is the residence of the governor-general of eastern Siberia. Although 3722 miles from St Petersburg (and 40 from Lake Baikal), Irkutsk is the best-built town in Siberia, with straight, wide streets, and handsome public buildings. It possesses a cathedral, public library, natural history museum, &c. The pop., 32,512 in 1875, had increased to 53,000 in 1905; it consists mostly of Russians and Buriats. Irkutsk was founded by a Cossack chief in 1652. Owing to its position on the great Siberian highway between China and Russia, it is the commercial centre of Siberia, especially for the tea-trade; the annual value of its trade amounts to about £1,100,000. It is on the line of the great Siberian railway in progress. The Angara and Lena rivers are valuable water-ways. A fire in 1879 did £2,000,000 worth damage.

Ironbridge, a village on the Severn, 1 mile E. of Coalbrookdale. It takes name from the bridge (1779), 100½ feet in span, the earliest large cast-iron bridge in the kingdom.

Iron Gates. See Danube.

Iron Mountain, a mining-town of Michigan, on the Menomonee River, 208 miles by rail N. of Milwaukee. It has risen since 1880. Pop. 9300.

Ironton, capital of Lawrence county, Ohio, on the Ohio River, 142 miles above Cincinnati. It is the chief business centre of an important iron region. Pop. 11,939.

Irrawaddy. See Irawadi.

Irtish, a river of Siberia, the chief affluent of the Obi (q.v.), rises at the east end of the Altai Mountains, passes through Lake Saisan, breaks through the Altai in the west at the bottom of a savage gorge, and flows north-westwards across the steppes of Western Siberia to join the Obi, from the left, at Samarow. At that point it has a width of 2000 yards; its total length is 1620 miles; the area of its basin, 647,000 sq. m. The towns of Semipalatinsk, Omsk, and Tobolsk stand on its banks. Its tributaries include the Buchtarma and Om from the right, and the Tobol and Ishim from the left.

Irun (*Ee-roon*), a town in the Spanish province of Guipuzcoa, on the Bidassoa, near the French frontier, 24 miles by rail SW. of Bayonne. In 1837 General Sir De Lacy Evans captured it from the Carlists. Pop. 9800.

Irvine, a seaport of Ayrshire, on the river Irvine, 1¼ mile from the Firth of Clyde, and 11 miles by rail N. of Ayr, 29 SW. of Glasgow. Made a sub-port of Troon in 1863, its harbour has been improved since 1873; and there are chemical works, foundries, grain-stores, &c. The bridge (1746–1837), the new town-hall (1859), a statue of Lord-justice-general Boyle (1867), and the academy (1814) are features of the town, which became a royal burgh about 1230, and which with Ayr, &c. returns one member to parliament. It was the birthplace of Galt and James Montgomery, and has memories also of Burns and the Buchanites. Pop. (1841) 4594; (1901) 9618.

Irvinestown, a town of County Fermanagh, 8 miles N. of Enniskillen. Pop. 781.

Irwell, a river of Lancashire, flowing 30 miles past Manchester, to the Mersey below Floxton.

Isandu'la, or Isandhlwana, in the north-east of Natal, on the left bank of the Buffalo River, 110 miles N. by W. of Durban. There, on 22d January 1879, the British camp was surprised by 18,000 Zulus in Lord Chelmsford's absence and almost annihilated. The British loss exceeded 800, that of the Zulus 2000.

Isar, or Iser, a river of Bavaria, rises in the Tyrol, north-east of Innsbruck, and flows 220 miles north and north-east to the Danube near

Deggendorf. Munich and Landshut are on the banks 'of Iser, rolling rapidly;' Hohenlinden (q.v.) is 20 miles away. Large quantities of wood are floated down the Isar from the mountains.

Isauria, in ancient geography, a district of Asia Minor, occupying the summit and northern slopes of Mount Taurus.

Ischia (*Is'kee-a;* anc. *Ænaria* and *Pithecusa*), an island on the north side of the entrance to the Bay of Naples, 6 miles from the mainland. Area, 26 sq. m.; pop. 27,500. Ischia is a favourite summer-resort, being noted for the excellence of its warm mineral waters, the richness of its soil, the flavour of its fruits and wines, and the beauty of its scenery. Its highest point is the volcanic Monte Epomeo, 2608 feet, the last outbreak of which occurred in 1302. In 1881 Casamicciola was nearly destroyed by two earthquake shocks, and in 1883 it was utterly overwhelmed, 1990 persons losing their lives. Chief towns: Ischia (7000), a bishop's seat; Casamicciola (3963); and Forio (7500). See Johnston-Lavis, *The Earthquakes of Ischia* (1886).

Ischl (*Eesh'l*), a town of Upper Austria, the capital of the Salzkammergut, is finely seated, 1536 feet above sea-level, on the river Traun, amid magnificent Alpine scenery, 33 miles E. by S. of Salzburg. Its situation, and the saline baths, established in 1822, attract 5000 visitors annually, including the Austrian royal family, who have a villa here. Yearly 8000 tons of salt are manufactured in the salt-works, opened in 1571. Pop. 9700.

Iseghem (*Ee'ze-khem*), a town of Belgium, 10 miles by rail N. by W. of Courtrai. Pop. 12,200.

Iseo (*Ee-zay'-o*), LAKE (*Lacus Sebinus*), a lake of northern Italy, situated between the provinces of Bergamo and Brescia. Length, 12½ miles; maximum breadth, 3⅞ miles; area, 24 sq. m. It contains two small islands, and is traversed by the Oglio, a tributary of the Po.

Isère (*Ee-zehr'*), a dep. in the south-east of France, round which on the north and west flows the river Rhone. It was formed out of the ancient province of Dauphiné. Area, 3200 sq. m.; pop. (1872) 575,784; (1901) 563,813. The dep. contains the four arrondissements of Grenoble (the capital), La Tour-du-Pin, St Marcellin, and Vienne.

Iserlohn (*Ee-zer-loan*), a town of Prussian Westphalia, on a tributary of the Ruhr, 14 miles SE. of Dortmund. It manufactures brass and bronze articles. The calamine mines are celebrated. The neighbouring Dechen stalactite cave, 292 yards long, was discovered in 1868. Pop. 30,000.

Isernia (anc. *Æsernia*), a cathedral city of Italy, 52 miles N. of Naples. Pop. 9678.

Ishim. See IRTISH.

Ish'peming, a city of Michigan, 15 miles W. of Marquette on Lake Superior, and 392 N. of Chicago by rail. Much iron ore is mined close by, and the town possesses foundries, blast-furnaces, &c. Pop. 15,000.

Iskanderoon. See SCANDEROON.

Isla (*Ī'la*), (1) a river of Forfar and Perthshire, flowing 46 miles SE. and SW. to the Tay near Cargill, 4½ miles WSW. of Coupar-Angus.—(2) A Banffshire stream, running 18 miles to the Deveron near Grange Junction.

Isla de Pinos. See PINOS, ISLA DE.

Islamabad. See CHITTAGONG.

Islandshire, a part of Northumberland in England, embracing the Farne Islands, together with three parishes adjoining Berwick-on-Tweed (q.v.) and portions of two others. Till 1844 it formed a detached part of Durham county.

Islay (*Ī'lay*), an Argyllshire island, 13 miles W. of Kintyre, and ½ mile SW. of Jura, from which it is separated by the Sound of Islay. Deeply indented on the south by Loch Indal (12 × 8 miles), Islay has a maximum length and breadth of 25½ and 19 miles, and an area of 246 sq. m. It contains several small fresh-water lakes, and attains a height of 1444 feet. More than half the whole area is capable of cultivation, and great improvements have been effected in the way of road-making, draining, reclamation, &c. Dairy-farming, stock-raising, and whisky-distillation are leading industries; whilst slate, marble, iron, lead, and silver have been worked. Pop. (1831) 14,982; (1901) 6875.

Isle of France. See MAURITIUS.

Isle of Man, Wight, &c. See MAN, WIGHT.

Isleworth (*Ī'zel-worth*), a Middlesex parish, on the left bank of the Thames, 12 miles WSW. of London. Here is Sion House, a seat of the Duke of Northumberland, the place where the crown was offered to Lady Jane Grey.

Islington (*Iz'ling-ton*), (1) one of the metropolitan boroughs of the county of London. Pop. (1861) 155,341; (1901) 334,906. It has numerous religious, educational, and benevolent institutions. The Agricultural Hall (1861), where the great national cattle and horse shows are held, is capable of holding 50,000 people. In 1885 Islington was made a parliamentary borough. It returns four members.—(2) A former parish of Norfolk, 4 miles SW. of Lynn. It is the Isliugton probably of 'The Bailiff's Daughter.'

Ismail, a town and river-port in the Russian government of Bessarabia, stands on the north bank of the Kilia branch of the Danube, 48 miles from its mouth. Formerly a Turkish fortress, it was taken and destroyed by Suwaroff in 1790; came to Russia in 1812; was assigned to Moldavia (1856), its fortifications being razed; and was transferred to Russia again in 1878. Pop., with the adjoining Tutchkoff, 33,084.

Ismailia (*Iz-mī-lee'a*, named after the Khedive Ismail), a small town on Lake Timsah, through which the Suez Canal passes. It stands on the railway from Cairo to Suez and on the Sweet-water Canal. During the construction of the Suez Canal it was the headquarters of the work, having been founded in 1863, but it is now a place of less than 4000 inhabitants.

Isn'ik. See NICÆA.

I'sola Bella. See BORROMEAN ISLANDS.

Isola Grossa, or ISOLA LUNGA (Great or Long Island), an Austrian island, 27 miles by 3, parallel to Dalmatian coast, off Zara. Pop. 3000.

Ispahân, properly ISFAHÂN, a famous city of Persia, capital of the province of Irak-Ajemi, and in the 17th century of the entire country, is situated on the Zenderud, in an extensive and fertile plain, 226 miles S. of Tehran. The river, here 600 feet broad, is crossed by three noble bridges. Groves, orchards, avenues, and cultivated fields surround the city for miles; but the permanent beauty of the vicinity only serves to make the contrast all the more striking between the former splendour of the city and its present ruinous condition. Miles of street are now almost tenantless, and many of the palaces are falling to decay. The suburb Julfa, on the southern bank of the river, once a flourishing

Armenian settlement of 30,000 inhabitants, is now little better than a mass of ruins. Ispahân, however, is still an important city and the seat of extensive manufactures, including all sorts of woven fabrics, from rich gold brocades and figured velvets to common calicoes. Trinkets and ornamental goods in great variety, with firearms, sword-blades, glass, and earthenware, are also manufactured. Of late years, too, many of its edifices have been rebuilt; and rice is now largely cultivated in the neighbourhood. Pop. 80,000—not a tenth of what it was once.

Issik-kul (Kirghiz, 'warm water'), a salt-lake in central Asia, in the Russian province of Semirschensk, between the Terskei Ala-tau range on the south and the Kungei Ala-tau on the north. Lying 5000 feet above sea-level, it is 112 miles long, 38 miles broad, and 1980 sq. m. in area. Although it receives forty rivers, its surface falls permanently 8 or 9 inches a year.

Issoire (*Is-swahr'*; anc. *Issiodorum*), a town in the French dep. of Puy-de-Dôme, near the confluence of the Couze and Allier, 21 miles by rail SE. of Clermont-Ferrand. Pop. 5560.

Issoudun, a town in the French dep. of Indre, 72 miles S. of Orleans by rail. It manufactures parchment, cloth, agricultural instruments, &c. Pop. 13,000.

Issus, an ancient seaport on a gulf of the same name in Cilicia, Asia Minor. Here Alexander the Great routed Darius (333 B.C.).

Issy, a village in the French dep. of Seine, ½ mile SW. from Paris. Pop. 12,830. Here on 3d July 1815 Blücher defeated Davoût. During the siege of Paris (1870–71) by the Germans, the fort of Issy suffered severely from bombardment.

Istakhr, or STAKHR, an ancient city of Persia, built near Persepolis (q.v.).

Istambol. See CONSTANTINOPLE.

Istria, an Austrian margraviate, forming a mountainous peninsula in the north-east corner of the Adriatic, between the Gulf of Trieste and the Gulf of Fiume or Quarnero. Area, with the adjacent islands, 1812 sq. m.; pop. 344,200. Capital, Rovigno.

Italy, a kingdom occupying the central of the three great peninsulas of southern Europe together with Sicily, Sardinia, and some smaller islands. The peninsula, which at the Strait of Otranto approaches within less than 50 miles of Albania, is bounded W. and S. by that portion of the Mediterranean known as the Tyrrhenian Sea, E. by the Adriatic, and N. by the Alps, separating it from France, Switzerland, and Austro-Hungary. Its greatest length is 710 miles; the breadth ranges from 351 miles in the north to about 20 between the Gulfs of Sta Eufemia and Squillace, but in most places is about 90 or 100 miles. The seaboard of the peninsula extends to 2272 miles. The area formerly given at 114,416, has been officially reduced to 110,657 sq. m. Pop. (1871) was 26,801,154; (1904) 33,218,328. The area of Italy is nearly equal to that of Great Britain and Ireland; the population about four-fifths that of the United Kingdom. To the kingdom proper must be added Italy's colonial possession in Africa. This consists of the territories of Assab and Massowah (q.v.) on the Red Sea, Keren and Asmara in Abyssinia, and the Dahlak archipelago, which embrace a total area of nearly 4000 sq. m., and were united into a colony bearing the name of Eritrea (from the old name of the Red Sea, *Mare Erythræum*) in 1889. In 1889 King Menelek acknowledged the protectorate of Italy over Abyssinia. The table shows the area and population of the 16 great divisions called Compartimenti (the administrative provinces are 69 in number and named after the chief towns) at the census of 1901.

Compartimenti.	Area.	Population.
Piedmont	11,340	3,326,311
Liguria	2,037	1,080,944
Lombardy	9,386	4,278,188
Venetia	9,476	3,130,429
Emilia (with Romagna)	7,990	2,451,752
Umbria	3,748	644,367
The Marches	3,763	1,064,749
Tuscany	9,304	2,548,154
Rome (and Latium)	4,663	1,206,354
Abruzzi and Molise	6,380	1,442,365
Campania	6,289	3,142,378
Apulia	7,376	1,949,423
Basilicata	3,845	490,000
Calabria	5,819	1,375,760
Sicily	9,936	3,529,266
Sardinia	9,305	789,314
Total	110,657	32,449,754

The number of foreigners in Italy at the census of 1901 was 61,606, including 11,616 Austrians, 10,757 Swiss, 10,745 Germans, 8768 British, and 6953 French. The Italian pop. includes in Piedmont about 120,000 of French and some 3000 of Teutonic origin, in southern Italy at least 60,000 of Albanian and 20,000 of Greek origin, and in Sardinia 7000 or 8000 of Spanish origin. Within the five years 1898–1902 over 2,000,000 left Italy, of whom nearly 1,000,000 went to other European countries, and almost all the rest to America (chiefly the United States, Brazil, Argentina, and Canada). The largest town is Naples (563,540 in 1901), Rome (the capital) having 462,783; Milan, 491,460; Turin, 335,656; Palermo, 309,692; Genoa, 234,710; Florence, 205,589; four about 150,000; and other 23 towns over 50,000.

On the northern frontier of Italy the Alps sweep round in a mighty arc from Nice to Trieste; and some of the loftiest peaks in the system, including Mont Blanc and Monte Rosa, belong to this mountain-girdle. The highest mountain entirely within the kingdom is Gran Paradiso (13,652 feet), the culminating point of the Graian Alps, in Piedmont. Between the Alps and the Apennines spreads the broad fertile Lombardo-Venetian plain, a nearly level country. Most of this great alluvial tract, which fills nearly the whole of northern Italy, belongs to the basin of the Po; it is irrigated by numerous streams and canals, and is one of the most fruitful and flourishing districts of Italy. The Adige and Brenta are other streams. Many of the Po's tributaries spread out at the foot of the Alps into considerable bodies of water, among which are the Lago di Garda (127 sq. m.), Lago Maggiore (81), and Como (58). From Rimini to the Gulf of Trieste the Adriatic coast is flat and marshy, and fringed by lagoons. On the Riviera, from Nice to Spezia, the sunny, rugged mountains come close to the water's edge. The geology of the north and west of northern Italy is that of the Alps (q.v.).

In the peninsula the Apennines are the most important feature. The chain, after stretching across from the Gulf of Genoa to the Adriatic, turns and runs down in a broad, irregular mass to the extremity of Calabria. The mean elevation is only some 5200 feet. The limestone rocks of the Apennines, rugged and cleft, fill the interior of the country with picturesque mountain-scenery. The culminating peak of the Apennines is Monte Corno (9577 feet), in the great mountain-mass called Gran Sasso d'Italia. On the west side of

the peninsula, between the main chain and the sea, a volcanic tract extends from Tuscany as far south as Vesuvius (4206), the only volcano still active. The entire Campanian plain, the Roman Campagna, and the country round Viterbo are mainly of volcanic origin. To the volcanic centres within the peninsula may be added Etna in Sicily, and Stromboli in the Lipari Islands. Tuscany is a hilly country, which seldom rises into mountains. Farther south the Roman plain, the Pontine Marshes, and the fertile Campanian plain are connected; on the east side of the Apennines the only plain is that of Apulia. The chief rivers of the peninsula flow into the Tyrrhenian Sea; but only the Tiber (for 90 miles) and, to a less extent, the Arno (66 miles), Volturno, and Garigliano are navigable.

The generally warm climate of Italy is considerably modified in places by the presence of the mountain-ranges or the proximity of the sea. The plain of the Po, open to the icy winds from the Alps, and closed to those from the south, has a cold if short winter, while along the Riviera the temperature is as high as, and sometimes higher than, that of Rome or Naples. Throughout the peninsula the temperature is lowered by the presence of the Apennines. Moreover, the Adriatic coast, exposed to the north-east winds, is colder than the corresponding west coast. The highest temperature recorded is 109° F. (in Apulia), the lowest −25° F. (on Monte Stelvio, in Lombardy). In the very south there are but two seasons, a wet and a dry; whereas in northern Italy there are two greater and two lesser rainy periods in the year, most rain falling in October and in spring, and least in winter. Over all the peninsula autumn is the wet season. The cold mistral blows in the Gulf of Genoa, and the warm sirocco affects the coast sometimes as far north as Venice. In many districts the evil presence of malaria, from July to October especially, forms a serious drawback to the sunny climate.

The vegetation of northern Italy is in the main such as can endure the frosts of winter. But by the lake-sides we find orange and olive trees, and the summer heat is sufficient to ripen rice and maize, of which, as well as other cereals and legumes, large crops are raised. Forests of chestnuts clothe the mountains, vineyards the lower hills, and the mulberry-tree is extensively grown. The Riviera, so far as vegetation is concerned, belongs to southern Italy. In southern Italy the flora of central Europe gives place to palms and orange and lemon and citron trees, the cactus and agave, laurels, myrtles, oleanders, and forests of arbutus and the evergreen oak. Italy is pre-eminently an agricultural country. Of its entire area 87 per cent. is returned as productive; and nearly half of the productive area is under cultivation. The grape harvest in Italy is second in value to the cereals alone, though most of the Italian wines are still comparatively poor. Below the 44th parallel the olive is among the most valuable products. Large quantities of fruit are exported. The chestnut yields an important article of food. Cultivation is still carried on in a very primitive fashion in some parts, but in northern Italy, Tuscany, and round Naples, indeed, the farming is of a very high character. The system of peasant proprietorship is extending. Otherwise, land may be held by the metayer system, or by rent, paid either in money or in kind; or the cultivator may be simply the paid servant of the landlord, receiving a share of the produce for his labour. In any case, the life of the Italian peasant is, as a rule, one of unremitting drudgery and poverty, often of privation. There are fisheries round the coast and in the lagoons. The tunny is the most valuable fish, and after that the anchovy and sardine; but the eel-fisheries of Comacchio are also of importance.

Italy contains no deposits of bituminous coal, nor, except in a few localities, of iron. A very little anthracite and about 300,000 tons of lignite are raised annually, most of the latter in Tuscany and Umbria. Nearly all the iron is raised in Elba. The great mineral product of Italy is sulphur. Marble, granite, and alabaster are quarried to the amount of nearly a million sterling annually. The silk industry employs, especially in northern Italy, some 172,000 persons, besides over 550,000 engaged in rearing the silkworm. The manufacture of thread and of cotton tissues shows a steady advance, as does also the spinning and weaving of wool. The north is the seat of the iron industry; the principal copper-works are at Leghorn. The manufactures of glass and ceramic wares are valued at £2,500,000. With these may be classed the cutting of cameos and the production of mosaics at Rome, Naples, and Florence, and also the working of coral. The manufacture of tobacco is a government monopoly. There are numerous paper-mills in Piedmont, Lombardy, and Campania, and factories of straw-hats, the principal at Florence, and of cloth, silk, and felt hats in Piedmont especially. Sulphuric and tartaric acid, sulphate of quinine, salt, soap, oils, candles, wax matches, gloves, &c. are also exported.

The foreign trade of Italy is facilitated both by the extensive seaboard and good harbours and by railway connections with the countries beyond the Alps. The imports and exports have been steadily increasing since 1800. In the five years from 1898 to 1902 the special imports (imports for home consumption) increased from £56,671,165 to £72,420,730. The special exports (exports of national merchandise) during the same years increased from £48,927,276 to £59,296,104. The commercial intercourse of Italy is, in the order of value, principally with Germany, the United Kingdom, the United States, France, Switzerland, Austria-Hungary, and Russia. The war of tariffs with France came to an end with the 19th century. The principal imports from Britain are coal, iron, cottons and woollens, machinery, chemicals, and fish; the chief exports thither are olive-oil, oranges and lemons, with their essences and syrups, hemp, hides, chemicals, dye-stuffs, and marble. More than half the steamers entering Italian ports are British, and these carry nearly four-fifths of the maritime trade. The most important seaports are Genoa and Savona, Leghorn, Naples, Venice, Messina, Catania, and Palermo. There are between 9000 and 10,000 miles of railway in operation. The principal occupation, agriculture, employs nearly a third of the entire population, and the manufactures only about half as many. Nevertheless, the proportion of inhabitants congregated in cities is unusually large, and in southern Italy and the islands even the peasants prefer to have their homes in some town or village. The death-rate from malaria steadily diminishes, as does that from *pellagra*, a disease resulting from insufficient and unwholesome food. The character of the people is in general sober and thrifty, and they prove excellent workmen where sheer labour is required, as in quarries and drainage operations.

The Roman Catholic is the recognised state religion, and claims all but a very small fraction of the people. Of Protestants there are about

66,000, and of Jews 36,000; the former include some 22,500 Waldensians. There are in Italy 49 Catholic archbishops and 226 bishops, and over 76,500 parish priests. The rank and dignity of the pope, as a sovereign prince, is recognised by the law of 1871. The great majority of the religious houses have been suppressed. In 1861, of those over nineteen years of age, 65 per cent. of the males and 81 per cent. of the females were unable to read or write; in 1901 the percentage had fallen to 43·8 for the males and 60·3 for the females. Primary education is now compulsory, and schools of all kinds have increased largely of late; since 1861 the pupils in elementary schools have increased from 885,000 to 2,750,000. There are in Italy 21 universities, with 23,000 students. The oldest university is that of Bologna (q.v.), the largest that of Naples (5500 students). The great body of Italian students are enrolled in the faculties of medicine and jurisprudence; theology is not taught in any of the universities.

Italy is a constitutional monarchy, the executive power vested in the king being exercised through responsible ministers. The legislative functions are in the hands of the king and parliament conjointly, the latter consisting of a senate of about 330 life-members, nominated by the king, and of a chamber of over 500 deputies. The franchise is extended to all citizens who are of age, can read and write, and pay 20 lire of direct taxes. The government of the provinces, with a prefect at the head of each, is very much the same as in France. Military (or naval) service is compulsory for all citizens from the age of twenty to thirty-nine, but only about 95,000 annually are drafted into the standing army (3000 into the navy). The standing army in 1905 numbered 264,500 men, besides 500,000 on unlimited leave; the total war strength, including mobile and territorial militia, is a little above 3 million men. Italy is disproportionately strong at sea, having 15 armoured battle-ships, 20 armoured and protected cruisers, and about 60 torpedo-boats (various), with a total force of 1799 officers and 25,000 men. Some of the armour-clads are amongst the largest of existing war-ships. The finances are not on a satisfactory footing; the enormous military and naval expenditure is out of all proportion to the resources of the country, and the constant deficits and schemes for expanding the revenue have led to frequent crises and changes of ministry. The extension and maintenance by government of railways far beyond commercial needs have saddled the country with a very serious burden. The estimated revenue of 1904–5 was £74,190,481, and the estimated expenditure for the same year restricted to £73,437,117. The total public debt is about £505,000,000.

The history of Italy is generally begun where that of Rome (q.v.) ends—with the total fall of the Western Roman Empire in 476 A.D. under the attacks of the invading Herulian barbarians. In 489 Theodoric and his Ostrogoths founded a Gothic monarchy in Italy, which was subverted by the generals of the Eastern or Byzantine empire in 553. In 568 came the Lombards, who soon held the greater part of the peninsula, and were only crushed by the Franks, whose king, Charlemagne, was crowned emperor of the Romans by the pope in 800. In 962 Italy became a part of the Holy Roman Empire as reconstituted under the German Otto; and henceforward Italy was the scene of constant struggles between German rivals for the imperial power, between the emperors and the popes, the Ghibellines and the Guelphs, the various cities against the emperor, the pope, or one another. With the fall of the Hohenstaufens in 1254 the emperors ceased from troubling, and the popes became the chief power in Italy, their faction being also dominant in the most powerful of the cities, many of which had now fallen under the power of hereditary tyrants. In the 14th and 15th centuries Italy was parcelled out amongst five powers—the kingdom of Naples (first under Angevin, then under Spanish kings), the duchy of Milan, the republics of Florence and Venice, and the papacy. From the time of Charles V. Spanish-Austrian influence became dominant, Charles being able to leave both Naples and Milan to his son, Philip II. In the war of the Spanish succession the little state of Savoy so skilfully used its power (against the French) as to secure the island of Sardinia and the rank of kingdom. After the treaty of Aix-la-Chapelle (1748), the House of Savoy held Sardinia and Piedmont; the Austrians, Milan and Tuscany; the Bourbons, Naples, Sicily (the kingdom of 'the two Sicilies'), and Parma; the papal power held the centre of the peninsula; Venice survived as a republic till 1797; and Modena and Genoa were under the protection of France, to which power the Genoese now gave Corsica. Despotism was everywhere universal. After the French Revolution numerous republics were established under French influence; in 1805 Napoleon, now emperor, was crowned king of Italy. The Congress of Vienna restored the map of Italy pretty much to its old appearance, but even more power was given to Austria, Venice as well as Lombardy being now Austrian (though Genoa fell to Sardinia). Austrian despotism pressed heavily on the rising spirit of independence; the revolutionary movement of 1849 had but momentary success, but henceforth Sardinia was regarded as the only possible nucleus of an Italian kingdom. The war of 1859 between France and Austria ended in the cession of Lombardy and part of Venetia (though the French had to get Savoy and Nice); soon after the central Italian states voted themselves into the kingdom; and southern Italy welcomed Garibaldi and his volunteers, and for ever expelled the Bourbons. In 1866 the Austro-Prussian war gave Venice to Italy; during the Franco-German war of 1870 Victor Emmanuel entered Rome, henceforth the capital. The unification of the kingdom was now practically complete—Italy being no longer a 'mere geographical expression;' the republic of San Marino (q.v.) is independent; and ardent Italian patriots regard the southern Tyrol, Trieste, Istria, the Dalmatian coast, and Nice and Savoy as 'Italia irredenta,' whose incorporation with the kingdom is yet to be worked for.

See works on Italy by Gallenga (1875 and 1887), De Amicis (1883), W. D. Howells (1883), Laveleye (1886), Orsi (1900), Bolton King and Okey (1901), and Deecke (trans. 1904); for history, see Hodgkin's *Italy and her Invaders;* Bryce's *Holy Roman Empire;* Ranke's *History of the Popes;* Symonds's *Renaissance in Italy;* besides small manuals, such as Hunt's (new ed. 1883).

Itasca Lake. See MISSISSIPPI.

Itchen, a Hampshire river, flowing 25 miles SSW. past Winchester to Southampton Water.

Ith'aca, now THIAKI, one of the Ionian Islands (q.v.), the smallest of them except Paxo, is a long, narrow strip of land off the north-east of Cephalonia, 20 miles W. of the Greek mainland. The surface is mountainous (2648 feet), the coast steep

and rocky. Area, 37 sq. m. Ithaca was Ulysses' home. Pop. 11,050. Chief town, Vathy. See Schliemann's *Ithaka* (1869).

Ithaca, capital of Tompkins county, New York, picturesquely situated on Cayuga Lake, 35 miles NNE. of Elmira by rail. It has a large trade in coal, and many foundries, mills, and factories, and is the seat of Cornell unsectarian male and female university, founded in 1868 by Ezra Cornell. Pop. 14,079.

Itzehoe, a town of Holstein, 40 miles NW. of Hamburg by rail. It manufactures sugar, cotton, machinery, chicory, and soap. Pop. 16,772. The original castle (Eselsfieth), around which Etzehoe or Itzehoe gradually arose, was built by Charlemagne in 809.

Ivano'vo, or Ivanovo-Voznesensk, the 'Manchester' of Russia, in Vladimir government, 210 miles by rail NE. of Moscow. It has been the centre of the Russian cotton industry since about 1750. Pop. 54,000.

Ivel, a river of Herts and Bedfordshire, flowing 30 miles N. to the Ouse at Tempsford.

Ivinghoe, a market-town of Bucks, 2 miles SSE. of Cheddington Junction, and 38 NW. of London. Ivinghoe Beacon (904 feet) is one of the Chiltern Hills. Pop. of parish, 1077.

Iv'iza, or Ibiza (anc. *Ebŭsus*), the most southwesterly of the Balearic Isles (q.v.), 56 miles from the Spanish mainland. It is mountainous, and its coasts are indented. Area, 228 sq. m.; pop. 21,568. Iviza, the chief town, is fortified, and a bishop's see. Pop. 6400.

Ivory Coast, a part of the northern coast of the Gulf of Guinea, West Africa, embraces the districts between Cape Palmas and the river Assini. Its western portion belongs to Liberia; its eastern, now counted as part of the Gold Coast, is shared between Britain and France.

Ivre'a, a town of Piedmont, 38 miles NNE. of Turin by rail. Its cathedral is on the site of a temple to Apollo. Pop. 9883.

Ivry, a village (pop. 1074) in the French dep. of Eure, 16 miles NNW. of Dreux. Here, 14th March 1590, Henry of Navarre defeated the League.—Ivry-sur-Seine, a SE. suburb of Paris, on the Seine. Pop. 28,357.

Ivybridge, a Devon village, 11 miles E. by N. of Plymouth. It has paper-mills. Pop. 1582.

Ixworth, a Suffolk village, 6½ miles NE. of Bury St Edmunds. Pop. of parish, 951.

Jabalpur, or Jubbulpore, a town of the Central Provinces, India, 228 miles by rail SW. of Allahabad. An important railway junction, it has a trade worth about £2,000,000 annually, and manufactures cotton, tents, and carpets. Pop. (1877) 55,188; (1901) 89,708.

Jablonoi. See Yablonoi.

Jackson, (1) a flourishing city of Michigan, capital of Jackson county, on the Grand River, 76 miles W. of Detroit, at the intersection of several railways. It has flour, paper, and planing-mills; foundries and machine-shops; locomotive-works; breweries; and manufactures of furniture, carriages, wagons, boilers and machinery, farming implements, corsets, soap, &c., besides boots and shoes at the state-prison. Close by are several mines of bituminous coal. Jackson was settled in 1830, and became a city in 1857. Pop. (1860) 4799; (1870) 11,447; (1900) 25,180.—(2) Capital of the state of Mississippi, on Pearl River, 45 miles E. of Vicksburg by rail, with trade in cotton. Pop. 7920.—(3) Capital of Madison county, Tennessee, on the South Fork of the Forked Deer River, 107 miles by rail S. by E. of Cairo, Illinois. It is the seat of the Southwestern Baptist University (1874), and has a cotton market, planing and other mills, and railway shops. Pop. 15,000.

Jacksonville, (1) capital of Duval county, Florida, on the St John's River, 23 miles from its mouth. The meeting-place of five railways, it is 165 miles by rail E. of Tallahassee. It exports lumber, cotton, moss, oranges, &c. Pop. (1880) 7650; (1900) 28,429.—(2) Capital of Morgan county, Illinois, 34 miles W. by S. of Springfield. Here are the Illinois College (Congregational; founded 1830), a Methodist female college (1847), a conservatory of music, &c.; and here, too, are state asylums for the blind, deaf and dumb, and insane. There are manufactures of woollens, paper, machinery, boilers, lumber, furniture, confectionery, &c. Pop. 16,500.

Jacobabad, a town of Upper Sind, 26 miles NW. of Shikarpur by rail, near the Beluchi frontier. Here is the tomb of General John Jacob, commandant of the Sind Horse, who in 1847 founded the place. Pop. 12,352.

Jaen (*Hâ-en'*), the capital of a Spanish province, on a tributary of the Guadalquivir, 50 miles N. by W. of Granada. Its Moorish walls are fast crumbling away; its cathedral dates from 1532. Population, 25,600. By the Moors the town was called 'Jaen of the Silk,' from its former silk manufactures. The province (area, 5184 sq. m.; pop. 475,000), part of Andalusia (q.v.), lies in the Guadalquivir's basin, and is mountainous. In 1246 it was reconquered from the Moors by Ferdinand III. of Castile.

Jaffa, or Joppa, a town on the sea-coast of Syria, 37 miles NW. of Jerusalem—57 by a railway opened in 1893. Under Constantine the place, which had been destroyed by Vespasian, became a bishop's see, and, as the Crusaders' great landing-place, was taken and retaken by Christian and Moslem. In 1799 Napoleon stormed it; in 1832 it was taken by Mehemet Ali, and restored to the Turks by British help. The open roadstead, the ancient walls, the yellow sand-dunes, and the orange gardens are now the chief features of the brown town on its hillock. The export of oranges to the United Kingdom more than tripled in the last three decades of the 19th century, and the population grew from 15,000 to about 40,000. There is a German colony (1869) of 300 persons near.

Jaffnapatam', a seaport on an island at the north end of Ceylon. Pop. 37,000.

Jägerndorf (*Yay-gern-dorf*, *g* hard), a town of Austrian Silesia, 34 miles by rail W. of Ratibor. It manufactures woollens, linen, organs, &c. Pop. 14,792.

Jahde, or Jade (*Yâ-deh*), a bay of Oldenburg, now Prussian, with the naval station of Wilhelmshaven (q.v.).

Jaipur. See Jeypore.

Jaisalmer, or Jeysulmere, capital of a native Indian state in Rajputana, stands on the edge of the Indian Desert, and was founded in 1156.

It has several Jain temples. Pop. 10,965.—Area of state, 16,039 sq. m.; pop. 115,701.

Jakutsk. See YAKUTSK.

Jalalpur, a town of the Punjab, 8 miles N. of Gujrat, with shawl manufactures. Pop. 12,884.

Jalandhar. See JULLUNDER.

Jalapa (*Halá'pa*), capital of the Mexican state of Vera Cruz, 60 miles by rail NW. of Vera Cruz City, and 4330 feet above the sea. Pop. 19,000.

Jalisco (*Halis'co*), a state of Mexico, on the Pacific, with an area of 38,840 sq. m. Population, over 1,160,000. The capital is Guadalajara (q.v.).

Jalna, a town and British cantonment in the Nizam's dominions, India, 210 miles NE. of Bombay. Pop. 16,191.

Jaluit, chief town of the Marshall Islands (q.v.).

Jamaica, aboriginally *Xaymaca* ('Land of Springs'), by far the most important of the British West Indian Islands, is 90 miles S. of Cuba, and stretches between 17° 43′—18° 32′ N. lat., and 76° 11′—78° 20′ W. long. It is divided into three counties, Surrey, Middlesex, and Cornwall; its area is 4193 sq. m., or a little more than the three English counties of the same names with Hampshire thrown in. The greatest length is 144 miles; the greatest breadth, 50 miles. Turk's and Caicos Islands, as well as the three Cayman Islands, are dependencies. The island is traversed from east to west by the Blue Mountains, which rise to 7400 feet. From this range nearly 120 streams descend to the coasts, but they are not navigable, except Black River (30 miles for small craft). Incomparably the best of many fine harbours is that of Kingston (q.v.). Jamaica is believed to be rich in minerals, but none are wrought. The chief towns are Kingston (the capital) and Spanish Town (the former capital), on the south-east of the island; and Montego Bay, Falmouth, and Port Maria, on the north. Port Royal, at the western extremity of the spit of sand that shuts in Kingston harbour on the south, previous to the great earthquake of 1692 was one of the chief cities in the West Indies, but is now a place of only 1200 inhabitants, and of little importance. The climate varies considerably, falling on an average 1° for every 300 feet in altitude, and at Kingston ranging between 70° during the night and 90° during the day; but the heat is tempered by the sea-breezes. On the whole, the island is very healthy; invalids even come from the United States to enjoy the salubrious air of the interior. There are two rainy seasons, one in spring and the other in summer. In the latter the rains are exceptionally heavy; violent thunder-storms are frequent, and hurricanes sometimes occur. Enormous damage was done by cyclones in 1880 and 1893.

The vegetation is very luxuriant. The primeval woods are rapidly disappearing; yet there are still many valuable trees, such as mahogany, logwood, lignum vitæ, ebony, cocoa-nut and other palms, cactuses, &c. Tropical fruits are grown in great variety, also many of the fruits of more temperate climes. Spices, dye-woods, medicinal plants, and food plants, such as ginger, cochineal, castor-oil, arrowroot, maize, vanilla, pimento (allspice), &c., are extensively grown. Guinea grass and pasture land occupy the greater portion of the north and west of the island. The mongoose, imported to prey on the rats that infested the sugar estates, has, after exterminating them, become a plague, and has nearly extirpated lizards, harmless snakes, and small birds, so that insect pests (especially the troublesome ticks) abound. The negroes, who are mostly small holders, are the chief growers of fruit. The exports, which consist chiefly of dye-woods, fruits (oranges, lemons, bananas, cocoa-nuts, &c.), sugar and rum, coffee, ginger, pimento, and cocoa, range between 1½ and 2 millions annually; as also do the imports, consisting of foodstuffs, clothing, hardware, liquors, coals, building materials, &c. About 40 per cent. of the trade is with the United Kingdom, and 43 per cent. with the United States. Since 1850 the white inhabitants have increased far less rapidly in numbers than the black and coloured population. In 1861 the total pop. was 441,255 (13,816 whites); in 1871, 506,154 (13,101 whites); in 1881, 580,804 (14,432 whites); and in 1904, 795,600, of whom over 700,000 are black or coloured, about 15,000 whites, about 11,000 East Indian coolies, and a few Chinese. About 35,000 belong to the Church of England, 33,000 are Baptists, 25,000 Methodists, 12,000 Presbyterians, 5000 Roman Catholics, &c.—children being excluded. Besides nearly 720 government schools, with over 80,000 pupils, there are three government training-colleges for teachers. Besides a British garrison, there are volunteers and a semi-military police force.

Jamaica was discovered by Columbus in 1494, and occupied by the Spaniards in 1509. The original inhabitants were peace-loving Indians (not Caribs); but they were practically extinct in 1655, when the island was conquered by the English, to whom it was ceded in 1670. The place of the native Indians was taken by negro slaves, imported by the Spaniards. During the 18th century more than half a million slaves were brought over from Africa. Under English rule the chief events were frequent rebellions of the Maroons, a community of runaway slaves; in 1831–32, a negro insurrection; on August 1, 1834, the emancipation of the slaves, Jamaica receiving £6,161,927 as compensation; the failure of the experiment; and in 1865 the rebellion of the negroes and massacre of twenty-three whites, suppressed by Governor Eyre. Under the constitution of 1866, the island is governed as a crown-colony. See the history by Gardner (1873) and the annual *Handbook*.

Jambusar, a town in the presidency of Bombay, 30 miles SW. of Baroda. Pop. 11,479.

James River is formed by the union of the Jackson and Cowpasture streams in the west of Virginia, and has its entire course of 450 miles in that state. It flows east-south-eastward, passing Lynchburgh and Richmond; and, widening into an estuary for the last 60 miles, falls into the Atlantic at the southern extremity of Chesapeake Bay. It is navigable for large steamers to City Point, at the mouth of the Appomattox. It was at Jamestown, now a ruined village on the north bank of this river, that the first English settlement in America was formed (1607).

James's Bay, the southerly arm of Hudson Bay, 250 miles long by 175 wide, beset with islands.

Jamestown, a town of Dumbartonshire, on the Leven's left bank, ¾ mile N. of Bonhill. It has large print-works. Pop. 2100.

Jamestown, a town of New York, on Chautauqua Lake, 70 miles S. by W. of Buffalo by rail. It manufactures woollens and alpacas, pianos, furniture, &c. Population, about 25,000. See also JAMES RIVER, ST HELENA.

Jammu (*Jummoo*), capital of a province of Cashmere, on an affluent of the Chenab. Pop. 36,200.

Jamnotri, hot springs (194·7° F.) near the Jumna's source, in northern India, in 30° 59′ N. lat. and 78° 35′ E. long., 10,849 feet above the sea. They are overhung by the three Jamnotri Peaks (20,100 to 21,150 feet).

Janesville, a city of Wisconsin, on Rock River, 91 miles NW. of Chicago. The river's water-power is utilised in flour, cotton, and woollen mills. Pop. 15,836.

Janina (*Yanina*), or JOANNINA, capital of a vilayet in Turkish Albania, stands in a striking situation on a lake (12 miles long by 3 broad), 50 miles inland from the shore opposite Corfu. Here is the ruined castle of Ali Pasha. Gold lace is manufactured, as well as morocco leather, silks, and linens. The pop. has sunk from 40,000 in 1800 to 26,000, three-fourths of them Greeks. The town has been Turkish since 1430.

Jan Mayen Land, a volcanic island in the Arctic Ocean, named after its Dutch discoverer in 1611. It lies between Iceland and Spitzbergen, and is 35 miles long, with an extinct volcano (8350 feet) in it.

Japan, an island empire off the east coast of Asia, separated from Corea and Siberia by the Sea of Japan. Japan Proper comprises four large islands—Honshū (the Japanese mainland), Shikoku, Kyūshū, and Yezo—with an area of 147,655 sq. miles (not very much larger than the British Islands), and a pop. in 1903 of 46,732,841 (35,460,507 in Honshū alone). The empire of Japan includes also nearly 4000 small islands, among them the Liu Kiu ('Loo Choo') and Kurile groups; Formosa and the Pescadores, ceded by China in 1895 (area, 13,500 sq. m.; pop. close on 3,000,000); and the southern half of Saghalien (q.v.), or Sakhalin, restored by Russia in 1905 (area, 10,000 sq. m.; pop. 15,000). In 1905 some 160,000 Japanese were resident in foreign countries; and 14,000 foreigners were resident in Japan. The name Japan is a corruption of Marco Polo's *Zipangu*, itself a corruption of the Chinese pronunciation of the native name *Nihon* or *Nippon* ('Land of the Rising Sun').

The islands of Japan appear to be the highest portions of a huge chain of mountains which rises from a deep ocean bed. This chain, though dotted with volcanoes, is not therefore itself of volcanic origin. Earthquakes occur very frequently in Japan, although the western slope is exempt. Japan is one of the most mountainous countries in the world. Its plains and valleys with their foliage of surpassing richness, its forest-clad heights, its alpine peaks towering in grandeur above ravines noisy with waterfalls, its foam-fringed headlands, give it a claim to be considered one of the fairest portions of the earth. The sublime cone of the sacred Fuji-san (Fusiyama), a rather dormant volcano, rises to a height of 12,365 feet; and there are six peaks between 8000 and 10,000 feet (one an active volcano) in Honshū. The three other large islands also abound in mountains. Yezo has eight active volcanoes. Throughout the empire there are many solfataras and sulphurous springs. The plains, most of the valleys, and many of the lower hills are highly cultivated. Most of the countless rivers are too impetuous for navigation. The harbours are spacious and deep, but not numerous.

The different parts of Japan vary widely in climatic conditions. At Tōkyō (Yedo) we find the annual average temperature to be 57·7° F., while in winter the mercury occasionally falls to 16·2°, and in summer it may rise to 96°; at Nagasaki the lowest winter temperature is 23·2°; at Hakodaté the annual extremes are 2° and 84°. The ocean current known as the Kuroshiwo ('Black Stream') modifies the climate of the south-east coast; thus, while snow seldom lies more than 5 inches deep at Tōkyō, in the upper valleys of Kaga, near the west coast, less than 1° farther north, 18 and 20 feet are common. The rainfall, which varies much in different years, is on an average 145 inches. No month passes without rain, but it is most plentiful in summer. The climate, though somewhat relaxing to Europeans, is fairly salubrious, highly so in the mountains. In Japan the vegetation of the tropics is strangely intermingled with that of the temperate or frigid zone; the tree-fern, bamboo, banana, and palm grow side by side with the pine, oak, and beech, and conifers in great variety. The camellia, the Paulownia, and the chrysanthemum are indigenous. Wild animals are not numerous, but bears, wild boars, monkeys, deer, small foxes, stoats, and squirrels occur; and there are several varieties of the seal and the whale. The Japanese cat has only a stump of a tail. There are numerous water-birds; land-birds are less plentiful. Edible fishes, including salmon, are abundant, and insect life is specially varied. Agriculture is the chief occupation of the Japanese, and they are very careful farmers, thoroughly understanding the rotation of crops. The soil is not naturally very fertile, being mostly derived from igneous rocks, but it is made productive by careful manuring, especially with night-soil from the villages and towns. Rice is the staple production, while barley, wheat, millet, buckwheat, maize, and many varieties of bean and pea are everywhere produced. The culture of tea, introduced from China in 770 A.D., is universal in the middle and south. Sericulture is on the increase, and cotton and hemp are also widely grown. Sugar, tobacco, and many kinds of fruit are grown. Gold, silver, copper, iron, lead, antimony, tin, sulphur, coal, basalt, felspar, greenstones, granites (red and gray), rock-crystal, agate, carnelian, amber, scoriæ and pumice-stone, talc, alum, &c. are found. Good building-stone is scarce.

With the exception of the wilds of Yezo, peopled by 12,000 Ainos, the Japanese islands are inhabited by a single race speaking various dialects of the same tongue. Probably the Japanese are the issue of the intermarriage of victorious Tartar settlers, who entered Japan from the Corean peninsula, with Malays in the south and Ainos in the main island. There are two distinct types of Japanese face, that which is found in art designs being the aristocratic and rarer type. It is distinguished by an oval head and face, a high forehead, a curved nose, narrow and slightly oblique eyes. The complexion is pallid or slightly olive, the face of the men almost hairless, and the expression demure. The commoner and vulgar type, almost universal in the northern districts, is pudding-faced, full-eyed, flat-nosed, and good-humoured in expression. The women soon lose any pretensions to good looks; but the girls, with their rosy cheeks, fascinating manners, and exquisitely tasteful dress, are particularly attractive, and the children are bright and comely—indeed Japan is the paradise of children. The Japanese have many excellent qualities: they are kindly, courteous, law-abiding, cleanly in their habits, frugal, and have a high sense of personal honour. Nowhere are good manners and artistic culture so widespread. On the other hand, the people are deficient in moral earnestness and courage. Although the Japanese are a singularly united

people, yet the nation divides itself into two portions, the governing and the governed. The former, representatives of the military class and numbering some 4000 families, are high-spirited and masterful; the rest of the nation are submissive and timid. Japanese towns are very subject to conflagrations, the houses being slight constructions of wood. Many of the customs once characteristic of Japan have, since the abolition of feudalism, become obsolete. Among these is *seppuku* or *hara-kiri*, for long a legalised mode of suicide.

The Japanese language belongs structurally, like Corean and Manchurian, to the Altaic family. The introduction of Chinese civilisation in the 6th century A.D. was followed by a wholesale absorption of Chinese words and characters. There are two prevailing religions in Japan—*Shintô*, the indigenous faith; and Buddhism, introduced from China in 552, and still the dominant religion among the people. Francis Xavier introduced Christianity in 1549, but his work was extinguished in blood. The Roman Catholic Church and the Greek Church both carry on a flourishing work in Japan. Of the Protestant missions those of the Presbyterians and the American Congregationalists are the most flourishing; American Methodists, Baptists, Anglicans, and others are also actively at work; and there are some 20,000 converts.

Education is general and compulsory. There is a complete system of local elementary, middle, and normal schools, and two universities at Tôkyô and Kyôto. Daily newspapers abound. The Japanese army was organised after European methods in the years 1868–72. Military service is obligatory from 17 to 40 years of age The army on a peace footing comprises 167,630 officers and men, with 632,000 reserves. In 1905 there were over 500,000 men in Manchuria. During the wars of 1895 and 1904–5 the Japanese sanitary and surgical methods and appliances were scientifically perfect. The navy consists of 6 battle-ships, 8 armoured cruisers, 15 protected cruisers, besides numerous torpedo-vessels. The total mileage of railways open is 4650 miles. In the mechanical arts the Japanese have attained to great excellence, especially in metallurgy, and in the manufacture of porcelain, lacquer ware, and silk fabrics; in some of these departments works of art are produced so exquisite in design and execution as to excel the best products of Europe. As to the cotton manufacture, between 1890 and 1900 the import of raw cotton increased sixfold, and in 1902 there were over eighty prosperous cotton-factories. The chief ports are Yokohama, Kôbe, Osaka, Nagasaki, and Hakodate. The commercial development of Japan has of late been marvellous. The total value of exports rose from £10,300,000 in 1887 to £28,950,000 in 1903; that of imports, which was £10,500,000 in 1887, was £31,720,000 in 1903. In respect of volume of trade with Japan, Britain (including British possessions) comes first, then the United States, then China. The imports from Great Britain vary from £5,000,000 to over £9,000,000 (from British India, from 5 to 7 millions); the exports to Britain from £1,500,000 to £2,275,000. From Great Britain come chiefly cotton and woollen goods, iron and machinery, and chemicals. The imports from the United States average about £4,700,000, and the exports thither £8,200,000. The staple exports of Japan are raw and manufactured silk, cotton yarn, coal, copper, tea, matting, earthenware, rice, and straw-plaiting. In 1903 over 9000 vessels of 13,570,000 tons entered the ports, of which 1777 vessels of 4,758,534 tons were British. The government is a hereditary monarchy. The imperial diet consists of two Houses—a House of Peers and a House of Representatives. The ordinary revenue varies from £25,700,000 to £29,700,000, and generally covers the expenditure. The public debt in 1904 was £56,500,000.

Before 500 A.D. Japanese history is mere legend. Buddhism was introduced from Corea in 552; and next century Chinese civilisation strongly influenced Japan. About the end of the 12th century, the weakness of the emperor led the Generalissimo (*Shogun*) to assume a large share of the supreme power, and he handed it on to his descendants. Hence the fable current in Europe that Japan had a Mikado or spiritual emperor who reigned but did not govern, and a 'Tycoon' (Shogun) who did govern though he paid homage to the nominal sovereign. The military caste was now dominant until the reign of Iyeyasu (*c.* 1600), whose descendants reigned till 1868. Total exclusion of foreigners was the rule till 1543, when the Portuguese effected a settlement; but in 1624 all foreigners were expelled and Christianity interdicted. The policy of isolation was rigidly pursued from 1638 till 1853, when the U.S. Commodore Perry steamed into a Japanese harbour, and extorted a treaty from the frightened Shogun. Soon sixteen other nations had followed the American example, and free ports were opened to foreign commerce. In 1867–68, a sharp civil war broke the feudal power of the daimios or territorial magnates, suppressed the Shogunate, and unified the authority under the Mikado. In a very few years Japanese students took a place of their own in western science; and how thoroughly the Japanese had laid to heart what they had learned from Europe in the military and naval arts was partially revealed by the swift and complete success of the war with China about Corea (q.v.) in 1894, and more impressively by their amazing triumph over the great military empire of Europe in 1904–5, when they defeated the Russians in a succession of bloody battles, took Port Arthur, and utterly destroyed the Russian fleet—so that by the peace the Russians not merely evacuated Manchuria, but recognised Japan's 'preponderance' in Corea, and gave up to Japan the 'leases' of Port Arthur and the Liao-tung peninsula Russia had wrested from China. In 1905, also, Britain concluded a treaty with Japan, more thorough-going than that of 1902, for mutual support in eastern Asia and India against unprovoked attack, and for the maintenance of the integrity of China and of the 'open door' there.

See the works of Kaempfer (1727), Siebold (1851), Griffis (New York, 1876), Rein (Eng. trans. 1884), Sir E. Arnold (1891), Hearn (1894, 1904), Brinkley (8 vols. 1901–4), Murray (1904); *Japan by the Japanese*, edited by Stead (1904); and books by Okakura, Iyenaga, and other Japanese authors.

Jarnac, a village in the French dep. of Charente, 23 miles by rail W. of Angoulême. Here in 1569 the Catholics defeated the Huguenots.

Jaroslav (*Yaroslaf*), capital of a Russian government on the Volga, 173 miles NE. of Moscow. Pop. 70,600.—The government has an area of 13,751 sq. m. and a pop. of 1,075,000.

Jarrow, a municipal borough and port of Durham, on the Tyne, 3 miles by rail SW. of South Shields and 7 E. of Newcastle. Its growth from a small colliery village has been due to the con-

struction of its docks (since 1859), and to the establishment of Palmer and Co.'s iron-shipbuilding and marine engine works, blast-furnaces, iron-foundries, gun-factory, &c., which together employ upwards of 7000 hands. Paper and chemicals are also manufactured, and coal is shipped in large quantities. At Jarrow in 682 Benedict Biscop founded the Benedictine monastery with which the name of Bede is inseparably associated. The chancel of the parish church, reconstructed in the 11th century, retains portions of Benedict's work; the nave was rebuilt in 1783 and again in 1866. Bede's chair is still preserved in the church. Jarrow was made a municipality in 1875. Pop. (1871) 18,115; (1901) 34,294. See Jewitt's *Jarrow Church* (1864).

Jashpur, a native state of Chutia Nagpur, in Bengal. Area, 1963 sq. m.; pop. 90,240.

Jassy (*Yássy*), the capital of Moldavia, the northern division of Roumania, stands 5 miles W. of the Pruth, 205 by rail NW. of Odessa, and 289 NNE. of Bucharest. It was almost destroyed by fire in 1827, and, as rebuilt, has broad streets paved with asphalt, and houses mostly one-storied and of wood. There are more than forty Greek churches and close upon sixty Jewish synagogues. The most noticeable secular buildings are the palaces of the boyars or nobles. There is a small university. There is an active trade in corn, spirits, and wine, mostly with Galatz. Pop. 80,000. Jassy was the residence of the Moldavian princes from 1565.

Jaszbereny, a town of Hungary, 39 miles E. of Budapest. Pop. 24,331.

Jativa, or Xativa, San Felipe de (*Há'teeva*), a town of Spain, 35 miles by rail SSW. of Valencia. Here was born the painter Ribera (Lo Spagnoletto) in 1588. It was also the home of the notorious Borgia (Borja) family. Pop. 15,071.

Jauer (*Yow'er*), a town of Prussian Silesia, on the Neisse, 13 miles by rail S. of Liegnitz. It is famous for its sausages and its weekly corn-market, held regularly since 1404. Pop. 13,178.

Jaura, the capital of a native state of Central India. Pop. 23,844.

Jaunpur, the capital of a district in the North-west Provinces of India, on the Gumti, here crossed by a bridge (1573) 712 feet long. The former capital of a Mohammedan kingdom, it has several splendid architectural monuments, including Ibrahim's baths (1420), mosques, and ruins of mosques and of the fort. Pop. 42,819.

Java (Djåwå), an island of the Dutch East Indies, the seat of the colonial government, separated from Borneo by the Sea of Java, and from Sumatra by the Straits of Sunda. It extends almost due west and east, and is crossed by 110° E. long. and 7° S. lat. Its length is 600 miles, its breadth 40 to 125 miles, and its area 49,000 sq. m. (excluding Madura, q.v.). From end to end of the island (most probably corresponding to a volcanic line of fissure) there is a mountain-chain, Gunung Kendang, attaining 12,000 feet; of forty-three volcanoes, several are still active. The climate is rather hot and unhealthy on the coast, but pleasant in the hills. The thermometer seldom indicates more than 95° F., the nights, especially in the highlands, are cool. The population of Java has rapidly increased; in 1850 it was 9,570,000, and in 1900 (with Madura) it was 28,746,638, including 50,000 Europeans (and half-castes), 300,000 Chinese, 17,000 Arabs, and 3500 Hindus. The natives belong to the Malay race. The Madurese, in the eastern part of the island, the Sundanese, living in the western part, and the Javanese proper differ in physique and in language. Most of them are Mohammedans, at least in name. There are about 12,000 native Christians. One of the chief vices is opium-smoking, which yields about £1,000,000 a year for licenses and profit on the import.

The chief wealth of Java consists in its luxuriant vegetation. The fauna is not very rich: tigers, rhinoceros, deer, and wild swine are types; only a few birds are conspicuous for their plumage, and hardly any are distinguished for their song. Several species of serpents (some venomous) and crocodiles are found on the island. A little gold is found; silver is scarce; salt (a government monopoly) is prepared from sea-water; and coal is worked in the Preanger, and marble in the Madiun residency. Under the 'culture-system,' established by the Dutch in 1830, the natives are compelled to cultivate part of the ground and plant staple articles on it, whilst the produce is delivered at a fixed price to the magazines of the government. The system though highly profitable, has always evoked disapproval as being unfair to the natives. Sugar, coffee, indigo, tea, and tobacco are planted for export. Rice is grown mainly for native consumption. The teak-forests belong exclusively to the government. Java may be considered the centre of the commerce and trade of a great part of the Dutch East Indies. The countries which trade most extensively with Java are Holland, the Straits Settlements, and Great Britain. The chief imports are cotton and linen goods, wine and spirits, provisions, machinery, railway-plant, &c. There are 1120 miles of railway, and an extensive telegraphic system. The island is divided into twenty-one residencies—two of which (Surakarta and Jokjakarta) are under native princes. Madura constitutes a twenty-second residency.

The earliest historical references date back to the beginning of the 5th century A.D. About the year 800 the intercourse of the Hindus with the island appears to have become more important. Already by that time the Javanese had attained to a considerable degree of civilisation, and many antiquities were left by the early Hindu conquerors, especially in middle and eastern Java (Boro Budor, Brambanan, Dieng). There were three periods of Hindu ascendency—a period of Buddhism, a period of Sivaism, and a period of compromise. At the beginning of the 15th century Mohammedanism reached the island and quickly got a firm footing. At the end of the 16th century European merchant-adventurers established themselves in Java; whilst the Dutch rule dates from 1610. Then began a long, tough struggle with the natives, but Java was practically a Dutch possession by 1811 when, until 1817, the English occupied it in connection with the French war.

See the exhaustive work by Veth (in Dutch, 3 vols. 1875–78); the history by Sir Stamford Raffles (1817); Wallace's *Malay Archipelago* (new ed. 1894); the novel, *Max Havelaar* (trans. 1868), by 'Multatuli;' and books by Worsfold (1893), Scidmore (1898), and Clive Day (1904).

Jaworow (*Yá'vorov*), a town of Austrian Galicia, 30 miles WNW. of Lemberg, was the favourite residence of John Sobieski, king of Poland. Pop. 9959.

Jaxartes, now called Sihûn, or Syr-Daria (both *syr* and *daria* mean 'river'), a river of western Asia, which rises at an altitude of 12,000

feet, 30 miles S. of Lake Issik-kul, in the Tian-Shan Mountains. It is at first called the Jaak-tash, then the Taragai, and under the name of the Naryn it descends, through a wild narrow gorge, to the level of 6800 feet at Fort Narynsk, and flowing W. and SW. A little west of Khojend it breaks through another gorge; then turns suddenly to the north-west, and, retaining that direction for 850 navigable miles, finds its way into the Sea of Aral by a delta with three mouths. Its total length is 1500 miles; area of its drainage basin, 320,000 sq. m. Five centuries ago the Syr-Daria used to send off a south-western branch at Perovsk, which flowed into the Sea of Aral on its south-east side, not far from the mouth of the Amu-Daria. This branch is now lost in the sand. The Syr-Daria is the Nile of Turkestan. The people fertilise their valleys by its water, carried off in irrigation channels.

Jeantown, or Lochcarron, a Ross-shire village, on the N. shore of Loch Carron, 3½ miles SW. of Strathcarron station. Pop. 383.

Jed, a Roxburghshire stream, flowing 22 miles N. by E. to the Teviot, near Mounteviot House.

Jedburgh, the county town of Roxburghshire, is beautifully situated on Jed Water, 56 miles by a branch-line (by road 49) SE. of Edinburgh. Of its magnificent Augustinian abbey, founded by David I. in 1118–47, and finally spoiled by the English in 1544–45, the ruined church only remains. This, Norman to Second Pointed in style, is 235 feet long, and has a central tower 86 feet high. In 1823 a jail (now disused) was built on the site of the royal castle (razed 1409), where a skeleton appeared to Alexander III. at his marriage-feast (1285). Other memories has Jedburgh—of Mary Stuart and Prince Charles Edward, of Thomson, Burns, Scott, and Wordsworth, of Mary Somerville and Sir David Brewster. A Border town, it nurtured a warlike race, whose slogan, 'Jeddart's here!' was seldom long silent. Their chief weapon was the 'Jeddart axe,' a stout steel-headed pole, 4 feet long; and 'Jeddart justice' is still a byword for hanging first and trying afterwards. Jedburgh has been a royal burgh from time immemorial, and till 1885, with Haddington, &c., returned a member to parliament. Woollen goods have been manufactured here since 1728. Pop. (1841) 3277; (1901) 3136. See Watson's *Jedburgh Abbey* (2d ed. 1894).

Jeddah. See Jiddah.

Jefferson City, the capital (since 1826) of Missouri, on the Missouri River, 125 miles by rail W. of St Louis. It has a state-house, U.S. court-house, state armoury and penitentiary (1500 convicts), the Lincoln Institute for coloured students, flour-mills, &c. Pop. 9742.

Jeffersonville, a city of Indiana, on the Ohio River, opposite Louisville, Kentucky, with which it is connected by an iron railway bridge nearly a mile long. The falls of the river here are utilised in railway workshops, foundries, machine-shops, flour-mills, &c. There are also boat-yards, and hydraulic cement is manufactured in the vicinity. Pop. 10,766.

Jehlam. See Jhelum.

Jeisk, or Eisk, a town in the Russian province of Kuban (Caucasus), on a small bay at the east end of the Sea of Azov, 65 miles SW. of Azov. Founded in 1848, it has grown rapidly, exports corn, flax, and wool, and has cloth manufactures and tanneries. Pop. 38,288.

Jelalabad', a town of Afghanistan, near the Kabul River, about half-way between the Indian frontier fortress of Peshawur and the city of Kabul. Formerly a strong fortress itself, it is now a dirty village of 3000 inhabitants. It is interesting from its heroic defence by Sir R. Sale in 1841–42; in the war of 1878 it was held by the British until 1880.

Jelatom, or Elatma, a town of Russia, 170 miles ESE. of Moscow. Pop. 7560.

Jeletz, or Eletz, a town of Russia, 120 miles by rail ESE. of Orel. It exports wheat and flour, has a great trade in cattle, and manufactures leather, soap, candles, &c. Pop. 36,346.

Jellalabad. See Jelalabad.

Jemappes, a village in the Belgian province of Hainault, 3 miles by rail SW. of Mons. Here the French republicans under Dumouriez, on 6th November 1792, defeated the Austrians. The village stands on one of the richest Belgian coal-fields, and manufactures stoneware, glass, and chemicals. Pop. 12,722.

Jena (*Yay'na*), a town of Saxe-Weimar, at the Leutra's influx to the Saale, 14 miles by rail SE. of Weimar, and 31 NNE. of Saalfeld. It lies 518 feet above sea-level, engirt by steep chalk-hills, of which the Hausberg (1069 feet) is crowned by the old Fuchsturm, and the Forstberg by a tower in memory of the Jena students who fell in the Franco-German war. It is still a quaint old-world place, with its ducal *schloss*, the 'Black Bear' inn where Luther halted on his flight from the Wartburg, and a church whose steeple is 311 feet high. Goethe here wrote his *Hermann and Dorothea*, Schiller his *Wallenstein;* and the houses of these and of other illustrious residents were marked with tablets in 1858, on occasion of the tercentenary of the university, when, too, was erected a bronze statue of its founder, the Elector John Frederick of Saxony. He founded it in 1547–58 to take the place of Wittenberg as a seat of learning and evangelical doctrine; it attained its zenith in the days of Goethe's patron, Duke Karl August (1787–1806). To that period belong the names of Fichte, Schelling, Hegel, Schiller, the Schlegels, Voss, Fries, Krause, and Oken; to our own, of Hase and Haeckel. Jena now has 85 professors and lecturers, over 600 students, and a library of 200,000 volumes. In 1883 a memorial was erected of the Burschenschaft. Pop. (1875) 9020; (1900) 20,456. The battle of Jena is often applied as a collective name to two separate engagements fought on the same day, 14th October 1806—one at Auerstädt, 14 miles to the north; the other, on the heights round Jena, where Napoleon commanded in person. In both the Prussians were totally defeated.

Jenissei. See Yenisei.

Jeno'lan Caves, a series of vast limestone caverns (rivalling the Mammoth Caves of Kentucky), on the west side of the Blue Mountains, in New South Wales, 160 miles W. of Sydney. Discovered in 1841, they became in 1866 public property. See S. Cook's *Jenolan Caves* (1889).

Jerash. See Gerasa.

Jerba, a small island of Tunis, in the Gulf of Gabes, being separated from the mainland by a narrow channel. Area, 425 sq. m.; pop. 45,000.

Jerez. See Xeres.

Jericho, once one of the most flourishing cities of Palestine, two hours' journey westward from Jerusalem. It is now a shapeless ruin, with a miserable village, Rihâ or Arihâ, and excavations

into the green mounds have disclosed only sun-dried bricks.

Jersey, the chief of the Channel Islands (q.v.), 14 miles from the Norman coast, 133 from Southampton, 95 from Weymouth. Measuring 11 miles by 5½, it is 45 sq. m. in area, of which nearly two-thirds is cultivated. Pop. (1806) 22,855; (1851) 57,020; (1901) 52,796, of whom 29,000 were in the capital, St Helier. The land rises northward, culminating in Mount Mado (473 feet). On all sides are large open bays; Boulay on the north is capable of becoming a fine harbour; that of St Helier is dry at low-water. The rocks on the coasts have been eroded by the sea, which has left many caverns and fantastic pinnacles. About the south-east are numerous dangerous reefs. Between Jersey and the French shore the Ecrehos, Bœuffetins, and Minquiers indicate a former connection with the mainland. It is also noticeable that moles and toads are found in Jersey, as also in Alderney, while there are none in Guernsey. The chief staple is the potato, which comes into the London market a fortnight before that of the west of England. Consequently other cultivation has been much neglected, and the land greatly stimulated by artificial manures. The potato export is about 100,000 tons yearly, of a value of £350,000. The rearing of cattle is also lucrative; it is estimated that there are fifty-eight head of cattle to every 100 acres—nearly three times the ratio of the United Kingdom. The purity of the breed is maintained by careful official registration, and the stock fetches high prices from breeders in England and America. The number of cattle exported averages nearly 1600 head annually. The imports consist largely of potatoes and butcher-meat from France and England, as the island produces little food for its own consumption. The language of legislative and judicial business is French, though the people among themselves use either English or a form of the ancient Norman. The parish churches are old, but have lost many traces of their primitive architecture in frequent restorations. The royal court is a large but ill-lighted building containing a portrait of Marshal Conway, by Gainsborough. The character of the people is orderly and frugal, the deposits in the savings-bank exceeding £350,000. There is little pauperism and hardly any serious crime.

Jersey City, the second city of New Jersey, and capital of Hudson county, on the west bank of the Hudson River, opposite New York, of which it is, in fact, though in another state, an extension, and with which and Brooklyn it is connected by steam-ferries; a tunnel was commenced in 1874. Its site forms the broadest part of a peninsula bounded on the west by the Hackensack River and Newark Bay; on the south-east it extends along New York Bay. Jersey City is a busy but not a beautiful city. It is an important railway terminus, and is connected with Easton, Pennsylvania, by canal; and at its wharves many ocean-steamers receive and discharge their freight. It is thus the entrepôt of a large trade, especially in iron, coal, and agricultural produce. Its own manufactures are on a large scale, and include sugar, flour, iron and steel, zinc, boilers and machinery, locomotives, oils and chemicals, oakum, lumber, silk, watches, and jewellery, lead-pencils, tobacco, pottery, soap, beer, &c. The city has large abattoirs and stock-yards, and grain-elevators notable both for their size and efficiency. The site of Jersey City was formerly called Paulus Hoeck (Hook); the town received its present name and became a municipality in 1838. Pop. (1860) 29,226; (1890) 163,003; (1900) 206,433.

Jerusalem (in the form *Urusalem* on the Tel-el-Amarna tablets; *Yerushalaim*, in Hebrew 'dwelling of peace;' Moslem *El-Kuds*, 'the Holy'), regarded as a holy city alike by Jews, Christians, and Moslems, long the capital of Palestine, stands 37 miles SE. (57 by rail) of its port Jaffa, on the Mediterranean shore of Syria. It stands—from 2364 to 2582 feet above the sea-level—on the spurs of two hills surrounded and divided by two valleys, once deep, now partly or wholly filled up with rubbish. The Eastern Hill was originally a rounded top crowned with the 'threshing-floor of Araunah,' and the rock and cave, probably a sacred site from time immemorial. The Western Hill, higher than the other by more than a hundred feet, was also bounded by steep slopes. Either hill was therefore a strong hill-fortress.

The history of Jerusalem covers a period of about 3500 years. Of these, 500 at least are prehistoric; and of the 3000 years which remain, less than 500 show us Jerusalem independent, the capital of a free country, and the centre of a national religion. For 600 years longer the city was in the hands of the Israelites, but never wholly independent. Its name is found on an inscription 500 years at least before David (see also Gen. xiv. 18); it was besieged almost immediately after the death of Joshua, *c.* 1400 B.C.; it was again taken by David about 1046 B.C.; it was surrendered by Jehoiachin 597 B.C.; it was taken from Zedekiah 586 B.C., and wholly destroyed. Fifty years later (536 B.C.) the edict of Cyrus enabled the people to return; the temple was rebuilt; Ezra arrived 457 B.C., Nehemiah 445 B.C. For 500 years after this Jerusalem knew not a single generation of peace. Internal factions tore it to pieces; the city was the possession in turn of Persian, Macedonian, Syrian, Egyptian, and Roman. Under Antiochus the temple was consecrated to Zeus Olympios; and swine were sacrificed on the altars. But for the Maccabees, the religion of the Jews would have been abandoned and their nationality lost. The city was besieged, taken, and totally destroyed by Titus, 70 A.D. In the early centuries of Christianity the land was covered with monasteries, churches, and hermitages. The city contained the great group of churches of which the most splendid was Constantine's Church of the Holy Sepulchre. The Persians came 614 A.D., sacked the city, and destroyed all the churches. During Moslem rule (637–1099) the Mosque el-Aksa was built, Justinian's great church of St Mary furnishing the principal edifice; the Dome of the Rock was built; and, by order of the mad calif Hakém Bi Asur Illah, the Church of the Holy Sepulchre was again destroyed. The next period is that of the Latin kingdom (1099–1244). In the last period Jerusalem is again under the Moslems (since 1244). It was in 1517 that the Turkish sultan Selim took Jerusalem. The principal buildings and monuments for which the explorer of the modern city has to look are the first, second, and third walls of the great temple itself; the royal towers of Phasaelus, Hippicus, Psephinus, and Mariamne; the Tyropœon Bridge; Baris or Antonia; Ophel; the Tombs of the Kings; and certain pools. The town was carefully examined by Sir Charles Wilson in 1865; and excavations were conducted by Sir Charles Warren in 1867–70, Major Conder in 1871–76, Clermont Ganneau in 1874–75, the Russians, the French, and the Germans. The site of the

temple was apparently within the Haram area, which is defined by the ruins of its gigantic walls. There exists a long *catena* of evidence from the Bordeaux pilgrim of the 4th century to the present day, which leaves it impossible to doubt that the basilica erected by Constantine was on the site of the present Church of the Holy Sepulchre. The present city contains about 28,000 inhabitants, of whom half are Jews, a quarter Moslems, and the rest Christians of various denominations. There are three sects of Jews, the Sephardim, of Spanish origin; the Ashkenazim, of German or Polish origin, themselves divided into several sects; and the Karaites. The Christians consist of Greeks, Armenians, Georgians, Copts, Syrians, Abyssinians, Latins, and Protestants. Lying among not very fertile mountains, the city has but little commerce, and practically no manufactures, although there is of course trade in curios and 'antiquities,' real or other. Of late years the town has grown beyond its walls, the dull, uniform, windowless one-storied houses stretching on every side. The climate has been compared to that of the south of France. Snow sometimes falls in January and February; rains begin in October and continue to fall at intervals till April, when a cloudless sky begins and lasts until October. There are now banks and hotels; the railway from Jaffa was made in 1890–93; and the number of pilgrims and tourists has increased.

See De Vogüé's *Temple de Jérusalem;* Warren and Conder's *Jerusalem* (Palestine Exploration Fund, 1884); Mrs Oliphant's *Jerusalem* (1891).

Jervaulx (locally *Jarvis*), a place in the North Riding of Yorkshire, 3 miles SE. of Middleham, with remains of a Cistercian abbey (1156).

Jesmond. See NEWCASTLE.

Jessor, or KASBA, a town of Bengal, 74 miles NE. of Calcutta. Pop. 8495. Since the opening of the Central Bengal Railway, it has developed into a trading-mart.

Jeypore (*Jaipur*), a protected native state in Rajputana (q.v.), with an area of 14,465 sq. m., and a population of 2,700,000, chiefly Hindus. It came under British protection in 1818. The maharajah was eminently loyal during the Mutiny, and was rewarded with an extension of territory.—The capital, JEYPORE, is a walled city, 850 miles NW. of Calcutta and 149 NE. of Ajmere by rail. It is a handsome and regularly-built town, with the maharajah's palace in the centre, and is the most important commercial centre of Rajputana. It was founded as late as 1728; the ancient and now deserted capital, Amber, lies 5 miles to the NE. The commercial business of Jeypore is chiefly banking and exchange, with a capital engaged of over £7,000,000. In addition to the banks there are the maharajah's college, an industrial and economic museum, a school of art, an observatory, a mint, and the 'Mayo' Hospital, besides the beautiful Rám Newás Gardens (70 acres). Pop. 160,000.

Jhansi, a fortified town in Gwalior state, Central India (till 1861 in the British North-west Provinces). During the Mutiny of 1857 its native garrison murdered all the Europeans; next April it was recovered by Sir Hugh Rose. Pop., with British cantonment, 56,000.

Jhelum, JEHLAM, or BITASTA (hence anc. *Hydaspes*), one of the rivers of the Punjab, rises in the mountains of Cashmere. About 250 miles from its source it enters the plains, and, after a total course of 450 miles, joins the Chenab at Timmu. On its banks was fought the battle between Alexander the Great and Porus (326 B.C.).—JHELUM, headquarters of a district in the Punjab, on the Jhelum River. Pop. with cantonment, 25,580.

Jiboutil. See OBOCK.

Jiddah, or JEDDAH, a seaport of the Hedjaz, Arabia, stands on the Red Sea, 65 miles W. of Mecca. It is an unhealthy town, suffering greatly from want of water. As the port, however, of Mecca, it is the place of disembarkation for pilgrims bound for the holy city (46,953 in 1891). Besides this it has an active, though a decreasing, trade. The imports comprise corn, sugar, metals, earthenware, textiles, &c.; the exports, mother-of-pearl, hides, coffee, balsams, dates, carpets, &c. A quay and a quay-railway were built in 1889. Pop. 25,000.

Jihûn. See OXUS.

Jimena, or XIMENA, a town of Spain, 21 miles N. of Gibraltar, has some remarkable caves and the remains of a Moorish castle. Pop. 8677.

Joachimsthal (*Yo'aheemstâl*), a mining-town of Bohemia, at an altitude of 2400 feet, on the southern slopes of the Erzgebirge, 10 miles N. of Carlsbad. The mines yield still a little silver, and also nickel, bismuth, uranium. Pop. 7628.

Jock's Lodge, or PIERSHILL, a Midlothian village, 1¾ mile E. by N. of Edinburgh, with large cavalry barracks, dating from 1793.

Jodhpur, or MÁRWÁR, the largest in area of the Rajputana states, containing 37,445 sq. m.; and the second in pop. (about 2,000,000).—The capital is Jodhpur, founded in 1459; pop. 60,450.

Johanna. See COMORO ISLES.

Johannesburg, the chief town and mining centre of the Transvaal goldfields, is situated about 6000 feet above sea-level, 298 miles NE. of Kimberley, and 838 NE. of Capetown, being connected with both by rail (1892). In 1886 the Transvaal government proclaimed as goldfields certain farms on and around the now famous Reef of Witwatersrandt, 30 miles SSW. of the capital Pretoria. The progress of the place and the mining industry was steady and rapid. Fine banks, churches, hotels, club-houses, a magnificent stock exchange, and some handsome streets reflect the wealth of the town, though much of it consists of mean huts and shanties. The Transvaal Institute promises to become a university for the province. The climate is healthy, save for dust-storms; the supply of water is still imperfect. Johannesburg was largely the scene of the intrigues and struggles that led to the war of 1899–1902. It was occupied by Lord Roberts in May 1900. The British Association held some of its sittings here in 1905. Pop. (1905) 160,000 (84,000 whites).

Johannisberg, a village of Prussia, overlooking the Rhine, 13 miles WSW. of Wiesbaden. It is noteworthy chiefly for the castle (1732) of the Metternich family, and the famous vineyards (38 acres) on the castle hill, producing the choice *Johannisberger* white wine. Pop. 1316.

John o' Groat's House, in Caithness, 1¾ mile W. of Duncansbay Head, and 18 miles N. of Wick, was, according to tradition, an octagonal building with eight doors and windows and an eight-sided table within, built by John o' Groat to prevent dissensions as to precedence among the eight different branches of his family. Certain it is that between 1496 and 1525 there was one 'John o' Grot of Duncansbay, baillie to the Earl in those pairts,' and probably a Hollander. An outline on the turf marks the site of the house; and the neighbouring hotel (1876) has, appropri-

ately enough, an octagonal tower. 'Frae Maidenkirk to John o' Groat's' (Burns) is the Scottish equivalent of 'from Dan to Beersheba,' Maidenkirk being Kirkmaiden in the Mull of Galloway.

Johnshaven, a Kincardineshire fishing-village, 9¼ miles NNE. of Montrose. Pop. 987.

Johnston, formerly a town of Rhode Island, now forming part of Providence (q.v.).

Johnstone, a manufacturing town of Renfrewshire, on the Black Cart, 3½ miles W. by S. of Paisley. Founded in 1781, it contains a large flax-mill, cotton-mills, a paper-mill, foundries, and machine-shops. Pop. (1831) 5617; (1901) 10,502.

Johnstown, (1) capital of Fulton county, New York, on Cayadutta Creek, 48 miles WNW. of Albany. It has mills and large manufactories of gloves and mittens. Pop. 10,150.—(2) A town of Pennsylvania, on the Conemaugh River, 78 miles E. by S. of Pittsburgh by rail, with large iron and steel works, tanneries, and flour, planing, and woollen mills. Johnstown was overwhelmed by the bursting of a reservoir on 31st May 1889. Pop. (1880) 8380; (1890) 21,805; (1900) 35,936.

Johore, an independent state at the S. extremity of the Malay Peninsula. It is densely timbered, and rises into several mountain-peaks, the highest Mount Ophir (4186 feet). Area, 10,000 sq. m.; pop. 200,000, mostly Malays and Chinese. The capital is Johore, 15 miles NE. of Singapore.

Joigny (*Zhwan'yee*, anc. *Joviniacum*), an old walled town in the French dep. of Yonne, 90 miles by rail SE. of Paris, manufactures cloth, linen, and sporting rifles. Pop. 5271.

Joinville (*Zhwañveell*), a small town of 4000 inhabitants in the French dep. of Haute-Marne, 22 miles N. of Chaumont by rail.

Jokjakarta, a residency in the centre of Java. Area, 1191 sq. m.; pop. 500,000. The capital, Jokjakarta (pop. 58,000), has the sultan's palace and ruins of ancient temples.

Joliba. See NIGER.

Joliet, capital of Will county, Illinois, is on Des Plaines River, 40 miles SW. of Chicago by rail, and its water-power is increased by a canal from Lake Michigan. It has a state prison, manufactures flour, steel rails, wire, stoves, tools, boots, paper, tiles, cigars, &c. There are large quarries of limestone, and a coalfield in the neighbourhood. Pop. (1880) 11,657; (1900) 29,353.

Jönköping (*Yönchöping*), the capital of a Swedish *län* or county (area, 4468 sq. m.; pop. in 1892, 193,389), is beautifully situated at the south end of Lake Wetter, 115 miles by rail E. of Gothenburg. It is famous for its safety-matches. Paper, carpets, tobacco, &c. are also made. Pop. (1875) 13,142; (1900) 23,143.

Joplin, a town of Missouri, 167 miles by rail S. of Kansas City, with lead and zinc mines and smelting furnaces. Pop. 27,000.

Joppa. See JAFFA and PORTOBELLO.

Jordan ('descending'), the principal river of Palestine, forms a great valley stretching from north to south. The highest source is the Hasbany, which rises near the Druse town of Hasbeiya, on the west side of Mount Hermon; another spring is on the south side at Bânias (Paneas or Cæsarea Philippi). The Jordan flows south for over 100 miles, passing through the small Huleh Lake (The Waters of Merom) and the Lake of Tiberias (Sea of Galilee), and falls into the northern extremity of the Dead Sea (q.v.), 1292 feet below the Mediterranean. As the source is 1700 feet above the Mediterranean, the total fall is 3000 feet. The river, which varies much in breadth, from 30 to 50 yards, flows latterly in a sunken channel. Its banks of white marl are in some places flat, in others steep; in the north partly occupied by fields of barley, but barren below Jericho.

Jorullo (*Ho-rool'yo*), a volcanic mountain in the Mexican state of Michoacan, 4315 feet above sea-level, and 1640 feet above the plain on which it stands, 150 miles WSW. of Mexico City. It was thrown up one night, 29th September 1759, after several months of subterranean convulsions.

Josephstadt, an important Austrian fortress, stands at the confluence of the Mettau and the Elbe in Bohemia, 10½ miles N. by E. of Königgrätz. Pop. 6963.

Joyce's Country, a mountainous district in the north-west of the county of Galway.

Juan Fernandez, called also MAS-A-TIERRA ('nearer the mainland'), a rocky Chilian island in the Pacific Ocean, 420 miles W. of Valparaiso. It is 13 miles long and 4 broad, and is for the most part a series of rocky peaks of volcanic origin (the highest 3000 feet). The trees are mostly ferns. Horses, pigs, and goats run wild. The island was discovered by the Spaniard whose name it bears in 1563, and was frequently visited by buccaneers. Here Alexander Selkirk, a marooned privateer, a native of Largo, lived from 1704 to 1709. His story is supposed to have suggested the *Robinson Crusoe* of Defoe; though in the story Robinson's island is placed on the other side of South America, near the mouth of the Orinoco. Chili used the island as a penal settlement from 1819 to 1835. It is usually inhabited by a few Chilian sea-lion hunters; and in 1877 it was leased to a Swiss, who established a small colony there. See Mackenna, *Juan Fernandez* (Santiago, 1883).

Juba, or JUB, a great river of eastern Africa, which flows into the Indian Ocean at about 0° 5' S. lat., and whose mouth marks the northern boundary of the coast placed under British control by the agreement with Germany in 1890.

Jubbulpore. See JABALPUR.

Juby, CAPE, on the west coast of Africa, 100 miles south of the frontier of Morocco.

Judæa. See PALESTINE.

Juggernaut, or PURI, a town on the coast of Orissa, at the southern end of the delta of the Mahanadi, celebrated as one of the chief holy places in India. With a resident pop. of 50,000, it owes its reputation to a temple erected there in honour of Vishnu, and containing an idol of this Hindu god, called *Jagannâth* or *Juggernaut*, a corruption of the Sanskrit word *Jagannâtha*—i.e. Lord of the World. The first historical mention of him is in 318 A.D. The place, too, was long a sacred city of the Buddhists, the abode of the Golden Tooth of Buddha. The great festivals sometimes bring 100,000 pilgrims. The temple enclosure comprises 120 temples, the chief pagoda being that of Jagannâth, with a tower 192 feet high. There are twenty-four annual festivals in his honour, the chief being the car festival, when Jagannâth (who is armless) is dragged on his car (45 feet high, with sixteen wheels, each 7 feet in diameter) to his country-house. This is less than a mile distant from the temple, but the heavy sand extends the short journey to several days. The car festival has been falsely believed to be the occasion of numer-

ous cases of self-immolation, the frantic devotees throwing themselves before the wheels. See Sir W. W. Hunter's work on Orissa (1872).

Jujuy (*Hoo-hwee'*), the northernmost province of Argentina; area, 20,000 sq. m.; pop. 54,500.—The capital, JUJUY, on the San Francisco River, 44 miles N. of Salta, has a national college and sugar-refineries. Pop. 6000.

Julfa, a suburb of Ispahan (q.v.) in Persia.

Jülich (*Yü'lihh;* Roman *Juliacum;* Fr. *Juliers*), a town of Rhenish Prussia, on the Roer, 20 miles by rail NE. of Aix-la-Chapelle. Pop. 5234. Jülich was the capital of a duchy annexed in 1814 to Prussia.

Jullunder, or JÁLANDHAR, a very ancient city of the Punjab, stands in the Doab between the Sutlej and the Beas, on the railway between Umballa and Umritsar. Pop. 70,000.

Jumet, a busy place in the Belgian province of Hainault, near Charleroi, with ironworks, collieries, glass-works, &c. Pop. 26,000.

Jumilla, a town of Spain, 36 miles N. by W. of Murcia. Pop. 15,900.

Jumna, or JAMUNA, the principal feeder of the Ganges, has its source 10,849 feet above the sea, 5 miles N. of Jamnotri. After a southerly course of 95 miles it breaks into the plains from the Siwalik Hills at an altitude of only 1276 feet. It continues to flow south as far as Hamirpur, beyond Agra, and then turns to the east, finally joining the Ganges from the right 3 miles below Allahabad, after a total course of 860 miles. As a rule its banks are high and craggy. Many tributaries add their waters to swell its current. The towns of Delhi, Agra, Firozabad, Etáwah, and Allahabad are on its banks. Where it emerges from the Siwalik Hills, two great irrigation canals, an Eastern and a Western, were made in 1817–30.

Junagarh, capital of a native Indian state (area, 3283 sq. m.; pop. 490,000) in the peninsula of Kathiawar, NW. of Bombay, is one of the most picturesque towns in India. Pop. 34,250.

Juneau, a mining settlement (named from one of the original prospectors) on the shore of the Alaska strip, till 1903 claimed by Canada, opposite Douglas island. Pop. 3000. There are gold and silver mines in the neighbourhood.

Jungfrau ('the Maiden'), a magnificent peak of the Bernese Alps, 13,671 feet high. A railway to the top was made in 1895–1905.

Juniper Green, a Midlothian village, 5½ miles SW. of Edinburgh. Pop. 1607.

Jura (Scand. *deor-oe*, 'deer-isle'), an Argyllshire island, ½ mile NE. of Islay, and 2½ miles W. of the nearest point of the mainland. It extends 28 miles north-eastward; varies in width from ¾ mile, at Loch Tarbert in the middle, to 8½ miles; and is 143 sq. m. in area. The western side is rugged and desolate, the eastern green and pleasing. The conical Paps of Jura are 2571 and 2412 feet high; and most of the surface is deer-forest. Pop. (1831) 1312; (1901) 560.

Jura, a range of mountains of a peculiar limestone formation, oolitic in composition, and generally called Jurassic, which extends from the angle formed by the Rhone and the Ain, in a north-easterly direction (with a gradually declining elevation) for more than 450 miles, to the upper course of the Main. But it is usual to restrict the name to the ranges that lie along the frontier of Switzerland and France—mainly in the deps. of Doubs, Jura, and Ain. These constitute a plateau about 155 miles long by 40 wide, with an average height of 2000 to 2500 feet. The loftiest peaks are Reculet (5643 feet), Crêt de la Neige (2653), Mont Tendre (5512), and Dôle (5507).

Jura, an eastern French dep., bounded on the E. by Switzerland. Area, 1928 sq. m.; pop. (1881) 285,263; (1901) 261,288. It is divided into the four arrondissements of Lons-le-Saunier (the capital), Poligny, Sainte-Claude, and Dôle.

Jüterbog, or JÜTERBOCK, a town of Prussia, 39 miles by rail SSW. of Berlin. Pop. 7797.

Jutland (Dan. *Jylland*), the only considerable peninsula of Europe that points directly north, has since early in the 10th century formed a portion of the kingdom of Denmark (q.v.). Area, 9754 sq. m.; pop. (1900) 1,063,792. Jutland was called the Cimbric Chersonesus, from the Cimbri, its early inhabitants. In the 5th century it was inhabited by the Jutes, who took part in the expedition of the Saxons to England; and the Jutes were succeeded by the Danes.

Jyhoon. See OXUS.

K 2. See GODWIN-AUSTEN.

Kabul, or CABUL (*Kau'bal;* the *Kabura* of Ptolemy), the capital of Afghanistan, is charmingly situated at the foot of the Takht-i-Shah and Asmai hills, on a spur of which to the south is the fortress of Bala Hissar (or 'upper fort'), once an important stronghold, but now abandoned. The city is composed almost entirely of mud-built buildings with flat roofs, and is traversed by the main bazaar, whose streets diverge from the central square, and divide Kabul into four quarters. The bazaar rivals that of Kandahar, and includes every variety of trade. Carpets, camel-hair cloth, and skins are perhaps the specialities; but there are now many shops in which European goods can be purchased, and Kabul is rapidly assuming the general character of an Indian mart. Communication with India is now regular and constant: there is a growing trade with central Asia. The cantonment of Sherpur, situated about a mile north of the Bala Hissar, where the British troops were beleaguered in 1880, is maintained in good repair. Close to it are still to be traced the outlines of the old British entrenchment of 1840–41, when, after a nine weeks' siege, a British force had to capitulate. At the western extremity of the Benara ridge, which flanks Sherpur on the north, is the English cemetery, now protected by a high wall. Kabul is celebrated for its fruit, its grapes and melons being especially famous. The elevation of the plain above sea-level is about 6000 feet, which ensures a delightful temperature and fine climate in summer; but it is sometimes severely cold in winter, when snow occasionally covers the ground to the depth of several feet, and communication is frequently interrupted. Pop. 90,000.

The KABUL RIVER rises at Sar-i-Chashma, near the source of the Helmund, flows through Kabul city, and, mainly by a long series of precipitous defiles, finally reaches the Indus at Attok. The length of its course (generally south-easterly) is about 270 miles.

Kadiak, a wooded, mountainous island off the S. coast of Alaska. It contains good harbours,

and has an area of 3465 sq. m. Pop. 1482 Eskimos, engaged in the salmon-fishery.

Kaffa (anc. *Theodosia* or *Feodosia*), a Russian seaport, on a bay on the east side of the Crimea, 62 miles E. by N. of Simferopol. It is defended by walls and a citadel, and has the ruined palace of the Khans of the Crimea, a Greek cathedral, and, near by, an Armenian monastery (1442). Soap and caviare, camel-hair carpets, and sheep-skin rugs are manufactured; and here is the only oyster-fishery in Russia. Pop. 27,500.

Kaffraria, properly the country inhabited by the Kaffirs or Caffres, who inhabit the E. of Cape Colony, Natal, Swaziland, Zululand, &c.; but usually restricted to the coast-districts between the Great Kei River (Transkei) and the Natal frontier. British Kaffraria was the country from the Great Kei westward to the Keiskamma, some time an independent colony after being wrested from the Kaffirs in the war of 1846-47, but ultimately incorporated with Cape Colony. Neither Kaffraria nor British Kaffraria is now an administrative division.

Kafiristan, a mountainous region of Asia, lying between the Kabul River on the south and the Hindu Kush on the north-west; its eastern and western boundaries are formed by the Chitral and Panjshir rivers respectively, feeders of the Kabul. Area, 5000 sq. m.; pop. 200,000, primitive Aryan heathens, of many tribes, united only by their hatred of Mohammedans. See Leitner's *Kafiristan* (Lahore, 1881).

Kagoshi'ma, a town of Japan, on a large bay of the same name, at the south end of Kiu-siu Island, with manufactures of pottery and porcelain, arms, and cotton. Population, 55,000. It was bombarded by a British fleet in 1863.

Kaieteur Fall. See Essequibo.

Kai-fung, capital of the Chinese province of Honan, near the southern bank of the Hoangho, where the great inundation occurred in 1887, long the chief settlement of the Jews in China. Pop. 100,000—many Mohammedans.

Kailás. See Ellora, Indus.

Kaira, capital of a district in northern Gujarat, 20 miles SW. of Ahmedabad by rail. Pop. 10,640.

Kairwan', a decayed walled town of Tunis, in an open, marshy plain, 80 miles S. of the capital. It contains about fifty ecclesiastical structures, of which the mosque of Okba, who founded Kairwan about 670, is one of the most sacred of Islam. Outside the city, to the north-west, is the mosque of the Companion—i.e. of the Prophet; this and other sacred tombs have rendered Kairwan ('caravan') the Mecca of northern Africa. As such, it has been jealously guarded from defilement by the presence of Jews and for the most part of Christian travellers; but it was entered and investigated by the French in 1881, and is now under their protection. Kairwan makes copper vessels, potash, carpets, and articles in leather. Population, 25,000. See works by Rae (1877), Broadley (1882), and Boddy (1885).

Kaisarieh. See Cæsarea.

Kaiserslautern (*Kïserslowtern*), a town of the Bavarian Palatinate, 52 miles by rail SW. of Worms. The chief manufactures are tissues, yarn, sewing and other machines, ultramarine, furniture, beer, bricks, &c.; and there are iron-works, steam-sawmills, and railway shops. Pop. (1875) 22,699; (1900) 48,300. Frederick I. built a castle here in 1152 (destroyed by the French in 1713); and near by the French republican armies were defeated in 1793 and 1794.

Kaiserswerth, a Prussian town (pop. 2388) on the Rhine, 10 miles below Düsseldorf. Here is Pastor Fliedner's deaconesses' house.

Kaiser Wilhelm's Land. See New Guinea.

Kaithal, an ancient town in the Punjab, India, 93 miles NNW. from Delhi. It has saltpetre-refineries, and manufactures lac ornaments and toys. It became British in 1843. Pop. 14,754.

Kalaha'ri Desert, a vast tract of South Africa, extending 600 miles from the Gariep or Orange River northwards to 21° S. lat., with an average breadth of about 350 miles. The so-called desert is an elevated basin, 3000 to 4000 feet high, with numerous depressions, and bordered in most parts by a wide belt of sandy waterless country. But the rainfall in the interior is sufficient to nourish a fair amount of vegetation. Many parts are thickly covered with high, thorny bushes, which harbour game. The inhabitants, called Bakalahari, keep cattle and grow corn, and live by these and by the chase; wandering Bushmen are also found in the 'desert.' See Farini, *Across the Kalahari Desert* (1886).

Kalamata, or Kalamæ, a seaport in the Greek Peloponnesus, on the Gulf of Koron, is the seat of an archbishop. Pop. 14,300.

Kalamazoo', capital of Kalamazoo county, Michigan, on a river of the same name, 144 miles by rail ENE. of Chicago. An important railway junction, it is the seat of the state insane asylum and of Kalamazoo College (Baptist), and manufactures machinery, paper, flour, carriages, windmills, agricultural tools, furniture, &c. Pop. 25,000.

Kalbe, a town of Prussian Saxony, on the Saale, 17 miles S. of Magdeburg. Pop. 12,300.

Kale, a Roxburghshire stream, running 20 miles to the Teviot, 4½ miles S. by W. of Kelso.

Kalgan, a Chinese town, 110 miles NW. of Peking, opposite the passage through the Great Wall, is a chief emporium of the Chinese tea trade with Mongolia and Siberia. Pop. 70,000.

Kalgoorlie, now third in population of Western Australian towns (after Perth and Fremantle), is 350 miles ENE. of Perth and 25 NE. of Coolgardie by a railway opened in 1896, in the centre of a rich gold-field employing 15,000 miners. The rush hither began in 1893; the water difficulty, for a time formidable, was satisfactorily surmounted in 1896. Pop. 7200. Originally the place was called Hannan's.

Kalinjar, an Indian fortress and shrine on an isolated rock (1230 feet high), a spur of the Vindhya Mountains, overlooking the plains.

Kalisz, capital of a government (area, 4390 sq. m.; pop. 850,000) in Russian Poland, 132 miles WSW. of Warsaw. Pop. 22,750.

Kalmar, a seaport of Sweden, capital of a län or county (area, 4436 sq. m.; pop. 231,396), on an island in Kalmar Sound, opposite the island of Öland. It has a good harbour, a handsome cathedral, and a castle, in which, on 20th July 1397, was signed the 'Union of Kalmar.' The manufactures include matches, chicory, and tobacco, and some shipbuilding. Population, 12,720.

Kalna, or Culna, a town of Bengal, 47 miles N. of Calcutta and 28 E. of Bardwan, on the Bhagirathi (Hooghly). Pop. 10,463.

Kalocsa, a town of Hungary, near the Danube, 86 miles S. of Budapest by rail. It has a cathedral, archbishop's palace, and observatory. Pop. 12,789.

Kalpi, a town in the North-western Provinces of India, stands among rugged ravines near the bank of the Jumna, 50 miles SW. of Cawnpore. Here on 23d May 1858 Sir Hugh Rose defeated 12,000 mutineers. Pop. 14,306.

Kalu'ga, chief town of a Russian government, 76 miles by rail NW. of Tula and 188 SSW. of Moscow. It has a large trade. Pop. 50,610. Area of government, 11,942 sq. m.; pop. 1,244,018.

Kama, the principal affluent of the Volga, rises in the Russian government of Vyatka, and joins the Volga 43 miles below Kazan. The Kama is navigable from Perm (930 miles). It is free of ice about 200 days in the year, and is one of the great highways of communication between Siberia and Nijni Novgorod and St Petersburg.

Kamakura, a coast village of Japan, 12 miles S. of Yokohama. It dates from the seventh century, and was the capital of the Shogunate for 400 years, but is now only of interest to tourists for its beauties and its famous bronze image of Buddha, the Dai-butsu, 50 feet high.

Kama'ran, a little island in the Red Sea, on the Arabian side, nearly opposite Massowah, with an area of 102 sq. m., and inhabited by a few fishermen. It was annexed by Britain in 1858.

Kambakonam. See COMBAKONUM.

Kamchatka (*Kam-tchat'ka*; Ger. *Kamtschatka*), a peninsula of eastern Siberia, stretches S. into the Pacific between Behring Sea on the E. and the Sea of Okhotsk. Area, 465,590 sq. m. The peninsula is long and narrow, terminating in a point only 7 miles distant from the northernmost of the Kurile Islands. A chain of volcanic mountains runs down the centre, and reaches 15,408 feet in Kojerevska and 16,988 in Kluchefskaya (in eruption in 1854 and 1885). Hot springs abound. The coast on the south-east is formed of rugged, precipitous cliffs. The principal river is the Kamchatka, which flows into the Pacific. The climate is colder than in corresponding latitudes in Europe, and very humid; grass and tree vegetation are consequently luxuriant. The principal occupations of the inhabitants are fishing and hunting. Kamchatka was annexed to Russia at the end of the 17th century. Pop. 6500, made up of Kamchadales, Koryaks, Lamuts, and a few Russians. The fort of Petropaulovsk (pop. 350), with a magnificent harbour covered with ice only a brief period of the year, is situated on the east coast. See works by Kennan (5th ed. New York 1879) and Guillemard (2 vols. 1887).

Kamenetz-Podolsk (Polish *Kamieniec*), capital of the Russian government of Podolia, near the frontier of Austrian Galicia, on a steep rock above an affluent of the Dniester, 243 miles NW. of Odessa. There are a Roman Catholic cathedral (1361), a Greek cathedral (16th century), and an Armenian church. Pop. 36,630.

Kamenz, a small manufacturing town of Saxony, 22 miles NE. of Dresden by rail. It was the birthplace of Lessing. Pop. 9211.

Kamerun. See CAMEROONS.

Kames, (1) a Berwickshire mansion, 6 miles E. of Greenlaw.—(2) A castellated mansion, John Sterling's birthplace, in Bute, 2¾ miles NNW. of Rothesay.

Kamesburgh. See PORT BANNATYNE.

Kamloops, a station on the Thompson tributary of the Fraser River, British Columbia, 230 miles NE. of New Westminster.

Kampen, a town of Holland, near the mouth of the Yssel, 5½ miles by rail NW. of Zwolle. It was formerly a Hanse town, and has partly recovered since 1850 the trade which left it as the Yssel sanded up. The church of St Nicholas is one of the finest mediæval churches in the country. Pop. (1840) 7760; (1900) 19,700. Kampen is the Gotham of the Dutch.

Kamschatka. See KAMCHATKA.

Kamthi, or KAMPTI, a town and cantonment of the Central Provinces, India, 9 miles NE. of Nagpur, on the Kanhan River. Pop. 40,159.

Kamyshin, an important shipping town of Russia, on the Volga, about 100 miles below Saratov. Pop. 16,000.

Kanagawa. See YOKOHAMA.

Kanara, NORTH, a coast-district of Bombay, lies south-east of Goa. Area, 3910 sq. m.; pop. 454,230.—SOUTH KANARA, immediately south of North Kanara, belongs to Madras. Area, 3902 sq. m.; pop. 1,134,600. The capital is Mangalore.

Kanauj, one of the great legendary centres of Aryan civilisation in India, stood originally on the Ganges, 65 miles NW. of Lucknow. At present the site consists of ruins, extending over the area of five villages, 4 miles from the Ganges, the river having altered its bed. The most remarkable buildings are Mohammedan mausoleums. Its most prosperous era was the 6th century; early in the 11th it fell before the sultans of Ghazni. Among the ruins there is a modern town of 17,000 inhabitants.

Kanawha. See CHARLESTON, and GREAT KANAWHA.

Kanazawa, a town of Japan, on the west coast of the main island, NW. from Tokyo, manufactures porcelain and silk. Pop. 100,000.

Kanchinjanga. See KINCHINJINGA.

Kandahar', or CANDAHAR, the capital of central or southern Afghanistan, 200 miles SW. of Kabul. It stands in 32° 37′ N. lat. and 66° 20′ E. long., 3484 feet above sea-level. It is in the form of an oblong square, while all its streets run straight, and cut one another at right angles. At the intersection of the two main streets there is a large dome (*Charsu*). Pop. variously estimated from 25,000 to 100,000. Kandahar is well watered by two canals, and stands amid gardens and orchards. It has much trade with Bombay, Herat, Bokhara, and Samarcand. About 2 miles N. rises a precipitous rock, crowned by a fortress. Here, amid all the disasters of 1839–41, the British maintained their ground under Rawlinson. Kandahar is supposed to have been founded by Alexander the Great, was wrested from the Afghans by the famous Mahmud of Ghazni (997–1030), and from then down to 1747 was, with brief intervals of independence, held by Genghis Khan, Tamerlane, and by various rulers of Tartary, India, and Persia in turn. In the war of 1878–80 the British entered Kandahar unopposed, and held it till 1881, some months after they had evacuated the rest of Afghanistan. The Sibi-Pishin Railway from the south has greatly enhanced both its political and its commercial importance.

Kandavu, one of the Fiji Islands (q.v.).

Kandy, a town of Ceylon, on a beautiful little lake among the mountains, 74 miles by rail NE. of Colombo. It is 1665 feet above the sea, and has a mean annual temperature of 76° F. Here are ruins of the palace of the former native kings, and a temple in which a reputed tooth of Buddha is preserved. Pop. 26,200.

Kanem, a vassal state of Wadai (q.v.) lying north of Lake Chad.

Kangaroo Island, an island of South Australia, at the mouth of the Gulf of St Vincent, is 87 miles by 34 broad. Pop. 379.

Kanizsa, two towns in Hungary. (1) Nagy (or Great) Kanizsa, 136 miles by rail SW. of Budapest. Pop. 24,619.—(2) Old Kanizsa, on the Theiss, 15 miles SSW. of Szegedin. Pop. 16,069.

Kankakee', capital of Kankakee county, Illinois, on Kankakee River, 56 miles SSW. of Chicago, with factories and foundries. Pop. 13,600.

Kano', a town and sultanate in Hausaland, Northern Nigeria, 250 miles SSE. of the city of Sokoto. Pop. 100,000.

Kansas, the central state of the American Union, and the eighth in area, is bounded N. by Nebraska, E. by Missouri, S. by Indian Territory, and W. by Colorado. It is about 400 miles from east to west, and 200 from north to south, and contains an area of 82,080 sq. m. The surface is for the most part a rolling prairie, rising from 800 feet in the east to between 3000 and 4000 feet in the north-west. Kansas has no navigable river except the Missouri, which forms part of its eastern boundary. The Kansas or Kaw (300 miles) drains nearly half the state, and the Arkansas drains another large portion. The climate is subject to extremes of temperature. A record of 106° F. above zero has been observed; but the mercury rarely falls below zero. The mean annual rainfall is 37·10 inches; but in the west the supply is scanty, and in the upper Arkansas valley irrigation has been introduced. The minerals of Kansas include lead and zinc, excellent coal, lignite, rock-salt, mineral paint, gypsum, good building-stones, brick-clay, and material for hydraulic cement. Kansas is an agricultural and pastoral state, wheat, maize, and oats being the chief crops. Horticulture has steadily extended, and the growing of sorghum cane for sugar. Great quantities of prairie hay are cut; and thousands of acres of planted timber now break the surface of the prairie. Creameries are numerous, and more attention is given to the raising of stock. Of the manufacturing industries the most important is beef and pork packing (mainly at Kansas City), flour-milling, foundry-work, and the manufacture of stoves and agricultural implements. The suffrage provisions allow women to vote at school and municipal elections; and there is a prohibitory liquor law. The state university is at Lawrence; an agricultural college at Manhattan; and a normal school at Emporia. The name is derived from the Kaw or Kansas Indians. The state, mostly acquired in the Louisiana purchase, was organised as a territory in 1854, and at once became the battle-ground between the partisans of slavery and freedom. The Federal administration sided with the pro-slavery party. John Brown took part in the civil war which prevailed, and many fights that were almost battles took place. The Free State party was steadily reinforced from the north, and after several futile endeavours the Wyandotte constitution was finally adopted in 1859, and in 1861 Kansas was admitted as a non-slaveholding state of the Union. Pop. (1860) 107,206; (1900) 1,470,495. The largest cities are Kansas City (q.v.), Topeka, the capital (33,650), and Wichita (24,700); next come Leavenworth, Atchison, and Fort Scott.

Kansas City, the second city of Missouri, and one of the great towns of the west, is situated on the south bank of the Missouri (here crossed by a fine railway bridge), where the river makes a sharp bend to the east, 283 miles by rail W. by N. of St Louis. Great part of the city is built upon a series of steep hills. The state frontier-line bounds the city on the west, and consequently a large suburb on this side, also called Kansas City, is in the adjoining state of Kansas. This suburb, connected with Kansas City by a remarkable elevated railway, has a pop. of 51,316, and contains great stock-yards and pork-packing establishments. The larger Missouri town possesses numerous fine streets, and handsome residences on the hills. Its public edifices include a fine United States court-house and the imposing building of the Board of Trade; there are two medical colleges here. The city is the terminus of a number of important railways, and is a principal distributing centre for the rich agricultural region to the south and west. There are great grain-elevators and stock-yards, and pork-packing is a principal industry; while the manufactories turn out railroad iron and car-wheels, shot, flour, beer, butterine, soap, furniture, &c. Pop. (1860) 4418; (1870) 32,260; (1880) 55,785; (1900) 163,752.

Kan-su', the north-west province of China.

Kanturk, a market-town, 24 miles NW. of Cork. Pop. 1539.

Kappel. See CAPPEL.

Kara, a gold-mining district in eastern Siberia, 300 miles from Chita and nearly 5000 from St Petersburg. The mines are the czar's private property, and are worked by 2000 convicts.

Karachi. See KURRACHEE.

Karagwe, a territory between the east coast of Africa and the Victoria Nyanza, divided between German and British East Africa.

Kara-hissar. See AFIUM-KARA-HISSAR.

Kara-köl. See BOKHARA.

Karakorum, (1) a name given, but according to the best geographers erroneously, to the Muztagh range, in the western Himalayas; sometimes also it is given, again erroneously, to the Kuen-Lun range on the north of Tibet. The Mustagh or Muztagh range is that part of the Himalayas which lies to the west of the Indus and extends as far as the head of the Gilgit Valley. It embraces some of the loftiest peaks of the Himalayan system, Dapsang being 28,700 feet high.—(2) The name is properly appropriate to a pass (18,550 feet), the culminating point of the route between India and East Turkestan, in 35° 33′ N. lat. and north from Leh.—(3) Karakorum is also used to indicate the ruined Mongolian capital, to the north of the desert of Gobi, on the Orkhon, a tributary of the Selenga River.

Kara-kum. See KIZIL-KUM.

Karaman. See CARAMANIA.

Karamnasa, a river of Bengal, rises in 24° 34′ N. lat. and 83° 41′ E. long., and, after a course of 146 miles—for some distance along the boundary between Bengal and the North-western Provinces—enters the Ganges from the right. The Hindus hold it in religious abhorrence.

Kara Sea, the portion of the Arctic Ocean lying between Nova Zembla and the Yalmal Peninsula. Some trade with western Europe now passes over the Kara Sea in summer to and from the rivers Obi and Yenisei.

Karategin, the easternmost province of Bokhara, a highland region (6000–7000 feet), traversed by a tributary of the Amu-Daria. Area, 8310 sq. m.; pop. 100,000.

Karauli (*Kerowlee*), a hilly, well-timbered native state in Rajputana, separated by the river Chambal from Gwalior. Area, 1229 sq. m.; pop. 156,587.—The capital, Karauli, is 75 miles NW. of Gwalior. Pop. 25,124.

Karczag, a town of Hungary, 99 miles by rail E. by S. of Budapest. Pop. 25,825.

Karelia, an old name for the south-east part of Finland, annexed to Russia in 1721.

Karikal, the second in importance of the French possessions in India, is on the Coromandel coast, 12 miles N. of Negapatam, and has an area of nearly 53 sq. m. The pleasant capital (pop. 34,719), about a mile from the sea, was four times taken by the British. There is an active trade in rice. Pop. 70,526.

Karli, a place with a famous sculptured cave-temple, 126 feet long and 45 feet high, 40 miles NW. of Poona by rail.

Karlsbad. For Karlsbad, Karlskrona, Karlsruhe, &c., see CARLSBAD, &c.

Karlsburg (Hung. *Gyula-Fehérvár*), a town and fortress of Transylvania, near the Maros, 170 miles E. of Szegedin by rail. Pop. 9388.

Karluk, a place in Alaska, with the greatest salmon cannery in the world.

Karnac. See THEBES.

Karnál, a town of the Punjab, 7 miles W. of the Jumna's present course, and on the western Jumna Canal. Pop. 24,963.

Kärnthen. See CARINTHIA.

Karnul, a town in Madras Presidency, 110 miles S. by W. of Hyderabad. Pop. 25,376.

Karroo, a generic name given to the high plains of Cape Colony; especially the Great Karroo, the elevated basin, more than 3000 feet above sea-level, and 350 miles long by 70 to 80 wide, which lies between the Nieuweveld Berge on the north and the Zwarte Berge on the south.

Kars, a fortress of Russian Armenia, 110 miles NE. of Erzerum. It is situated on a tableland over 6000 feet above the sea; the climate is therefore rather severe. Pop. 20,900, mostly Armenians. Kars, long a bulwark of the Ottoman empire in Asia, was taken by the Russians in 1828, resisted them for six months in 1855, and was stormed by them in 1877. It was ceded to Russia by the Berlin Congress in 1878, and its fortifications have been since augmented.

Karshi, a town of Bokhara, 95 miles SE. of Bokhara city and 80 SW. of Samarcand. It is of great importance in the transit trade between Bokhara, Kabul, and India; and its knives and firearms are famed. Pop. 25,000.

Karst. See CROATIA.

Kartum. See KHARTOUM.

Kárún River, the sole navigable river of Persia, rising in the Zardah Koh Mountains, near Ispahan, flows west through gorges of the Bakhtiári Range to Shuster, where it becomes navigable. At Ahwáz a reach of rapids and broken water bars the course of vessels to the Lower Kárún; and here since 1890 a tramway has been constructed. Below Ahwáz the river is 300 to 500 yards wide, and flows for 117 miles without an obstacle through a country naturally rich and fertile. Mohammerah lies at the Kárún junction with the waters of the Euphrates and Tigris (*Shat-el-Arab*). In 1842 Lieutenant Selby ascended the Kárún to Shuster; but it was not till 1888 that the navigation was thrown open. See W. F. Ainsworth, *The River Kárún* (1890).

Kasai. See CONGO.

Kasanlik, a town of Eastern Roumelia, at the Balkans' base, 5 miles from the southern end of the Shipka Pass, and 87 NW. of Adrianople. It manufactures otto of roses. Pop. 10,000.

Kaschau (*Ká-show'*; Hung. *Kassa*), one of the handsomest towns of Hungary, in the beautiful valley of the Hernad, 130 miles by rail NE. of Budapest. It has a cathedral (1270–1468), the finest Gothic edifice in Hungary, and manufactures tobacco, stoneware, furniture, starch, nails, and paper. Of the Jesuit university (1659) only the law academy remains. Pop. 37,500.

Kashan, a flourishing town of Persia, 3690 feet above sea-level, and 92 miles N. of Ispahan. It manufactures silk-stuffs, gold brocade, glazed tiles, carpets, and copper-wares. Pop. 30,000.

Kashgar, the political capital of Eastern or Chinese Turkestan, and, next to Yarkand, the second place of importance. The town and district have a pop. of 120,000. The old city is a small fortified place overlooking the Kizil River, separating it from the new city, in which stands the palace of the Chinese governor of the province, as well as the Mosque (Juma Mesjid). The people excel in certain branches of industry, as the making of cottons, silks, carpets, saddlery, &c., and carry on trade, chiefly with Russia. Kashgar, the centre of Mohammedan learning in eastern Turkestan, is besides a famous pilgrimage place. In 1758 the Chinese seized Kashgar, and with short interruption it has remained in their power. A successful rebellion was that of Yakub Kushbeghi (1864–77), but since the country was retaken by the Chinese, Kashgar has been left to the influence of Russia. See Colonel Kuropatkin's *Kashgaria* (Eng. trans. 1883).

Kashkar. See CHITRAL.

Kashmir. See CASHMERE.

Kaskaskia, a river of Illinois, flowing nearly 300 miles SW. to the Mississippi at Chester. On its right bank, a few miles from the mouth, is Kaskaskia village, the first capital of Illinois.

Kassai. See CONGO.

Kas'sala, a fortified town on a tributary of the Atbara, 260 miles S. of Suakin. Pop. 10,000.

Kassas'sin, a lock on the canal between Ismailia and Zagazig, in Egypt, 21 miles W. of Ismailia. In the Egyptian campaign of 1882 it was the scene of a sharp action on the evening of August 28, in which Arabi's forces were completely routed, principally by the British cavalry.

Kassel. See CASSEL.

Kastamu'ni, capital of a province in Asia Minor, 76 miles SW. of Sinope. It manufactures cotton goods, leather, &c. Here is the ancestral castle of the Comneni, 'Kastamuni' being a corruption of 'Castra Comneni.' Pop. 20,000.

Kasvin. See KAZVIN.

Katahdin, the highest mountain in the state of Maine, 5385 feet high.

Katanga, a town and district in the very heart of Africa, between two head-streams of the Congo—below the Luapula issuing from Lake Bangweolo, and passing on through Lake Moero, and a more westerly Lualaba, passing through a chain of lakes. Other names belonging to the adjoining territories are Msiri's country, Kasongo, &c.—all in the sphere of the Congo Independent State.

Kathiawar, or STRASHTRA, a peninsula on the west coast of India, lying between the Gulf of

Cambay and the Gulf of Cutch. Politically, the name Kathiawar Agency (formed in 1822) is given to a collection of 187 states, some independent, some tributary to native princes, and some (105) tributary to the British government in India. Area of agency, 20,559 sq. m.; pop. (1901) 2,327,500.

Katmandhu. See KHATMANDU.

Kat'rine, LOCH, one of the most celebrated of Scottish lakes, in Stirling and Perth shires, 5 miles E. of Loch Lomond and 9½ W. of Callander. Lying 364 feet above sea-level, it curves 8 miles east-south-eastward, is nowhere quite a mile broad, and has a maximum depth of 468 feet, and an area of 3119 acres. It discharges through Lochs Achray and Vennachar, to the Teith; and since 1859 has supplied Glasgow with water. Huge Benvenue (2393 feet) and Ben A'an (1500) rise steeply at its lower end, whose shores are beautifully wooded, with the mountain defile of the Trossachs beyond. Scott was often here during 1790–1809, as also in 1805 was Wordsworth with his sister Dorothy.

Kat River, a branch of the Great Fish River, in the Cape Colony, rising in the Didimaberg.

Kattowitz, a town of Prussian Silesia, 105 miles SE. of Breslau. It has manufactures and coal-mines. Pop. 31,750.

Katzbach, a river of Prussian Silesia, which falls into the Oder at Parchwitz. On its banks, near Liegnitz, on 26th August 1813, the French were defeated by the Prussians and Russians.

Kaub. See CAUB.

Kava. See AVA.

Ka'veri, or CAUVERY, a river of southern India, rises in the Western Ghâts, and flows 475 miles south-east across Mysore and Madras, to the Bay of Bengal, which it enters through two principal mouths. The Kaveri is of no value for navigation, its bed being rocky, with numerous rapids and falls—as those at the island of Sivasamudram, in Mysore, famous for their romantic beauty. Other islands formed by it are Seringapatam, in Mysore, and Sriringam, just above the delta. It is important for irrigation in Mysore and Coimbatore, but especially in the marvellous fertile delta. For this purpose the main stream has been dammed since the 4th century A.D., the Coleroon (the northern branch) since 1838.

Kayes, or KHAYES, a town of the French Soudan, on the river Senegal, with a railway of 94 miles to Bafoulabe. Pop. 10,000.

Kazan, capital of the Russian government of Kazan, and in the 15th century capital of the Mongol kingdom of the Golden Horde, stands 3 miles from the Volga's north bank, and 200 miles E. by S. of Nijni-Novgorod. In 1552 the Russians, under Ivan the Terrible, stormed the town, and put an end to the Mongol kingdom. The kremlin or fortress embraces within its walls the archiepiscopal cathedral (1562), a magnificent monastery (1579), an arsenal, &c.; the red brick Sumbek Tower is an object of veneration to the Tartars. The university, founded in 1804, has four faculties, nearly 1000 students, a library of 80,000 vols., an observatory, &c. The principal objects of industry are leather, soap (made from mare's milk), candles, gunpowder, books, hempen goods, cotton, &c. Close by are the shipbuilding-yards in which Peter the Great built his Caspian fleet. The Tartar merchants of Kazan trade as far as Bokhara and Persia on the one side and as Asia Minor on the other. Pop. (1871) 86,000; (1905) 150,000. The town has suffered severely from fire more than a dozen times, especially in 1774, 1815, and 1825.

Kazbek, or CASBECK. See CAUCASUS.

Kazvin, or CASBIN, a town of Persia, 95 miles NW. of Teheran. It manufactures brocade, velvet, cotton, and iron-ware, and has obtained a new commercial importance through the opening of the Transcaucasian Railway. Pop. 40,000.

Keady, a market-town, 8 miles SW. of Armagh. Pop. 1466.

Kearney, a town of Nebraska, on the Platte River, 196 miles by rail W. by S. of Omaha. It manufactures flour, ploughs, wagons, furniture, &c. Pop. 5640.

Kearsarge, a mountain of New Hampshire, 22 miles NW. of Concord, and 2950 feet high.

Kearsley, a town of Lancashire, 4 miles SE. of Bolton, with neighbouring coal-mines and paper-mills. Pop. 9260.

Kecskemet, a town of Hungary, 55 miles by rail SE. of Budapest. Pop. 57,500.

Keeling (or Cocos) **Islands,** a group of more than a dozen coral atolls in the Indian Ocean, 500 miles SW. of Java, attached since 1886 to the Straits Settlements. They are covered with cocoa-nut palms, whence oil is extracted, and are inhabited by about 400 Malays, but owned by a Scotsman named Ross. These islands were discovered by Captain Keeling in 1609 and were visited by Darwin in 1836.

Keen, MOUNT, a conical Grampian summit (3077 feet), 7 miles SSE. of Ballater.

Keene, a pretty town of New Hampshire, the capital of Cheshire county, on the Ashuelot River, 92 miles by rail NW. of Boston. Pop. 9446.

Keewa'tin, part of the country lying north of Manitoba. It is nominally administered by the lieutenant-governor of Manitoba, but is nearly uninhabited, except by Eskimos in the north. It embraces the northern part of Lake Winnipeg, and includes the mouth of the Saskatchewan River, which is navigable, except for a short distance, for nearly 1000 miles. The Nelson and Churchill rivers also pass through Keewatin; and Chesterfield Inlet, on the west side of Hudson Bay, penetrates nearly to its western boundary.

Kef, EL, a walled town of Tunis, 95 miles SW. of the capital, with a ruined temple, thermæ, and cisterns of Roman construction. Pop. 4000.

Kegworth, a Leicestershire town, 6 miles NNW. of Loughborough. Pop. of parish, 2149.

Kehl. See STRASBURG.

Keig, an Aberdeenshire parish, 29 miles WNW. of Aberdeen, the birth and burial place of Professor W. Robertson Smith.

Keighley (*Keethley*), a market and manufacturing town in the West Riding of Yorkshire, on the Aire, amid the moorland scenery of the Brontës' country, 9 miles NW. of Bradford and 17 WNW. of Leeds. It has a parish church (rebuilt 1848), a Gothic mechanics' institute (1870–87), the Drake trade school (1713; rebuilt 1860), extensive water-works (1876), two public parks of 9 and 15 acres gifted in 1887–88 by the Duke of Devonshire and Mr J. Lund, and important manufactures of worsted and woollen goods, worsted-spinning machinery, and sewing and washing machines. Keighley was constituted a municipal borough in 1882. Pop. (1851) 13,050; (1901) 41,568. See R. Holmes, *Keighley, Past and Present* (1858).

Kei Islands. See KEY.

Keir, the seat of the late Sir William Stirling-Maxwell, 1¾ mile NW. of Bridge of Allan.

Kei River, Great, a river of South Africa, which in 1848 was made the boundary between Cape Colony and Kaffraria. See Transkei.

Keiss, a Caithness fishing-village, 7¾ miles N. by W. of Wick. Pop. 341.

Keith, a town of Banffshire, on the Isla, 18 miles ESE. of Elgin. It manufactures tweeds, blankets, farm implements, &c. Pop. (1851) 2101; (1891) 4622.

Kelát (also *Khelat* and *Kalat*), the capital of Beluchistan, stands at an elevation of more than 7000 feet, in 28° 52′ N. lat. and 66° 33′ E. long. It was occupied by England (1839–41); and in 1877 a treaty was concluded with the khan, by which a British agent, with military escort, became resident. Pop. 14,000.—Kelat-i-Ghilzai is a fortress of Afghanistan, 75 miles NE. of Kandahar.

Kelati Nadiri, a strong natural fortress in the Persian province of Khorassan, close to the Russian frontier of Transcaspia.

Kells (anc. *Kenlis*), a town of County Meath, on the Blackwater, 26 miles by rail W. of Drogheda. Interesting antiquities are St Columba's house, a round tower, and three or four stone crosses. Kells was in 807 made the seat of a bishopric, united to Meath in the 13th century. Prior to the Union it returned two members. Pop. 2427.

Kelmscott, an Oxfordshire mansion, on the Thames, 2½ miles E. by S. of Lechlade, the residence of the poets Rossetti and Morris.

Kelso, a pleasant market-town of Roxburghshire, 23 miles by rail WSW. of Berwick-on-Tweed and 52 (by road 42) SE. of Edinburgh. It stands on the north bank of the Tweed, here joined by the Teviot, and spanned by Rennie's noble five-arch bridge (1803), 165 yards long. In 1126 David I. translated to 'Calchou' a Tironensian abbey, founded by him at Selkirk seven years before. This, wrecked by the English under Hertford in 1545, is now represented by the stately ruin of its cruciform church, Romanesque and First Pointed in style, with a massive central tower 91 feet high. Across the river, on the peninsula formed by the Teviot, stood the royal castle and town of Roxburgh, demolished in 1460; and 1 mile W. is Floors Castle (1718–1849), the seat of the Duke of Roxburghe. Kelso itself has a town-hall (1816), corn exchange (1856), racecourse, coach-building and other industries, and memories of the '15, Scott, the Ballantynes, and Sir William Fairbairn. Pop. (1851) 4783; (1901) 4008. See works by Haig (1825), Cosmo Inne (1846), and Rutherfurd (1880).

Kelung. See Formosa.

Kelvin, a stream flowing 21 miles south-westward to the Clyde at Partick, near Glasgow.

Kemnay, an Aberdeenshire parish, 18 miles WNW. of Aberdeen, with great granite-quarries.

Kempen, (1) a town of Rhenish Prussia, 7 miles NW. of Krefeld. Pop. 5952.—(2) A town in the Prussian government of Posen, 48 miles by rail NE. of Breslau. Pop. 5787.

Kempten, a town of Bavaria, 54 miles by rail S. by E. of Ulm. The old town was made a free town of the empire in 1289; the new town grew up around a monastery (8th century) founded by disciples of St Gall. Cotton-spinning and weaving and the making of machines and hosiery are carried on. Pop. (1875) 12,682; (1900) 18,860.

Kempton Park, in Middlesex, 4 miles W. of Kingston-on-Thames, once a royal residence, is now noted for its race-meetings.

Ken, a Kirkcudbrightshire stream, flowing 28½ miles to the Dee at Parton, and expanding during the last 4½ miles of its course into Lake Ken.

Kendal, or Kirby Kendal, a market-town of Westmorland, on the Kert, 22 miles by rail N. of Lancaster and 13 SW. of Ambleside. It is a gray straggling place, with an ancient Gothic church, a ruined castle (the birthplace of Catharine Parr), a town-hall (1828), and a grammar-school (rebuilt 1887). Flemings settled here in 1337, and the town became famous for its woollens and 'Kendal-green' buckram; whilst Pococke in 1754 refers to its 'manufacture of a sort of frieze call'd cotton, at 8d. a yard, sold mostly for the West Indies, for the slaves.' Nowadays the industries include heavy textile fabrics, such as horse-cloths and railway rugs, besides leather, snuff, paper, &c. Incorporated as a municipal borough in 1575, Kendal returned one member to parliament from 1832 to 1885. Pop. (1851) 11,829; (1901) 14,183. See two works by C. Nicholson (1832–75).

Kenfig, a Swansea (q.v.) borough, Glamorganshire, 6½ miles W. by N. of Bridgend. Pop. 380.

Kenia, Mount, an isolated snow-capped mountain mass in British East Africa, about 10′ S. of the equator, and not far N. of Kilima-Njaro. The crater wall rises 16,000 feet, but the loftiest pinnacle towers 3000 feet higher.

Kenilworth, a market-town of Warwickshire, on a small sub-affluent of the Avon, 5 miles N. of Warwick and 5 SSW. of Coventry. The castle, founded about 1120 by Geoffrey de Clinton, was defended for six months (1265–66) by Simon de Montfort's son, and passed by marriage (1359) to John of Gaunt, and so to his son, Henry IV. It continued a crown possession till in 1563 Elizabeth conferred it on Leicester, who here in July 1575 entertained her for eighteen days at a daily cost of £1000—that sumptuous entertainment described in Scott's *Kenilworth*. Dismantled by the Roundheads, the castle has belonged since the Restoration to the Earls of Clarendon. Its noble ruins comprise 'Cæsar's Tower,' the original Norman keep, with walls 16 feet thick; Mervyn's Tower and the Great Hall, both built by John of Gaunt; and the more recent but more dilapidated Leicester's Buildings. There is a fragment also of an Augustinian priory (*c.* 1122); and the parish church has a good Norman doorway. Tanning is the chief industry. Pop. (1851) 2886; (1901) 4544.

Kenmare, a town of Kerry, near the head of the sea inlet called Kenmare River. Pop. 1120.

Kenmore, a Perthshire village at the foot of Loch Tay, 6 miles WSW. of Aberfeldy.

Kenmure Castle, the Kirkcudbrightshire seat of the Gordons of Lochinvar, ¾ mile S. by E. of New Galloway.

Kennebec, a river of Maine, rises in Moosehead Lake, and, passing Augusta, runs 150 miles south to the Atlantic Ocean. It is navigable for large vessels to Bath, 12 miles, and for steamers beyond Augusta. It falls in its course 1000 feet, affording abundant water-power, and is mostly closed by ice for three to four months in the year.

Kennet, a river of Wilts and Berks, flowing 44 miles eastward to the Thames at Reading. It has good trout-fishing.

Kennington, a district of Lambeth parish, and a division of Lambeth parl. borough, London.

Kennington Oval, a little S. of Vauxhall Bridge, is a famous cricket-ground. Pop. 80,000.

Kenosha, a town of Wisconsin, U.S., 51 miles by rail N. by W. of Chicago. Pop. 12,700.

Kensal Green, a cemetery on the NW. of London, with the graves of many famous men, including Thackeray, Leech, Kemble, Charles Mathews, Tom Hood, and Cardinal Manning.

Kensington is, since 1899, a metropolitan borough of the county of London. Kensington Palace, built of red brick, was originally the seat of Heneage Finch, Earl of Nottingham and Lord Chancellor of England, from whose successor William III. bought it in 1689: he and his wife Mary, Queen Anne and her consort Prince George of Denmark, and George II. all died within its walls, and it was also the birthplace of Queen Victoria. Kensington Gardens, which at first only consisted of the grounds of 26 acres attached to the palace, have been frequently enlarged, and are now 2½ miles in circuit; they are connected with the northern part of Hyde Park by a stone bridge over the Serpentine built by Rennie in 1826. At their southern extremity is the Albert Memorial (1872), designed by Sir Gilbert Scott, and consisting of a bronze-gilt seated statue (by Foley) of the prince, placed beneath a gorgeous canopy 180 feet high, and surrounded by works of sculpture illustrating the various arts and sciences. Opposite, in Kensington Gore, is the Albert Hall (1867-71), a huge circular building in the modern Italian style, of red brick with yellow dressings, used as a concert-room and capable of holding 10,000 persons; its cost was £200,000, and the interior measures 200 feet by 180 feet and is 140 feet high. Other buildings in the vicinity are the South Kensington Museum (1857), Natural History Museum, Royal School of Art Needlework, Royal College of Music (1883), City and Guilds of London Institute for the advancement of technical education (1884), and Imperial Institute (1887-93). The parish church is a fine building in the Gothic style, designed by Sir Gilbert Scott (1869), with a spire 295 feet high. Close by are the town-hall (1880) and the Roman Catholic Pro-cathedral (1869). Next to Kensington Palace, the most interesting building from a historical point of view is Holland House, a quaint mansion in the Elizabethan style, erected (1607) by Sir Walter Cope, and the great resort of the Whig politicians at the commencement of the 19th century. Campden House, rebuilt in 1862 on its destruction by fire, is noteworthy from the former house, erected in 1612, having been the residence, before her accession, of Queen Anne. Of the residences occupied by Swift, Sir Isaac Newton, Jack Wilkes, Wilberforce, George Canning and his son, Dr Dibdin, Sir David Wilkie, William Cobbett, Mrs Inchbald, Count D'Orsay, Talleyrand, Lord Macaulay, Thackeray, and John Leech, but few traces now remain. The borough returns two members to parliament. It is a suffragan bishopric under London. Pop. (1871) 120,299; (1891) 166,308; (1901) 176,628.

See Leigh Hunt's *An Old Court Suburb* (1855), Loftie's *Picturesque Kensington* (1888), and Marie Lichtenstein's *Holland House* (1873).

Kent, an important maritime county in the SE. of England, is bounded by the estuary of the Thames, the Strait of Dover, Sussex, the English Channel, and Surrey. Its greatest length is 64 miles; its greatest breadth, 38 miles; and its area 1624 sq. m., or 1,039,419 acres. The surface is for the most part hilly, except in the south-east, where lies a marshy tract, some 14 miles long by 8 broad, and in the north, where a line of marshes skirts the banks of the Thames and Medway; these last are backed by a succession of wooded hills, stretching inland and gradually increasing in height until they culminate in the North Downs, a chalk range which traverses the middle of the county from west to east, attaining at Knocksholt Beeches, near Sevenoaks, a height of 782 feet above sea-level. Below these downs lies the Weald of Kent, a district abounding in beautiful scenery, and occupying nearly the whole southern side of the county. Of rivers in Kent, besides the Thames, the principal are the Medway, Stour, and Darent. The rich meadows of the Romney Marsh afford excellent pasturage for vast flocks of sheep. All branches of agriculture are extensively carried on, especially market-gardening and the growing of hops and fruit. Other industries are the manufacture of paper, bricks, and gunpowder. Large numbers of hands are employed in the government establishments at the Woolwich arsenal and the dockyards of Chatham and Sheerness; whilst at Ashford are the South-Eastern Railway, and at Whitstable and Faversham are important oyster-fisheries. Kent is divided into five lathes, and comprises 73 hundreds, the Cinque Ports of Dover, Hythe, Romney, and Sandwich, the cities of Canterbury and Rochester, and 18 municipal boroughs, the whole containing 435 civil parishes, almost entirely in the dioceses of Canterbury and Rochester. Maidstone is the assize town. Pop. (1801) 307,624; (1841) 549,353; (1881) 977,706; (1901) 1,351,849, of whom only 936,003 were within the 'administrative county,' Kent having given off 31 sq. m. to the 'county of London,' formed under the Local Government Act of 1888. Kent includes eight parliamentary divisions, and the parliamentary boroughs of Canterbury, Chatham, Dover, Gravesend, Hythe, Maidstone, and Rochester, each returning one member. The other chief towns are Ramsgate, Margate, Folkestone, and Tunbridge Wells, all popular watering-places.

Of its early inhabitants Kent has numerous traces in the shape of Roman roads, and many camps and barrows; at Aylesford and Hartlip Roman villas and baths have been discovered, and near the former place is a curious dolmen known as Kits Coity House. There are also the cathedrals of Canterbury and Rochester, the Norman fortress of the latter place, with those of Chilham and Dover, and the moated mansions of Hever (the home of Anne Boleyn), Ightham Mote, and Leeds Castle (where Richard II. was imprisoned). Amongst Kentish worthies have been Caxton the printer, Elizabeth Barton the 'nun of Kent,' Sir Nicholas Bacon, Sir Francis Walsingham, Camden the antiquary, Sir Philip Sidney, Harvey the discoverer of the circulation of the blood, the 'judicious' Hooker, the Earl of Chatham and his son William Pitt, General Wolfe, Richard Barham, author of the *Ingoldsby Legends*, the historians Hallam and Grote, Charles Dickens, and Gordon Pasha. See the county histories of Hasted (4 vols. 1778-99; new and enlarged ed. 1886, &c.) and Dunkin (3 vols. 1856-58).

Kentish Town, a district in St Pancras parish, in the north of London.

Kent's Cavern, near Torquay, Devonshire, a prehistoric bone-cave, 650 feet long, 2 to 70 wide, and 18 high.

Kentucky, a state of the American Union, in the Mississippi Valley; greatest length, E. to

W., 400 miles; breadth, N. to S., 175 miles; area, 40,400 sq. m. The eastern and south-eastern parts of the state are mountainous, broken by the Cumberland Mountains (2000–3000 feet) and their offshoots; westward from this region is a plateau sloping gradually toward the Ohio and the Mississippi rivers, which bound the state on the north and west. Large cypress-swamps still exist in the south-west. The Cumberland, Tennessee, Licking, and Kentucky rivers rise among the mountains in the east, and cross the state to the Ohio. Southward from the Ohio River extends a semicircular tract of land of Silurian formation; here the soil is produced by the disintegration of the fossiliferous blue limestone, and in this, the famous Blue Grass country, the most exhausting crops, such as tobacco and hemp, may be raised continuously for a series of years without materially impairing the productive value of the soil. A somewhat narrow belt of Devonian shale is also very fertile, and the lower strata contain petroleum. The eastern coal-field (10,000 sq. m.) is a prolongation of the Appalachian deposits; the western (4000 sq. m.) belongs to the Illinois tract. The coal is bituminous, and some excellent cannel occurs. The iron ores are of excellent quality, and are found throughout a district of 20,000 sq. m. Galena, building-stones, and salt are obtained. Through the limestone formations the streams have cut deep gorges, and in a region of about 6000 sq. m. much of the drainage is subterranean. The long-continued erosive action of the water has undermined a large part of this region, and produced numerous and often extensive caverns—the best known being the Mammoth Cave (q.v.). Kentucky is densely wooded over two-thirds of its area. Notwithstanding this large proportion of forest land, it has always been one of the leading agricultural states; it is the principal tobacco-producing state in the union, and breeds excellent stock and racehorses. The chief manufacture is whisky; next the smelting and working of iron. Pop. (1860) 1,155,684; (1880) 1,648,690; (1900) 2,147,174. The largest cities are Louisville (205,000), Covington (43,000), Lexington (26,500), and Paducah (19,500); the capital is Frankfort (9500). Numerous remains indicate that the mound-builders lived here; the name Kentucky, 'dark and bloody ground,' commemorates the conflicts between various warlike tribes. Included in the original grant to the colony of Virginia, Kentucky in 1790 was made a territory, and in 1792 a state. Though a slave-holding state, it did not secede during the civil war.

Ke'okuk, a city of Iowa, almost at its south-east extremity, on the Mississippi River (here crossed by a railroad bridge), 161 miles by rail ESE. of Des Moines. It contains law, medical, and commercial colleges, and has foundries, saw and flour mills, and factories, with a large trade by rail and river. The biggest steamboats could always come up to Keokuk, and the 'Des Moines rapids,' just above, are now passed by a great canal, 11 miles long. Pop. 14,700.

Ker'bela, a town and holy place in Asiatic Turkey, 60 miles SW. of Bagdad. Pop. 65,000. The pilgrims number at least 200,000 annually, the sanctity of the place arising from its being built on the battlefield where Hussein, son of Ali and Fatima, perished (680), seeking to maintain his claim to the califate.

Ker'guelen's Land, or Desolation Island, of volcanic origin, in the Antarctic Ocean, between 48° 39′—49° 44′ S. lat. and 68° 42′—70° 35′ E. long., is 85 miles long by 79 wide. Mount Ross attains 6120 feet; and most of the interior is covered with an ice-sheet and its glaciers. Numerous islands and rocks encircle the coasts, which are penetrated by long fjords, that form good harbours. The climate is raw, and storms are nearly constant. The island was discovered in 1772 by a Breton sailor, Kerguelen-Trémarec, and was visited by Captain Cook (who christened it Desolation Island) in 1776, and in 1874 by the *Challenger*, and by English, American, and German expeditions to observe the transit of Venus. France annexed it in 1893.

Kerki, a town of central Asia, on the left bank of the Amu-Daria or Oxus, 120 miles S. of Bokhara city. An important place both commercially and strategically, it was occupied and garrisoned by Russia in 1887.

Kermadec Islands, a group of volcanic islands in the Pacific Ocean, 700 miles NE. from Auckland in New Zealand. It consists of four principal islands—Raoul or Sunday (7200 acres), Macaulay (756 acres), Curtis, and L'Esperance—and several smaller islands. The group was discovered in 1788, annexed by Britain in 1886, and in 1887 declared part of New Zealand. Pop. 8. See a work by S. Percy Smith (1887).

Kerman, or Karman (anc. *Carmania*), one of the eastern provinces of Persia, lying south from Khorassan. Area, 59,000 sq. m.; pop. 300,000. Kerman, the chief town, near the middle of the province, in the central mountain-range, contains a pop. of 70,000. In 1722 the Afghans destroyed it; in 1794 it was pillaged by Aga Mohammed, and 30,000 of the inhabitants made slaves. But the chief cause of the decline of its trade was the fall of Gombroon, its port, before the rising prosperity of Bushire. At present it is only noted for the manufacture of the famous Kerman carpets, felts, and brass cups.

Kermanshah (also *Karmanshah* and *Kirmanshahan*), a flourishing town of Persia, capital of Persian Kurdistan, near the right bank of the river Kerkhah. It manufactures carpets and weapons. Pop. 30,000.

Ker'rera, an Argyllshire island, screening the Bay of Oban. It is 4½ miles long, 1½ mile wide, 5 sq. m. in area, and 617 feet high. Alexander II. died here. Pop. 99.

Kerry, a maritime county of SW. Ireland, in the province of Munster, is bounded N. by the Shannon estuary, and W. by the Atlantic. Area, 1853 sq. m. or 1,185,918 acres, of which less than one-tenth is under crops. One-fourth is barren mountain-land, and more than 11 per cent. bog and marsh. Maximum length, N. to S., 67 miles; maximum width, 55 miles. Its coast-line, 220 miles long, is fringed with islands, of which the chief are Valentia, the Blasquets, and the Skelligs; and is deeply indented by Kenmare, Dingle, and Tralee Bays. The principal mountain group is Macgillicuddy's Reeks, whose summit, Carran Tual (3414 feet), is the highest in Ireland. The rivers are short. The county contains many lakes, those of Killarney (q.v.) being of exquisite beauty. The climate is mild, but moist, especially on the coast. Iron, copper, and lead ores abound, but are not much worked. Slate and flagstone are quarried in Valentia. The coast fisheries employ nearly 2000 men and boys. Since 1885 Kerry returns four members. Pop. (1841) 293,880; (1871) 196,014; (1901) 165,331, nearly all Roman Catholics.

Kertch, previous to being levelled with the

ground by the allies in 1855 the most important port of the Crimea, is situated on the eastern shore of the peninsula, on the strait of Kaffa or Yenikale, which, 26 miles long and 3 to 25 wide, connects the Sea of Azov with the Black Sea. It still has an export trade to the extent of nearly £200,000 annually in grain, linseed, leather, fish, and caviare. Kertch, founded in the middle of the 6th century B.C. by Miletans, from 1318 to 1475 was a depôt of the Genoese, then came to the Turks, and finally, in 1771, to the Russians. Pop. with the neighbouring Yenikale, 30,500.

Kes'teven, THE PARTS OF, the south-west division of Lincolnshire.

Keswick (*Kez'ick*), a market-town of Cumberland, near the confluence of the Greta and the Derwent, 16 miles NNW. of Ambleside, and by a branch-line (1865) 18 W. of Penrith junction, 36 SSW. of Carlisle. In its immediate vicinity are wooded Castle Head and beautiful Derwentwater, whilst to the north towers Skiddaw (3058 feet). A great tourist centre, it is a pleasant little place, with half-a-dozen hotels, a good public library, a recreation ground, a town-hall (1813), lead-pencil factories, Greta (q.v.) Hall, and a church (1839), besides the old church of Crosthwaite (q.v.), ¾ mile N. Pop. (1851) 2618; (1901) 4451.

Keszthely, a market-town of Hungary, on the western shore of Lake Balaton, 113 miles by rail SW. of Budapest. Pop. 5393.

Ket'tering, a market-town (since 1227) of Northamptonshire, 75 miles NNW. of London by rail. The parish church (1450 c.; restored 1862) is a fine Perpendicular structure, with tower and spire. A town-hall and corn exchange was built in 1863; and Kettering has also a free grammar-school, water-works (1872), and manufactures of boots and shoes, stays, plush, brushes, &c. Pop. of parish (1861) 5845; (1901) 28,653.

Kew, a village in Surrey, 6 miles W. of Hyde Park Corner, and on the right bank of the Thames, which is here crossed by a fine stone bridge of seven arches, built 1789 and freed 1873. The Royal Botanic Gardens and Arboretum contain magnificent collections of plants, ferns, trees, and shrubs. Established in 1760 by George III.'s mother, and made a national institution in 1840, the gardens now extend over 70 acres, and the arboretum 178 acres. SW. of the gardens is an observatory, chiefly used as a meteorological station. Close to the northern entrance is Kew Palace, formerly a favourite residence of George III., and of Queen Charlotte, who died there. In Kew churchyard is buried Gainsborough. Pop. (1801) 424; (1901) 2500. See Chancellor's *Richmond, Kew*, &c. (1894).

Kewatin. See KEEWATIN.

Ke'weenaw, a peninsula of Michigan, on Lake Superior, with famous copper-mines.

Keyham, seat of a naval engineering college, on an inlet of the Hamoaze, close to Devonport.

Key or **Kei Islands**, a small group in the East Indies, lying S. of Dutch New Guinea and NE. of Timor, consists of Great Key, Little Key, and some smaller islets. Total area, 680 sq. m.; pop. 20,000, Malays and Alfuros, three-fourths on Great Key. This is a long narrow island, stretching north to south, volcanic in origin, and with a rocky, hilly surface that rises to nearly 3000 feet. Little Key, to the west, is of coral formation, and lies low; it is said to have made its appearance in the middle of the 19th century during an earthquake disturbance. All the islands are covered with dense jungle, valuable timber being the principal product. Fishing is the chief occupation; and *bêche-de-mer* is gathered. The group has been Dutch since 1645.—The islets of the Bahama group in North America are called generally keys or cays (Span. 'rocks' or 'reefs').

Key West, a port of entry and health-resort, the capital of Monroe county, Florida, is situated on the island of Key West (Span. *Cayo Hueso*, 'Bone Reef'), 60 miles SW. of Cape Sable. It is a coral island, 7 miles long, 2 to 3 wide, and nowhere more than 11 feet above the level of the sea. There is a good harbour, defended by a fort. The streets are wide and straight, with tramway lines; most of the houses are built of wood. The exports are salt, turtles, sponges, fruits and vegetables, and cigars manufactured here. Pop. 20,000.

Khabarovsk, or KHABAROVKA, capital of the Maritime Province, and seat of the governor-general of the Amur (q.v.).

Khairpur, the chief town of Khairpur state, in Sind, stands among marshes 15 miles E. of the Indus. Pop. 7000.—Area of state, 6109 sq. m.; pop. 200,000, mostly Mohammedans.

Khandesh, or CANDEISH, on the northernmost edge of the Deccan in India, lies south of the Nerbudda and east of Baroda, and is intersected by the Tapti River. Area of the district (in Bombay presidency), 10,907 sq. m.; pop. 1,460,851.

Khania. See CANEA.

Kharbin. See HARBIN.

Kharkoff, capital of a Russian government, and one of the chief towns of the Ukraine, is by rail 312 miles NW. of Taganrog and 465 S. by W. of Moscow. It is the seat of a Greek bishop and of a university (1805), with four faculties, 900 students, an observatory, a library of 56,000 volumes, a botanical garden, &c. There are also a theological seminary, a veterinary school, and a government model farm. The chief industrial products are sugar, soap, candles, felt, brandy, tobacco, and iron; but the place is principally celebrated for its four great fairs, at two of which (in horses and wool) the united turnover amounts annually to the sum of nearly £3,000,000. Pop. 176,500.—The *government*, situated in Little Russia, has an area of 21,035 sq. m., and a population of 2,537,900.

Khartoum, or KHARTÛM, the most important town in the eastern Soudan, stands on the low tongue of land between the Blue and the White Nile, just above their junction, 445 miles SW. of Suakim (*viâ* Berber), and 1625 S. of Cairo, following the windings of the Nile. Khartoum is the starting-point and terminus of caravans to the interior, and has been notorious for its great activity in the slave-trade. It was founded under the rule of Mehemet Ali in 1823, and soon became a place of commercial importance, and was made the capital of the Egyptian Soudan. It has a melancholy interest for Englishmen since its heroic defence by General Gordon against the forces of the Mahdi in 1884–85. Two days before the rescuing army reached it, Khartoum fell, and with it Gordon (26th January). At the time of the Mahdi's revolt its pop. was set down as 60,000. Since then Omdurman, on the opposite bank, has largely superseded it.

Khasi and Jaintia Hills, a district in Assam. Area, 6041 sq. m.; pop. 197,904; administrative headquarters, Shillong (pop. 3640). It forms part of the watershed between the Brahmaputra and the Surma, and rises in a series of step-

like plateaus. The rainfall in some parts is enormous; the average for twenty-five years being 489 inches. In 1861, 805 inches (366 in July alone) are recorded to have fallen. For ages Bengal has been supplied with limestone, lime, and oranges, and since 1830 with potatoes, from this district; and coal and iron ore exist, but only the latter is extracted. The Khasis are an Indo-Chinese race.

Khatmandu', the capital of Nepal, at the confluence of the Baghmati and Vishnumati rivers. The principal building is the immense ugly palace of the Maharaja. Pop. 50,000.

Khelat. See KELAT.

Kherson, or CHERSON, capital of a Russian government, stands on the Dnieper, 19 miles from its mouth, and 81 NE. of Odessa. The town was laid out by Prince Potemkin in 1778 as a port for the construction of ships of war; but was soon supplanted by Odessa and Nikolaieff, both as a dockyard and a commercial outlet. It has a large trade in timber, and manufactures soap, tallow, beer, and tobacco. Wool-cleansing is an important industry. At Kherson Potemkin is buried, and John Howard, the prison reformer, died. Pop. a little over 70,000.—The *government* borders on the Black Sea, having the Dnieper for its eastern boundary and the Dniester for its western, while the interior is watered by the Bug, Ingul, &c., which form shallow, salt lagoons next the sea. Area, 27,515 sq. m.; pop. about 2,800,000. The chief towns are Kherson, Odessa, Nikolaieff, Otchakoff, Yelisavetgrad, Voznesensk, and Tiraspol.

Khiva, also called KHARASM, KHWARÍZM, or URGENJ (anc. *Chorasmia*), a khanate of Turkestan in central Asia, lies between 37° 45′—44° 30′ N. lat. and 50° 15′—63° E. long., and contains about 25,000 sq. m., the surface being mostly a sandy desert, with many fertile tracts scattered over it. It is bounded N. by the Russian territory and Sea of Aral, E. by Bokhara, S. by Persia, and W. by the Caspian Sea. The chief oasis, in which the capital Khiva is situated, stretches from the mouth of the Oxus or Amu-Daria for 200 miles along its banks, and is watered by canals fed by it. The inhabited area is about 5000 sq. m.; the pop. about 260,000 settled inhabitants and nearly as many nomads. Khiva, successively subject to Bactria, Parthia, Persia, and the Califate, became an independent monarchy in 1092 A.D., but in 1221 succumbed to the Mongols, under Genghis Khan, and in 1370 came to Timûr. Timûr's descendants were subdued in 1511 by a chief of the Uzbegs. In 1717 Peter the Great endeavoured to conquer Khiva, in 1839 the attempt was renewed by the Czar Nicholas; but it was not till 1873 that a great and final effort was made to crush Khiva. The Russians entered it on 10th June; and the khan had to cede to Bokhara the Khivan possessions on the right bank of the Amu-Daria. The rest of Khiva is ruled by the khan, under Russian suzerainty.—KHIVA, the capital of the khanate, is on the Hazveti Pehlivan Canal, in the western portion of the great oasis. It consists almost entirely of earth-huts. Pop. 20,000. Other towns are Yenghi-Urgenj, the commercial centre of the khanate, and Kungrat, not far from the Aral. See works by Vambéry (1864), Burnaby (1876), Stumm (Eng. trans. 1885), and Lansdell (1885).

Khodavendighiar, a Turkish division of Asia Minor, south of the Sea of Marmora.

Khoi, a town in the Persian province of Azerbijan, 75 miles NW. of Tabriz. Here Selim I. defeated the Persians in 1514. Pop. 25,000.

Khojak, a pass in the Khwaja Amran range, at the head of the Pishin valley, has been pierced at a height of 6400 feet above the sea by a tunnel, 2½ miles long, on the railway from India to Kandahar.

Khojend, a walled town of Russian Turkestan, on the Sir-Daria, 75 miles S. by W. of Khokand. It manufactures silk. The Russians seized it in 1865. Pop. 35,000.

Khokand, once a khanate of Turkestan, now forming the Russian government of Ferghana (q.v.). The town of Khokand has 84,000 inhabitants.

Khonsar, or KHUNSAR, a Persian town, 80 miles NW. of Ispahan. Pop. 12,000.

Khorassan (old Persian 'eastward'), the largest province of Persia, bordering on Afghanistan, contains about 210,000 sq. m., of which nearly one-third is a vast salt waste; of the remainder a large portion consists of plains of shifting sand. The fertile districts are in the north, where the high range of the Elburz crosses the province. The chief towns are Meshed (the capital), Nishapur, Kutchan, Shahrud, Khaf, Kain, and Tebbes.

Khorsabad. See NINEVEH.

Khotan, or ILCHI, a city of eastern Turkestan, at the northern base of the Kuen-Lun Mountains. Pop. 40,000.

Khulm, a city (pop. 15,000), capital of a small state in Afghan Turkestan, adjoining Balkh.

Khurja, a town of India, 50 miles SE. of Delhi. There is a large export of raw cotton to Cawnpore and Calcutta. Pop. 30,000.

Khuzistan (anc. *Susiana*), a province of Persia, having Fars and the Persian Gulf on the south.

Khyber Pass, the great northern military road between the Punjab and Afghanistan, winds 33 miles north-westward, and varies in width from 150 yards to 20, in one place only '10 feet or less.' It is liable to sudden inundations. The mountains on either side are often sheer walls of smooth rock; they vary in height from 1400 to over 3000 feet. The Khyber Pass has been the key of the adjacent regions in either direction from the days of Alexander the Great; and it was stipulated in the treaty of Gandamak (1879) that the Anglo-Indian authorities were in future to have full control of it.

Kiachta, or KIAKHTA, a town of the Siberian province of Transbaikalia, 165 miles SE. of Irkutsk, close to the Chinese town of Maimatchin. Pop. 9000. Kiachta was from 1689 to 1800 the sole trading-place between China and Russia.

Kiangsi, Kiangsu, provinces of China (q.v.).

Kiao-chao, or KIAO-CHOW, a city inland from the bay of the same name, in the Chinese promontory of Shantung. In 1898 the town, with an area of 130 sq. m. and a pop. of 60,000, was leased to Germany for ninety-nine years, forming a German protectorate. The foreign settlement and port are at Tsing-tao, on the same bay, where fine streets have been built, and waterworks, telephones, electric light, &c. established.

Kidderminster, a parliamentary and municipal borough of Worcestershire, on the Stour, 4 miles above its junction with the Severn, and 14½ miles by rail N. of Worcester, 121 NW. of London. It is a busy, thriving-looking place, chiefly noteworthy for its carpet manufacture, which dates from 1735. Worsted spinning and

dyeing are also carried on. Richard Baxter was for fourteen years vicar, and there is a statue of him (1875). An illustrious native was Sir Rowland Hill; a marble statue of him was erected in 1881. Chief buildings are the parish church, Early English to Perpendicular in style, with a noble pinnacled tower; a Renaissance town-hall (1877), a corn exchange (1855), a free library, and a free grammar-school, founded in 1637. Kidderminster was incorporated as a municipal borough by Charles I., and since 1832 has returned one member. Pop. (1851) 18,453; (1901) 24,692. See Burton's *History of Kidderminster* (1890).

Kidwelly, a Carmarthenshire municipal borough (1885), near Carmarthen Bay, 9¾ miles WNW. of Llanelly. Pop. 2282.

Kieff (*Kee-yeff'*), one of the oldest towns of Russia, stands on the Dnieper, by rail 586 miles SW. of Moscow and 381 N. of Odessa. From 882 to 1169 it was the capital of the Russian principality, and here in 988 Christianity was first preached in Russia by St Vladimir. Captured by the Mongols in 1240, it was held by Lithuania from 1320 till 1569, and then by Poland till 1654, when it was annexed to Russia. The town is built on elevated ground (350 feet above the river), and the Dnieper is spanned by a fine suspension bridge (1851). The celebrated Petchersk monastery is visited by 250,000 pilgrims annually. The cathedral of St Sophia (1037) contains the tombs of the grand-dukes of Russia; and the cathedral church of the Assumption has a beautiful belfry with a peal of twelve bells. Kieff has nearly seventy churches, many of them with gilded domes and pinnacles, which give the city a striking appearance. The university, removed here from Vilno in 1833, has four faculties and 1700 students. There are also theological colleges, a military school, and an arsenal. The industry is unimportant, except tanning and the manufacture of candles. Considerable trade is done, especially at the January and other fairs. The fortress of Kieff, begun by Peter the Great in 1706, occupies a commanding site on the Dnieper's right bank. Pop. 250,000.—The *government* embraces great part of the Ukraine, and is bounded NE. by the Dnieper; the area is nearly 20,000 sq. m., and the population 3,600,000.

Kiel (*Keel*), chief town of the Prussian province of Sleswick-Holstein, stands 66 miles N. by E. of Hamburg by rail, at the head of a deep inlet (11 miles long) of the Baltic, which admits large ships to anchor close to the town. It is the Baltic headquarters of the German navy, and has imperial shipbuilding-yards, slips, dry and wet docks, &c., naval marine stores, a naval academy, and an observatory. It is also an important commercial port, some 1,100,000 tons of merchandise passing in and out annually. The chief imports are corn, coal, timber, and cattle, whilst coal, flour, beer, butter, cheese, and fish are exported. There are iron-foundries, shipbuilding-yards, corn-mills, breweries, and cabinet-makers' works. Kiel is the seat of a university, founded in 1665, with new buildings completed in 1876, 85 professors and teachers, and nearly 500 students. The 13th-century castle shelters the university library of 200,000 volumes and a museum with sculptures by Thorwaldsen. The bay is defended by forts. For the Baltic Canal connecting the Elbe and the Bay of Kiel, see Baltic Sea. Kiel affords good bathing facilities. Pop. (1875) 37,270; (1890) 69,172; (1900) 121,790.

Kielce, the smallest of the Polish governments of Russia, on the Austrian frontier. Area, 3897 sq. m.; pop. 730,000. The capital, Kielce, 85 miles NE. of Cracow, has 25,000 inhabitants.

Kikinda, Nagy, a town of Hungary, 36 miles by rail W. of Temesvar. Pop. 24,500.

Kilauea, the great volcano of Hawaii (q.v.).

Kilbarchan (*Kilbar'hhan*), a town of Renfrewshire, 12 miles W. by S. of Glasgow. It manufactures silks, cottons, &c. Pop. 2887.

Kilbeggan, a town of Westmeath, 4 miles SE. of Horseleap station. Pop. 900.

Kilbirnie, an Ayrshire town, on the Garnock, 20 miles SW. of Glasgow. It manufactures linen-thread, wincey, nets, &c. Pop. 4578.

Kilbowie, now part of the police-burgh of Clydebank, in Dumbartonshire, is the seat of the Singer sewing-machine works.

Kilbride, East, a town of Lanarkshire, 12 miles SSE. of Glasgow. Pop. 1230.

Kilbride, West, an Ayrshire town, 4½ miles NNW. of Ardrossan. Pop. 2320.

Kilburn, a metropolitan suburb, 5 miles NW. of St Paul's. See also Kinburn.

Kilchurn (*Kilhoorn'*), a ruined castle of the Campbells, in Argyllshire, at the NE. end of Loch Awe, 2½ miles W. by N. of Dalmally.

Kilcreggan, a coast-village in Rosneath peninsula, Dumbartonshire, 3¼ miles NW. of Greenock. It forms a police-burgh with Cove. Pop. 916.

Kilcullen, a town of Kildare, 5 miles S. of Newbridge station. Pop. 616.

Kildare', a county of Leinster, Ireland, bounded by Dublin, Wicklow, Queen's and King's counties, Meath, and Carlow. Its chief town is Naas, and other municipal towns are Kildare, Kilcullen, Maynooth, and Athy, besides many villages. The area is 418,836 acres, or 654 sq. m.; the surface is generally flat, and the soil very productive. In the northern part the great Bog of Allen covers some 40,000 acres, intersected by elevated ridges of dry ground. From this bog rises the conical Hill of Allen, 300 feet high. Agriculture is the main occupation. The most fertile and best-farmed districts are the valleys of the Liffey and the Greese; other rivers are the Boyne and Blackwater (both having their source in County Kildare), the Barrow and the Lesser Barrow. To the south of the town of Kildare is the Curragh (q.v.) of Kildare, an undulating plain of bright green grass covering about 8000 acres. Kildare returns two members. Pop. (1841) 114,488; (1901) 63,469, of whom 54,794 were Catholics. Kildare is noted for its antiquities—giant stone pillars, earthworks, sepulchral mounds, a stone circle, five round towers, and the ruins of many religious houses and castles.

The town of Kildare is 30 miles SW. of Dublin. St Bridget (453-523) founded a nunnery here, and the older name *Druim Criaidh* was changed to *Cil-dara*, the cell or church of the oak, from an old tree under which she built her cell. There are remains of three other monastic institutions, and a round tower, the finest in the county, 103 feet high. The Protestant see (1550) is now united with Dublin, and the Roman Catholic see forms the diocese of Kildare and Leighlin. Kildare suffered severely in the wars of the 16th and 17th centuries. The rebellion of 1798-99 began in Kildare, which prior to the Union returned two members. Pop. 1572. See works by Rawson (1807) and O'Byrne (1867).

Kildo'nan, a Sutherland parish, 83 miles NNE. of Dingwall. Gold was mined here in 1868-69, and experimental diggings were renewed in 1894.

Kilfinnane, a village of County Limerick, 5 miles SE. of Kilmallock. Pop. 1016.

Kilia, a town in the portion of Bessarabia ceded by Roumania to Russia in 1878, is situated on the northern bank of the Kilia branch of the Danube, 20 miles NE. of Ismail. Pop. 11,700.

Kilima-Nja'ro, an isolated mountain mass in East Africa, standing between Victoria Nyanza and the coast, just within the northern limit of the German East African Company's territory, in 3° 20′ S. lat. and 37° 50′ E. long. It consists of two peaks, or rather craters, Kibo and Kimawenzi, connected by a broad saddle (14,000 feet) studded with lava hills. Kibo was climbed by Dr Meyer in 1889. Its highest point is 19,680 feet above sea-level; its crater is 650 feet deep and 6500 feet in diameter. He also climbed Kimawenzi, and found it to exceed 17,250 feet. The crater rim of both peaks is covered with a thick crust of ice. In 1894, with the assent of the I.B.E.A. Company, a community of peaceful (but armed) Austrian Communists established themselves on the slopes of Kilima-Njaro. See H. H. Johnston's *Kilimanjaro Expedition* (1886).

Kilkee, a watering-place of County Clare, on Moore Bay, 8 miles NW. of Kilrush. Pop. 1666.

Kilkeel, a seaport of County Down, 10 miles SE. of Warrenpoint station. Pop. 1377.

Kilkenny, an inland county of Leinster, bordering on Queen's County, Carlow, Wexford, Waterford, and Tipperary. Its area is 509,732 acres, or 796 sq. m. Vegetation is earlier here than in the rest of Ireland, and the soil along the Suir, Nore, and Barrow is very rich. In the northern part there are large tracts of moor devoted to sheep and cattle. S. and SE. the surface rises to a considerable elevation; and in the north there is another hilly region forming part of the Castlecomer anthracite coalfield, whose output is about 80,000 tons per annum, or more than one-half that of all Ireland. In the western district are the Walsh Mountains. The chief towns are Kilkenny, Callan, Thomastown, Freshford, Urlingford, and Castlecomer. Pop. (1841) 202,420; (1901) 78,821, of whom 74,572 were Catholics. Prior to the Union Kilkenny returned sixteen members to the Irish parliament, but now the county returns two and the city one. Kilkenny, anciently part of the kingdom of Ossory, was formed into a county by King John in 1210. Its Norman remains are very numerous, and among other antiquities are circular groups of stones on Slieve Grian and the Hill of Cloghmanta, cromlechs and raths, forts and mounds, five round towers, and monastic ruins at Jerpoint, Rosbercon, Thomastown, Knocktopher, &c. The most notable castle is Graney, in Iverk, supposed to have been founded by the Earls of Ormonde in 1521. The cave of Dunmore, between Kilkenny and Castlecomer, which opens with a natural arch 50 feet high, is noted for its stalactite chambers and its subterranean stream. See J. G. Robertson's *Antiquities and Scenery of Kilkenny* (1851).

Kilkenny, the county town, is situated on the Nore, 81 miles SW. of Dublin by rail. Pop. (1851) 19,975; (1901) 10,493. At one time it was the seat of linen and woollen manufactures; and it does some marble-polishing, and has a trade in provisions. The name is Celtic—Cil-Canice—the church of St Canice or Kenny, a building dating from 1052, and the largest ecclesiastical edifice in Ireland except St Patrick's at Dublin. It is in the Early English style, 226 feet long by 123 across the transepts. There are many old sepulchral monuments, and the remains of a round tower still 100 feet high. Other ecclesiastical remains are the preceptory of St John's (1211); the Dominican abbey (1225), still used as a Roman Catholic church; and the Franciscan abbey (1230). In 1857 was erected the Roman Catholic cathedral, at a cost of £30,000, with a massive central tower 186 feet high. On a precipitous rock above the Nore is Strongbow's famous castle (1175), restored during the 19th century as a residence for the Marquis of Ormonde. The 16th-century grammar-school also stands by the river, fronting the castle; here Swift, Congreve, and Bishop Berkeley received their education. Near the city is the Roman Catholic college of St Kyran. Cromwell laid siege to the city in 1648, and in 1650 it capitulated on honourable terms. The fable of the 'Kilkenny cats,' which fought till only the tails were left, was a satire on the contentions of Kilkenny and Irishtown in the 17th century.

Killala, a seaport of County Mayo, 8 miles NW. of Ballina station. Pop. 510.

Killaloe (*Killaloo*), a town of Clare, on the Shannon, 17 miles NE. of Limerick. Pop. 885.

Killarney, a Kerry market-town, 185 miles by rail SW. of Dublin, and 47 WNW. of Cork. The Roman Catholic cathedral, a very imposing structure, along with the Bishop's Palace, was designed by Pugin. There are also a large Episcopal church, a lunatic asylum, a court-house, &c. Pop. (1851) 7127; (1901) 5656.

Killarney, The Lakes of, are a series of three connected sheets of water, the lowermost of which is within 1½ mile of the town of Killarney. The outflow is by the river Laune north-west to Castlemain Harbour. These famous lakes are situated in a basin in the midst of the mountains of Kerry, some of which rise abruptly from the water's edge densely clothed with trees from base to summit. The lower lake, Lough Leane, covers 5001 acres in area, is studded with richly-wooded islands—the largest Ross Island, on which is an old stronghold of the O'Donoghues. Another island is the 'sweet Innisfallen' of Moore's song, and on this is the picturesque ruin of an abbey, founded by St Finian the leper in the 6th century. The upper lake covers 430 acres, and is also studded with islands. Between the two is Lough Torc (680 acres). Connecting the upper with the lower and middle lakes is the Long Range, a beautifully-wooded, winding stream 2½ miles long. Midway in its course occurs the famous echo, caused by a lofty rock, the Eagle's Nest. Between the lower and the middle lake is the fine ruin of Muckross Abbey, founded by the Franciscans in 1440. A peculiarity of the scenery is the luxuriant growth of arbutuses on the islands of the lakes. See works by Mr and Mrs Hall (1843–78).

Killashandra, a town of Cavan, 6 miles NW. of Crossdoney station. Pop. 559.

Killearn, a Stirlingshire village, 16½ miles NNW. of Glasgow. At the farmhouse of Moss, 1¾ mile SSW., was born George Buchanan.

Killenaule, a town of Tipperary, 11 miles SE. of Thurles. Pop. 560.

Killiecrankie, a beautiful wooded pass in Perthshire, on the Garry, 15 miles NNW. of Dunkeld. It is traversed by Wade's Great Highland Road (1732), and by the Highland Railway (1863). At its head, on 27th July 1689, Claverhouse defeated Mackay and was slain.

Killin', a Perthshire village, near the head of Loch Tay, 37 miles NW. of Stirling. Pop. 539.

Killorglin, a town of County Kerry, 13 miles NW. of Killarney. Pop. 1018.

Killybegs, a Donegal seaport, 17 miles W. of Donegal town. Pop. 1607.

Killyleagh (*Killylay'*), a seaport of County Down, on the west side of Lough Strangford, 6 miles N. of Downpatrick. Pop. 1410.

Kilmainham, a western suburb of Dublin city. Pop. 5390. Here are the Royal Hospital for 250 old soldiers, founded by Charles II., and the prison of Kilmainham.

Kilmalcolm (locally *Kil-ma-koam'*), a Renfrewshire village, 15 miles WNW. of Glasgow. Pop. 2220.

Kilmallock, a market-town, 17 miles S. of Limerick. Pop. 1029.

Kilmar'nock, the largest town in Ayrshire, on Irvine and Kilmarnock waters, 15½ miles by rail NNE. of Ayr, and 24 SSW. of Glasgow. It received its name *Kil-mo-Ernin-oce* (Gael., 'church of my little Ernin') from the dedication of its church about 1200 to an Irish saint of the 7th century; and in 1591 it was made a burgh of barony under the Boyds, from which date its hose and bonnet making grew into thriving industries. The great carpet manufacture was introduced in 1777, and the printing of calicoes in 1770, of shawls in 1824; tweeds, winceys, boots, &c. are also manufactured; and the Glasgow and South-Western Railway works were transferred hither in 1858. The staple trade, however, is in connection with iron, owing to Kilmarnock's situation in a great mineral district; and the October cheese-fair (established 1855) is second to none in the kingdom. The Boyds' Dean Castle, 1 mile NE., was reduced by fire to ruin in 1735; and the town itself, which has suffered twice from fire (1668 and 1800), and once from flood (1852), has few buildings of interest. The town-hall (1805), the court-house (1852), the corn exchange (1862), with its Albert tower 110 feet high, and the new academy (1876) may be noticed, as also may a statue of Sir James Shaw (1848), and the Kay Park of 41 acres (1879), with its Burns monument, a tower 80 feet high. Of Burns and of the Covenanters Kilmarnock has memories; and it was the birthplace of Alexander Smith. Since 1832 it has united with Rutherglen, Dumbarton, Port-Glasgow, and Renfrew to return one member, its parliamentary boundary having been extended in 1885. Pop. (1841) 19,398; (1901) 35,091. See M'Kay's *History of Kilmarnock* (1848; 4th ed. 1880).

Kilmaurs', a town of Ayrshire, 2¼ miles NNW. of Kilmarnock. Pop. 1803.

Kilmuir', a Skye hamlet, 20 miles NNW. of Portree, with Flora Macdonald's grave.

Kilmun', an Argyllshire village, on the NE. shore of the Holy Loch, 7½ miles WNW. of Greenock. Pop. 447.

Kilpatrick, Old, a Dumbartonshire village near the N. bank of the Clyde, 11½ miles WNW. of Glasgow. It is the traditional birthplace of St Patrick. The Kilpatrick Hills attain 1313 feet. Pop. 1533.

Kilravock (*Kilrawk'*), an old castellated mansion of Nairnshire, long the seat of the Roses, on the river Nairn, 7 miles SW. of Nairn town.

Kilrea, a town of Londonderry, on the Bann, 18 miles S. of Coleraine. Pop. 785.

Kilrenny, a royal burgh in the East Neuk of Fife, 1½ mile NE. of Anstruther. It is one of the St Andrews parliamentary burghs. Pop. 2510.

Kilrush', a Clare seaport and watering-place, on the N. shore of the Shannon estuary, 36 miles W. of Limerick. Pop. 4175.

Kilsyth (*Kil-sīth'*), a town of Stirlingshire, 13 miles NE. of Glasgow, with quarries and coal and iron mines. Founded in 1665, it was made a burgh of barony in 1826. Here, on 15th August 1645, Montrose with 4900 followers almost annihilated 7000 Covenanters. Revivals took place here in 1742 and 1839. Pop. (1851) 3949; (1901) 7292. See Anton's *History of Kilsyth* (1890).

Kilwa. See Quiloa.

Kilwinning, a town of Ayrshire, on the Garnock, 3½ miles NNW. of Irvine and 26 SW. of Glasgow. The stately Tironensian abbey, founded in the 12th and demolished in the 16th century, was dedicated to Winnin, an Irish saint, who is said to have founded a church here about 715. The traditional birthplace of Freemasonry in Scotland, with a new 'mother lodge' (1893), Kilwinning was also celebrated (1488–1870) for archery; its July shooting at the popinjay, which was placed on the steeple (105 feet high), is described in Scott's *Old Mortality*. Eglinton Castle (1798), the seat of the Earls of Eglinton (q.v.), is 1½ mile SE.; and the Eglinton Ironworks (1846) afford employment. Pop. 4450. See works by Wylie (1878) and Lee Ker (1883).

Kim'berley, (1) a town of Notts, 5¾ miles NW. of Nottingham. Pop. of ecclesiastical parish, 5130.—(2) A Norfolk parish, 3½ miles NW. of Wymondham, with the seat of the Earl of Kimberley.—(3) Capital of Griqualand West, South Africa, the most important inland town of Cape Colony, is situated 540 miles NE. of Capetown by rail (30 hours). With the rest of Griqualand West, Kimberley became part of Cape Colony only in 1880; but the town owes its existence and rapid growth to the diamond-mines, the working of which dates from 1871. It is on the main line from Capetown and the sea to the Orange River Colony, the Transvaal, and the immense territories to the north. There are a handsome town-hall, post-office, high court, public library, and botanic gardens. In the South African war Kimberley was defended by British troops against the Boers for 122 days in 1899–1900, until relieved by French. Pop. (1891) 28,718; (1904) 34,260, of whom half are whites.—(4) A fertile district in the Fitzroy basin in northern (tropical) Western Australia, where gold was found in 1893.

Kimbolton, a market-town of Hunts, on the Kym, 11 miles WSW. of Huntingdon. Kimbolton Castle is the seat of the Duke of Manchester. Pop. of parish, 993.

Kimmeridge, a Dorset parish, 3½ miles SW. of Corfe Castle. It gives name to Kimmeridge Clay, the lowest series of the Upper Oolite.

Kim'polung, (1) a town of Wallachia, stands in a valley at the foot of the Carpathians, 80 miles NW. from Bucharest. Pop. 9090.—(2) A town in the extreme south of Bukowina. Pop. 5534.

Kinabalu. See Borneo.

Kinburn, or Kilburn, a former fort (razed 1860) of south Russia, opposite Otchakoff, on a long narrow sandbank which forms the southern boundary of the Dnieper's estuary.

Kincar'dine, a seaport now of Fife (till 1889 Perthshire detached), on the Forth's left bank, 10 miles W. by N. of Dunfermline. Pop. 1700.

Kincar'dineshire, or The Mearns, a maritime county of Scotland, with Aberdeenshire and the

Dee on the N., Forfarshire and the North Esk on the S. and W., and the North Sea on the E. Area, 383 sq. m., or 245,346 acres, of which 120,050 are in cultivation, and 23,153 in wood. The county may be divided into four sections—viz. the Coast, the 'Howe o' the Mearns,' the Grampians, and Deeside. Much of the first two is of superior quality; the 'Howe' forms a continuation of the Valley of Strathmore (q.v.). The Grampians, running across the country from east to west, parallel to the Dee, attain in Mount Battock 2555 feet high. The principal towns and villages are Stonehaven, Bervie, Laurencekirk, Banchory, Johnshaven. Of the objects of antiquarian interest the most noted are Dunnottar Castle and Raedyke's Camp, one of the sites of the Battle of the Grampians. Kincardineshire was the birthplace of George Wishart, Robert Barclay, Dr J. Beattie, and Dr Thomas Reid; and the father of Robert Burns was born in Dunnottar parish. Pop. (1801) 26,349; (1871) 34,630; (1901) 40,923.

Kinchinjinga, or KANCHANJANGA, a Himalaya peak (28,176 feet) between Sikkim and Nepal.

Kinder Scout, the highest summit (2080 feet) of the Peak district, Derbyshire.

Kineton, a Warwickshire market-town, 11 miles S. by E. of Warwick. Pop. of parish, 1008.

Kinfare. See KINVER.

Kinfauns, a Gothic mansion (1322) of Perthshire, 3 miles E. by S. of Perth.

King Country. See WAIKATO.

King George's Sound, an inlet 5 miles north and south, and 5 miles broad, at the south-west angle of West Australia, which is an excellent roadstead, and contains two landlocked recesses, Princess Royal and Oyster Harbours.

Kinghorn, a royal burgh of Fife, on the Firth of Forth, 3 miles S. of Kirkcaldy by rail. It has shipbuilding-yards, a bleachfield, manufactures of flax and glue, and golf-links. Alexander III. was killed (1286) at Kinghorn Ness, and a monument was erected on the spot in 1887. Pop. 1550.

Kingsbridge, a town of Devon, at the head of Salcombe haven, 10½ miles SW. of Potness. John Walcot ('Peter Pindar') was a native. Pop. of urban district (1901) 3025.

Kingsburgh, a Skye mansion on the E. side of Loch Snizort, 9 miles NW. of Portree. It has memories of Prince Charlie, Flora Macdonald, and Dr Johnson.

King's County, an inland county of Ireland, in Leinster, is separated on the W. by the Shannon from Roscommon and Galway. It is 20 miles long from N. to S. by 58 wide. Area, 493,985 statute acres, or 772 sq. m. Of this 23 per cent. is covered with bogs, including a large part of the Bog of Allen, and about 26 per cent. is under crops. Pop. (1841) 146,857; (1861) 90,013; (1901) 60,129, of whom 53,788 were Roman Catholics. The surface is flat, except for the Slieve Bloom Mountains (1733 feet) on the south boundary. The Grand Canal traverses the north of the county, and joins the Shannon. The river Barrow separates it from Queen's County on the south-east. King's County, constituted a shire in 1557, and named in honour of King Philip, returns two members. In the north-west is Clonmacnoise Abbey (q.v.); at Birr Castle Lord Rosse erected his great telescope. The chief towns are Tullamore, Parsonstown or Birr, and Portarlington.

Kingsclere, a town of Hants, 9 miles NW. of Basingstoke. Pop. of parish, 2450.

Kingscourt, a town of Cavan, 20 miles N. of Navan. Pop. 843.

King's Lynn. See LYNN.

Kingsmill Islands, another name for the Gilbert Islands (q.v.).

King's-Norton, a Worcestershire town, 5½ miles SW. of Birmingham. It manufactures paper, screws, chocolate, &c. Pop. of urban district, King's-Norton and Northfield (1901), 57,122.

King's Seat. See OCHILS.

Kingston, chief town of Frontenac county, Ontario, is situated at the head of Lake Ontario, and at the mouth of the Cataraqui Creek, 161 miles by rail ENE. of Toronto. It has handsome public buildings, and is the seat of the Royal Military College of Canada (1876), of Queen's University (1841), with museums and an observatory, and of the Royal College of Physicians and Surgeons (1854), and the Women's Medical College (1883) affiliated to it. The city has, besides excellent railway facilities, good water-communication by the lake, the St Lawrence, and the Rideau Canal, which last connects it with Ottawa. It possesses a large, sheltered harbour, with an active trade, and strongly fortified; and, besides busy shipyards, has manufactories of locomotives and stationary engines, machinery, leather, boots and shoes, agricultural implements, wooden wares, &c. Grant Allen and George Romanes were born here. The capital of Canada from 1841 to 1844, Kingston is the seat of an Anglican bishop and of a Roman Catholic archbishop. Its site was occupied by the old French fort of Frontenac. Population, nearly 20,000.

Kingston, the capital of Jamaica, stands on the north side of a landlocked harbour, the best in the island, and, for its size, one of the best in the world. Population, about 48,000. It was founded in 1693–1703, after the neighbouring town of Port Royal had been destroyed by an earthquake. From this place, afterwards rebuilt, Kingston is distant 6 miles, the breadth of its noble haven; while with Spanish Town, towards the interior, it has since 1846 been connected by railway. In 1758 Spanish Town was made the capital, but in 1872 the seat of government was removed to Kingston. Kingston was visited in 1880 by a violent hurricane, and by a vast conflagration in December 1882, as also before in 1782 and 1843. The most interesting public building is the Old Church, where Benbow the 'old sea-dog' is buried.

Kingston, capital of Ulster county, New York state, stands on the right bank of the Hudson, 54 miles S. of Albany. It is a railway and canal terminus, and forwards enormous quantities of blue-stone flags. Kingston is also a centre of the hydraulic cement business, and contains breweries, tanneries, flour-mills, foundries, brickyards, &c. Pop. 26,000.

Kingston-on-Hull. See HULL.

Kingston-upon-Thames, a municipal borough of Surrey, 12 miles SW. of London, lies on the right bank of the Thames, here crossed by two bridges—one of stone completed 1828 and freed 1870, and the other an iron railway viaduct. Of late years, with its suburbs of Norbiton, Surbiton, and New Malden, it has grown rapidly, its easy access to London, coupled with its facilities for boating and its pleasant surroundings, notably Hampton Court, Bushy and Richmond Parks, having attracted large numbers of residents. The borough is within the London Metropolitan Police District. Pop. (of parish, 1801) 4886; (1891) 27,059; (1901) 34,375. The parish church has some

fine monuments; the county council buildings, costing £36,000, were undertaken in 1890. Seven of the Anglo-Saxon kings were crowned here, as recorded on the coronation-stone still standing near the market-place; King John, who granted the town its first charter, was a frequent visitor in 1204–15; in 1264 Kingston Castle (of which no traces now remain) was captured by Henry III.; Fairfax made the town his headquarters in 1647; and a year later took place in the neighbourhood the last fight between the royalists and Roundheads. At Ham Common lived Gay's 'Kitty,' Duchess of Queensberry. See Biden's *History of Kingston-upon-Thames* (1852).

Kingstown, a populous and important suburb of Dublin, 7 miles SSE. from the G.P.O. Previous to 1817, when the harbour-works were commenced, it was merely a fishing-village known as Dunleary. On the occasion of George IV.'s visit in 1821 its name was changed to Kingstown. The situation of the town and the invigorating air have made it a favourite residence. The mail-packets sail hence to Holyhead twice a day. There is little general trade, though the harbour, completed by the Admiralty in 1859 at a cost of £825,000, is one of the finest in the United Kingdom. The east pier is 3500 feet in length; the west, 5000 feet, enclosing an area of over 250 acres, with a depth of from 13 to 27 feet. Vessels drawing 24 feet can come alongside the quay at any state of the tide. Kingstown is within the parliamentary division of South Dublin. Pop. (1901) 17,356.

Kingstown, capital of the British West Indian island of St Vincent, at its SW. extremity, on a large bay, at the foot of a spur of Mount St Andrew (2000 feet). Pop. 4547.

Kingswinford, a Staffordshire village, 3½ miles N. by W. of Stourbridge. It has coal and iron mines, and manufactures of iron, glass, bricks, &c. Pop. of rural district, 20,000.

King-te-chin, the principal seat of porcelain manufacture in China, in the province of Chiang-hsi, on a small river which falls into Lake Po-yang from the east. Pop. 500,000.

Kington, a Herefordshire town, 13 miles W. by S. of Leominster. Mrs Siddons made her début in a barn here. Pop. of rural dist. 5254.

Kingussie (*Kin-yoos'sie*), a police-burgh of Inverness-shire, on the Spey's left bank, 72 miles by rail NNW. of Perth. Pop. 990.

King Williamstown, a town in the SE. of Cape Colony, on the Buffalo River, 80 miles ENE. of Grahamstown, and by rail (1877) 42 WNW. of East London, on the coast. It has considerable trade, military barracks and stores, and a college. Pop. 8226.

Kinibalu. See Borneo.

Kinloss', an Elginshire parish, 3 miles NE. of Forres, with a ruined Cistercian abbey (1150).

Kinnaird' Castle, the seat of the Earl of Southesk, 3½ miles SE. of Brechin.

Kinnaird Head. See Fraserburgh.

Kinnoull Hill (*Kin-nool'*), a beautiful wooded eminence (729 feet) E. of Perth.

Kinross'-shire, the smallest Scotch county after Clackmannanshire, lies between Perthshire and Fife, and, measuring 9⅝ by 12¼ miles, has an area of 78 sq. m., or 49,812 acres, of which 3327 are water. Most of the drainage belongs to Loch Leven (q.v.), from which the surface rises to encircling hills 734 to 1573 feet high. Nearly 63 per cent. of the surface is in cultivation, and 2733 acres are under wood. A separate county since 1252 and earlier, Kinross-shire unites with Clackmannanshire to return one member to parliament. Pop. (1801) 6725; (1851) 8924; (1901) 6980, of whom 2136 were in the county town, Kinross, 27 miles NNW. of Edinburgh, and near the west end of Loch Leven. Kinross House (1635–92) was designed by Sir William Bruce, the architect of the later portions of Holyrood. See Æneas Mackay's *History of Fife and Kinross* (1890).

Kinsale', a municipal borough and seaport of County Cork, at the head of Kinsale Harbour, which is formed by the estuary of the river Bandon, 24 miles SSW. of Cork by a railway (1863). Down to the Union Kinsale returned two members; thenceforward one until 1885. Kinsale is much frequented by summer visitors. The harbour, landlocked, is about 2 miles long and ½ mile in average breadth. Formerly Kinsale was one of the most flourishing ports on the south of Ireland; but its trade has been ruined by its more successful rivals Cork and Queenstown. Valuable fisheries are carried on. On the Old Head of Kinsale stands a lighthouse whose light, 236 feet above high-water, is visible 21 miles. Pop. (1851) 5506; (1901) 4250. In 1601, 3000 Spaniards landed at Kinsale to fight for the O'Neill confederacy. Here James II. landed on 12th March 1689, and here he re-embarked in July 1690.

Kintore', an ancient royal burgh of Aberdeenshire (one of the Elgin parl. burghs), near the Don, 13½ miles NW. of Aberdeen. Pop. 789.

Kintyre', or Cantire (Gael. *ceann-tir*, 'headland'), a long, narrow peninsula of Argyllshire, between the Atlantic and the Firth of Clyde, extending 42 miles south by westward, and 4½ to 11½ miles broad. At the north end it connects with the mainland by the isthmus of Tarbert, 1⅛ mile broad, between East Loch Tarbert, a bay of Loch Fyne, and West Loch Tarbert. The surface is diversified by a ridge of low, moorish hills, with many lochs, the highest point being Ben-an-Tuirc (1491 feet). Coal is found at Drumlemble, 4 miles to the west of Campbeltown. Machrihanish Bay, on the west coast, just beyond, possesses noted golf-links. A lighthouse (1787), 297 feet above sea-level, stands on the Mull of Kintyre, which is overhung by Ben-na-Lice (1405 feet), and is only 13 miles distant from Ireland.

Kinver, a town of Staffordshire, 4 miles WSW. of Stourbridge. Pop. of parish, 2180.

Kioto. See Kyoto.

Kirghiz Steppes (*Keer-geez*, *g* hard), the region of the Kirghiz Tartars or Turks, between the Volga, Irtish, Caspian, and Sea of Aral.

Kirin, a Manchurian town, on the Sungari, 220 miles NE. of Mukden. Pop. 85,000.

Kirkburton, a Yorkshire town, 5 miles SE. of Huddersfield. Pop. 2976.

Kirkby-Lonsdale, a Westmorland town, on the Lune, 11 miles SSE. of Kendal. Pop. 1650.

Kirkby Moorside, a Yorkshire town, on the Dove, 7½ miles WNW. of Pickering. Pop. 4800.

Kirkby Stephen, a Westmorland town, on the Eden, 9½ miles SE. of Appleby. Pop. 1713.

Kirkcaldy (*Kir-caw'dy*), a seaport of Fife, on the Firth of Forth, 15 miles N. of Edinburgh. Including Linktown and Newtown of Abbotshall on the west, and Pathhead, Sinclairtown, and Gallatown on the north-east, it is nearly 4 miles in length; hence the name 'The Lang Toun.' It was created a royal burgh in 1450, and, with Dysart, Kinghorn, and Burntisland, returns one member. Its harbour is small and shallow, but there is wet-dock accommodation for ships

of considerable burden, and a bill was passed in 1890 for the construction of a large new harbour. Its manufactures are spinning flax, tow, and jute, and bleaching and weaving linen yarns, which are extensively carried on, the products being the usual varieties of linen cloth; mechanical (including marine) engineering on a large scale; iron-founding; and tanning. There are also several potteries. The manufacture of floor-cloth and linoleum has been developed into a great trade, and Kirkcaldy is the chief seat of this important manufacture. There is also a direct export trade to the United States. The Beveridge public park was opened in 1892. Pop. of parliamentary burgh (1841) 5704; (1871) 12,422; (1901) 22,346; of royal burgh, as extended in 1876 (1901), 34,063. Kirkcaldy is the birthplace of Adam Smith (memorial hall, 1895); and Edward Irving and Thomas Carlyle were teachers here.

Kirkcudbright (*Kir-koo'bry*), Stewartry of, a county of south-west Scotland, washed on the south for 50 miles by the Solway Firth, and elsewhere bounded by Wigtown, Ayr, and Dumfries shires. Measuring 41 by 38 miles, it has an area of 954 sq. m.; is watered by the Nith, Urr, Dee, Fleet, and Cree; and in the south-east sends up conspicuous Criffel (1867 feet), on the north-west border Merrick (2764), the loftiest summit in the south of Scotland. Little more than a fourth of the entire area is in cultivation, though great improvements have been effected since the foundation in 1809 of the Stewartry Agricultural Society. Nearly 31 sq. m. are occupied by woods. Towns are Kirkcudbright, New Galloway, Castle-Douglas, Dalbeattie, Gatehouse, Creetown, and Maxwelltown; and the antiquities include the Deil's Dyke, Threave Castle, and the ecclesiastical ruins of Dundrennan, Lincluden, New Abbey, St Mary's Isle, and Tongueland. Among worthies of the Stewartry have been Samuel Rutherford, Paul Jones, Thomas Brown, and Alexander Murray. It returns one member to parliament. Pop. (1801) 29,211; (1851) 43,121; (1901) 39,407.

Kirkcudbright, the county town, 30 miles SW. of Dumfries by a branch-line (1864), is beautifully situated on the left bank of the Dee, which soon begins to broaden into Kirkcudbright Bay, opening into the Solway Firth 6 miles below. Its name is derived from the church of St Cuthbert, as old at least as 1164; and it is a royal burgh (1455), uniting with Dumfries, &c. to return one member. Chief buildings are the court-house (1868) and town-hall (1879); a lattice-bridge (1868), 500 feet long, spans the Dee. The ivy-mantled ruins of the castle (1582) of Maclellan of Bombie still dominate the town. Pop. 2400.

Kirkdale Cave, Vale of Pickering, Yorkshire, 28 miles W. of Scarborough, is 245 feet long, but very low. Discovered in 1821, it has yielded many remains of Tertiary mammals.

Kirkham, a market-town of Lancashire, 8½ miles W. by N. of Preston. It has a grammar-school (1673), and manufactures of cotton, flax, sailcloth, sacking, and cordage. Population, over 3700.

Kirkheaton, a town in the West Riding of Yorkshire, near the Colne, 3 miles ENE. of Huddersfield. Pop. 2632.

Kirkintil'loch, a town in Dumbartonshire (detached), on the Forth and Clyde Canal, 7 miles NNE. of Glasgow. Its Celtic name *Caerpentulach* ('fort at the end of the ridge') referred to a strong fort on Antoninus' Wall, which has left some remains; as early as 1170 it was made a burgh of barony. Chemicals, iron, &c. are manufactured. In the southern suburb, Lenzie, are the large Barony lunatic asylum (1875) and the Glasgow convalescent home (1864). Pop. (1851) 6342; (1901) 10,502.

Kirk-Kilissia (the 'forty churches'), a town of Turkey, 104 miles NW. of Constantinople. It is famed for its confections. Pop. 16,000.

Kirklees, a Yorkshire village, on the Calder, 4 miles NE. of Huddersfield. Robin Hood died, it is said, in a Cistercian nunnery here.

Kirkmaiden, a parish, the southernmost of Wigtownshire and Scotland; hence the phrase, 'frae Maidenkirk to John o' Groat's.'

Kirkoswald, an Ayrshire parish, 4½ miles WSW. of Maybole. 'Tam o' Shanter' and 'Souter Johnnie' are buried in the churchyard.

Kirkpatrick-Irongray, a Nithsdale parish of Kirkcudbrightshire, 7 miles W. of Dumfries. Helen Walker ('Jeanie Deans') is buried here.

Kirk'stall Abbey, a Cistercian abbey in Yorkshire, stands 3 miles NW. of Leeds, in the midst of modern manufacturing establishments. First founded at Barnoldswick in 1147, but five years later moved to its present site, the abbey is mainly Transition Norman and Perpendicular in style. The church is, like most Cistercian churches, long and narrow, with little ornamentation, and a low tower. The abbey was purchased by Col. North in 1888 for £13,500, and presented next year to Leeds.

Kirkstone Pass (1500 feet), in Westmorland, 3½ miles NNE. of Ambleside.

Kirk'wall, the capital of Orkney, on the east coast of Mainland, 49 miles NE. of Thurso, and 225 N. of Leith. St Magnus' Cathedral (1137–1500) is a stately cruciform pile, mixed Norman and Gothic in style. It measures 253 feet by 102 across the transept, and has a central tower 133 feet high, though shorn by lightning of its spire in 1671. The choir serves as a parish church. The last vestige of the royal castle was demolished in 1865; but the roofless Earl's Palace (1607) remains, and a tower (1550) of the Bishop's Palace, in which King Haco died in 1263. Much has been done for drainage, paving, and water-supply; the harbour has been improved, and the iron pier superseded by a stone one. Its shipping has increased eightfold since 1850. Made a royal burgh in 1486, Kirkwall unites with Wick, &c. to return one member to parliament. Pop. 3660.

Kirk-Yetholm. See Yetholm.

Kirriemuir, a police-burgh (1875) of Forfarshire, on Gairie Burn, 5 miles WNW. of Forfar. It manufactures brown linen, and is famous as the 'Thrums' of Mr J. M. Barrie, whose birthplace it was. Pop. 4100.

Kirton-in-Lindsey, a town of Lincolnshire, 10 miles NE. of Gainsborough. Pop. of parish, 2400.

Kishineff', capital of the Russian government of Bessarabia, stands on a tributary of the Dniester, 162 miles NW. of Odessa by the railway to Jassy. When it became Russian in 1812 it had only 7000 inhabitants; in less than a century it had nearly 110,000, of whom about 10,000 are of Russian race, the others being, in about equal proportions, Moldavians and Jews. In 1903 the town became notorious for anti-Semitic riots and the massacre of hundreds of Jews. Kishineff is the seat of an archbishop. Pop. (1897) 108,506.

Kishm, or Tawilah (anc. *Oaracta*), a barren island of Persia, at the entrance to the Persian Gulf, is 55 miles long, and 515 sq. m. in area.

Kismayu, an island and port on the coast of British East Africa, 10 miles S. of the Juba River, a region inhabited by Somali tribes.

Kissingen (*Kis'sing-en*), the most popular watering-place in Bavaria, on the Saale, 60 miles E. by N. from Frankfort-on-Main. Its three mineral springs (51° F.) are both drunk and used as baths, and are considered specially efficacious in cases of dyspepsia, skin-diseases, gout, &c.; and the waters are largely exported in bottles. Though their existence was known in the 9th century, it was not until the 16th century that their medical properties were recognised, and not until the 19th that they came into high repute. The pop. (5000) is increased by an annual influx of 13,000 to 14,000 visitors.

Kistna, or KRISHNA, a river of southern India, rises in the Western Ghâts within 40 miles of the Arabian Sea, at a height of 4500 feet, in 18° 1′ N. lat., and flows 800 miles E. across the peninsula to the Bay of Bengal. It forms for some distance the boundary between the Nizam's dominions and Madras Presidency, and has a delta extending 100 miles inland. It is only navigable for 50 miles and during six months.

Kit's Coity House, the best-known dolmen in England, 1½ mile NW. of Aylesford, Kent. Three upright blocks of sandstone 8 feet high support a 'covering stone' 12 feet long.

Kiû-kiang, or CHIÛ-CHIANG, a Chinese treaty-port on the Yang-tsze-kiang. Pop. 53,000.

Kiung-chow, chief city of Hainan (q.v.).

Kizil-Irmak ('red river;' anc. *Halys*), the largest river of Asia Minor, rises 70 miles above the town of Siwas, and curves 560 miles SW. and NNE. to the Black Sea.

Kizil-Kum ('red sands'), a sandy desert in Russian Turkestan, lying between the lower courses of the Amu-Daria and Syr-Daria.

Kjöbenhavn. See COPENHAGEN.

Klagenfurt (*Klâgenfoort*, *g* hard), capital of the Austrian duchy of Carinthia, 262 miles SW. of Vienna. Pop. 24,500.

Klausenburg (Hungarian *Kolozsvár*), one of the chief cities in Transylvania, 95 miles by rail E. by S. of Grosswardein. Here are a university (1872) and a Unitarian College. Pop. 50,000.

Klausthal (*Klowstâl*), the chief mining-town of the northern Harz Mountains, 25 miles NE. of Göttingen. The ores raised are silver, lead, copper, and zinc. Pop. 9000, or, with Zellerfeld, 20,000.

Klondike, or KLONDYKE, a small tributary of the Yukon River in the Canadian district of Yukon, separated from the North-west Territories in 1895. The Klondike (properly *Thron-duick*, 'plenty of fish') gives name to an extraordinarily rich auriferous region, partially known in 1873. Gold-mining was being carried on on the Lewis and Stewart rivers when in 1896 gold was found on the Klondike in such abundance as to cause the desertion of the adjoining diggings and to create a rush from Europe. Dawson, where the Klondike enters the Yukon River, is 60 miles east of the Alaskan (U.S.) frontier.

Kluchevskaya. See KAMCHATKA.

Knapdale, an Argyllshire district, bounded N. by the Crinan Canal.

Knaresborough, a market-town in the West Riding of Yorkshire, on the Nidd, 3½ miles NE. of Harrogate and 17 WNW. of York. It has a church (restored 1872), with interesting Slingsby monuments; a grammar-school (1616); remains of a castle (1170), in which Richard II. was imprisoned, and which was dismantled in 1648; a 'dropping well,' with petrifying properties; and St Robert's Cave, where Eugene Aram buried his victim in 1745. Mother Shipton is claimed as a native, also Jack Metcalf, the blind road-surveyor, and Bishop Stubbs. Linen and woollen rugs are manufactured. Knaresborough returned two members from 1550 till 1867, and one until 1885. Pop. a little under 5000. See works by Calvert (1844) and Grainge (1871).

Knebworth, a parish, 8½ miles NW. of Hertford, with the seat of Lord Lytton.

Knighton, a Radnorshire market-town, on the Teme, 16 miles W. of Ludlow. Pop. 2140.

Knock, a village in County Mayo, Ireland, 17 miles ESE. of Castlebar, where an alleged luminous apparition of the Virgin appeared on the chapel wall in 1880.

Knockmeledown, or KNOCKMEALDOWN, a range (2609 feet) between Tipperary and Waterford.

Knole. See SEVENOAKS.

Knossos. See CNOSSUS.

Knowsley Hall, Lancashire, 3 miles NW. of Prescot, seat (since 1385) of the Earls of Derby.

Knoxville, a city of Tennessee, stands amid picturesque scenery on the Holston River, at the head of steamboat navigation, 165 miles E. of Nashville. The seat of the state university and a railway junction, it manufactures iron goods, wooden wares, flour, &c. Pop. (1880) 10,917; (1900) 32,637.

Knoydart, a district in the west of Inverness-shire, between Lochs Hourn and Nevis.

Knutsford ('Canute's ford'), a pleasant looking town of Cheshire, 15 miles SW. of Manchester by rail, the 'Cranford' of Mrs Gaskell's sketches, with manufactures of cotton, worsted, and leather goods. Pop. a little over 5100. See H. Green's *History of Knutsford* (1859).

Knysna, a forest and elephant-preserve, between the sea and the Outeniqua Mountains in Cape Colony, 150 miles W. of Port Elizabeth.

Kobbe. See DAR-FÛR.

Kobe. See HYOGO.

Kodiak. See KADIAK.

Kohat', in the NW. Frontier Province, is 37 miles S. of Peshawar. It has cantonments and a fort. Guns are manufactured. Pop. 27,003.

Koh-i-baba. See AFGHANISTAN.

Kohistan', a name given to certain mountainous regions in Persia, Afghanistan, and Turkestan.

Koil. See ALIGARH.

Ko'komo, a city of Indiana, on Wild Cat River, 54 miles by rail N. of Indianapolis, with busy mills, &c. Pop. 12,000.

Koko-nor, or KUKU-NOR, a lake of Tibet, near the Chinese frontier, fills a depression surrounded by mountains, and lies 12,097 feet above sea-level. Its very salt, blue waters, cover 66 miles by 40. One of its five islands has a Buddhist monastery.

Kokstadt. See GRIQUALAND.

Kola, the capital (pop. 770) of Russian Lapland, and the most northern town of European Russia, is situated on the peninsula of Kola, near the head of the Kola inlet. The peninsula is a dreary expanse of forests and lakes, but in the Umbdek Mountains, east of Lake Imandra, rises to 3300 feet.

Kolapur (*Kolhâpur*), the capital of a tributary state in Bombay, 144 miles S. by E. of Poona, famous for its ancient temples. Pop. 54,500.—Area of state, 2816 sq. m.; pop. 915,000.

Kolguef, or KALGUEF, an island in the Russian government of Archangel, in the Arctic Ocean. Area, 1350 sq. m.

Kolin, or KOLLIN, a town of Bohemia, on the Elbe, 38 miles by rail E. by S. of Prague, is a centre of the sugar industry of the country, and manufactures chemicals, oil, metal wares, &c. Pop. 15,636. Near it, on June 18, 1757, the Austrians defeated Frederick the Great.

Köln. See COLOGNE.

Kolome'a, a town of Austrian Galicia, on the Pruth, 43 miles by rail NW. of Czernowitz. Near a rich petroleum region, it has petroleum and paraffin-candle works. Pottery is, however, the staple manufacture. Pop. 35,235.

Kolomna, a town of Russia, on the Moskva, 68 miles SE. of Moscow. It manufactures silk, linen, leather, soap, and machines. Pop. 28,323.

Kolosvár. See KLAUSENBURG.

Kolyma', a river of E. Siberia, flowing from the Stanovoi Mountains 995 miles NE. to the Arctic Ocean. It is frozen forty weeks.

Ko'morn, a town of Hungary, on the island of Schütt, in the Danube, here crossed by a bridge of boats, 48 miles NW. of Pesth. Its strong fortress dates from about 1300. Pop. 23,042.

Konakry. See CONACRY.

Kong, a district of West Africa, stretching from 8° 30′ to 12° N. lat. along the upper course of the Comoe (mouth at Grand Bassam on the Ivory Coast). It forms a plateau 2300 feet above sea-level; and the Kong Mountains of geographers are really mere isolated granitic peaks only 300 feet higher. The people are Mandingoes by race and Mohammedans by religion. The capital, Kong, has 12,000 to 15,000 inhabitants. Kong was declared a French protectorate in 1889.

Konieh, or KONIYA. See ICONIUM.

Königgrätz (*Königgraytz*), a cathedral city of Bohemia, on the Elbe, 73 miles by rail E. by N. of Prague. Here Ziska was buried in 1424. Pop. 9166; with suburbs, 17,715. A signal victory was gained here on 3d July 1866 by the Prussians over the Austrians: the latter name the battle *Sádowa* from a village nearer the battlefield.

Königsberg, (1) a town and fortress in East Prussia, on the river Pregel, 4½ miles from the Frisches Haff and 366 by rail NE. of Berlin. The nucleus of the place was the block-house built in 1255 by the Teutonic Knights, but Königsberg is quite a modern town. The castle, chiefly of the 16th and 18th centuries, was the headquarters of the grand-master of the Teutonic Order, and from 1525 to 1618 the residence of the Dukes of Prussia. In the castle chapel (1592) Frederick I. crowned himself first king of Prussia in 1701. The Gothic cathedral (1333) was restored in 1856; in an adjoining building Kant lies buried. The university was founded as a Lutheran institution in 1544, and rebuilt in 1844–65, has an observatory (1811), a zoological museum (1819), a botanical garden (1809), a library of 200,000 volumes, 96 teachers, and over 650 students. One of the most imposing edifices in the town is the new exchange (1875). The industries include the manufacture of iron, machinery, pianos, thread, meerschaum, tobacco, beer, &c. Königsberg is a chief continental centre for the tea trade, and ships immense quantities of corn. Large merchant-vessels unload at Pillau, 28½ miles by rail to the west, at the entrance from the Baltic to the Frisches Haff. Pop. (1875) 122,636; (1905) 192,500.—(2) There is another Königsberg, 34 miles S. of Stettin by rail. Pop. 5958.

Königshut'te, a rapidly-growing centre of great coal, iron, zinc, and copper works in Prussian Silesia, 110 miles SE. of Breslau by rail. It was constituted a town in 1869, out of several mining-villages. Pop. 61,000.

Königstein, a fortress of Saxony, once regarded as impregnable, but now of no military importance, stands on a rock 800 feet above the Elbe, 24 miles SE. of Dresden by rail.

Königswart, a town of Bohemia, 14 miles by rail SE. of Eger, in a romantic valley, has a fine castle of Prince Metternich, chalybeate springs, and a bathing establishment. Pop. 2112.

Königswinter, a village on the Rhine (pop. 3200), 21 miles SE. of Cologne.

Konkan, a strip of coast-districts in Bombay Presidency, extending from Gujarat on the north, past Goa, to the south of North Kanara. Its breadth varies from 1 or 2 to 50 miles, as the Western Ghâts approach or recede from the sea.

Kootenay, a river of British Columbia, which rises in the mountains that separate it from Alberta, and, after passing through a corner of the U.S., forms the Kootenay Lake, and after a course of 450 miles falls into the Columbia River. There have been rich gold finds here since 1896.

Kopparberg, another name for Falun (q.v.).

Kordofan', or the White Land, since 1899 once more a province of the Egyptian Soudan, is separated from Sennaar on the E. by the White Nile, and from Dar-Fûr on the W. by a strip of desert. It extends from 12° to 16° N. lat. and from 29° 30′ to 32° 30′ E. long.; its area, including Takalla on the S., has been estimated at 41,500 sq. m., and its pop. at 280,000. The surface is undulating. The chief product is millet, the principal food of the inhabitants. The capital is El-Obeid, with 30,000 inhabitants, situated in the centre of the country.

Korea. See COREA.

Körös, NAGY ('Great Körös'), a town of Hungary, 55 miles SE. of Budapest by rail. Pop. 26,584.—KISS KÖRÖS ('Little Körös'), a town, 66 miles by rail S. by E. of Budapest, is the birthplace of Petöfi. Pop. 8734.

Korosko, a small village of Lower Nubia, with a few wretched huts straggling along the right bank of the Nile, about midway between the first and second cataracts.

Kosciusko, MOUNT. See AUSTRALIA, p. 62.

Köslin, a town of Prussia, 5 miles from the Baltic and 85 NE. of Stettin. It manufactures iron, paper, soap, bricks, &c. Pop. 27,277.

Koslow. See KOZLOF.

Kos'sovo, the 'Field of Blackbirds,' a plain in Turkey, near the Servian frontier, west of the Prishtina, the scene of two Turkish victories—(1) of Sultan Murad I. over the Servian Tsar Lazar in 1389, when both sovereigns fell, and the Servians lost their independence; (2) of Sultan Murad II. over the great Hungarian general Hunyady in 1448.

Kostendil, an archiepiscopal city of Bulgaria, near the Struma, 43 miles SW. of Sofia, has gold and silver mining, warm baths, and numerous ruins. Pop. 11,400.

Kostnitz. See CONSTANCE.

Kos'troma, capital of a Russian government, near the Kostroma's influx to the Volga, 216 miles by rail NNE. of Moscow. The spinning and weaving of cotton and linen, brandy distilling, dyeing, corn-grinding, and tanning are chief

industries. Pop. 41,196.—Area of *government*, 32,692 sq. m.; pop. 1,428,900.

Kotah, the chief town of a native state in Rajputana, on the right bank of the Chambal. Pop. 33,624. The area of the state is 3803 sq. m.; pop. 544,350.

Köthen, a town in the German duchy of Anhalt, till 1853 the capital of the principality of Anhalt-Köthen, 22 miles by rail N. of Halle, and 31 SSE. of Magdeburg. It has a cathedral; the castle of the former dukes, rebuilt in 1597–1606 after a fire; iron-foundries, sugar-factories, &c. Pop. (1875) 14,403; (1900) 22,100.

Kotonou. See COTONOU.

Koubbet. See OBOCK.

Kovno, capital of the Russian government of Kovno, stands near the confluence of the Vilia and the Niemen, 523 miles by rail SW. of St Petersburg and 94 ENE. of Königsberg. It was long a stronghold of the Teutonic knights, and was taken by Russia from Lithuania in 1795. Pop. 73,550.—The *government* lies south of Courland, bordering on Prussia and Poland. Area, 15,687 sq. m.; pop. 1,600,000.

Koweit, or KUWEIT, a good port of Turkey in Asia, on the Shat-el-Arab, dependent on Muscat or Oman (and so on Britain); the proposed terminus of the German railway through Asia Minor.

Kowloon. See HONG-KONG.

Koyunjik. See NINEVEH.

Kozlof, a Russian town, 123 miles SE. of Moscow by rail. Pop. 45,053.

Kra, or KRAO, the isthmus connecting Siam with the Malay Peninsula, whose minimum breadth is 44 miles. A ship-canal through it would shorten the journey from Ceylon to Hong-Kong by 300 miles, and that from Calcutta to Hong-Kong by 540. A railway has also been suggested. See a work by Loftus (1883).

Kragujevatz, a town of Servia, 61 miles S. of Belgrade, has an arsenal. Till 1842 it was the residence of the Servian princes. Pop. 14,669.

Krain. See CARNIOLA.

Krajova, or CRAIOVA, a town of Roumania, 154 miles by rail W. of Bucharest. Near it are productive salt-mines. Pop. 43,000.

Krakatoa, or KRAKATAU, a volcanic island in the Strait of Sunda, between Java and Sumatra, was in 1883 the scene of a tremendous volcanic disturbance. From May the volcano on the island had been ejecting ashes; during 26–28th August the crater walls fell in, together with a part of the ocean bed, carrying with it 8 sq. m. or two-thirds of the island. At the same time a gigantic ocean-wave inundated the adjoining coasts of Java and Sumatra, causing a loss of 36,500 lives, and then careered round the entire globe. See a work by G. J. Symons (1888).

Kranganur. See CRANGANORE.

Krasnovodsk, a Russian railway terminus and harbour, on the east side of the Caspian Sea, in the Transcaspian territory. Pop. 7500.

Krasnoyarsk, the chief town of the Siberian government of Yeniseisk, on the Upper Yenisei, 370 miles E. from Tomsk. It is the centre of the gold-washings of the province. Pop. 27,154.

Knaresborough, one of the most important manufac- Riding of Yorkshire, many, 4 miles from the left of Harrogate and 17 W. 12 NW. of Düsseldorf. It church (restored 1872), wi the settlement here, in monuments; a grammar-s ries, of refugees from of a castle (1170), in which lished Krefeld's noted

silk and velvet manufactures. Here are also large railway repair shops, iron-foundries, and manufactures of machinery, chemicals, soaps, spirits, &c. Pop. (1875) 62,840; (1900) 109,116.

Kremenchug, a town of Russia on the Dnieper, 74 miles by rail SW. of Pultowa. From 1765 to 1789 it was the chief town of New Russia; it is now the seat of great industrial activity, especially in wool, timber, and tobacco, and of factories for agricultural machines, leather, tobacco, candles, &c. Pop. 58,000.

Kremlin. See MOSCOW.

Kremnitz, a town of Hungary, 83 miles N. of Budapest. Its gold and silver mines were once more famous than now. Pop. 10,000.

Krems, a town of Lower Austria, at the confluence of the river Krems with the Danube, 47 miles by rail W. by N. of Vienna. Pop. 13,042.

Kremsier, a pretty town of Moravia, on the March, 35 miles E. by N. of Brünn. Pop. 13,816.

Kreuznach (*Kroitz'nahh*), a town of Rhenish Prussia, dating from the 9th century, on the Nahe, 35 miles by rail SSE. of Coblenz. Its chief manufacture is champagne; but it is most notable for its hot salt-springs (50° to 90° F.), attracting over 5000 visitors annually. Pop. 21,404.

Krimmitschau, a town of Saxony, 45 miles S. of Leipzig. Pop. 23,000.

Krishna. See KISTNA.

Kronenberg, a town of Rhenish Prussia, 4 miles S. of Elberfeld. Pop. 9958.

Kronstadt (Magyar *Brassó*), a town in the extreme SE. of Transylvania. Pop. 36,660.—For the Russian KRONSTADT, see CRONSTADT.

Kroonstad, a town of Orange River Colony, on the railway from the Cape to Pretoria, 130 miles NE. of Bloemfontein. Pop. 7200.

Krugersdorp, a town of the Transvaal Colony, about 20 miles W. of Johannesburg. Pop. 19,500.

Kuban, a river of Caucasia, giving name to a province (area, 39,277 sq. m.; pop. 1,922,800).

Kuch Behar. See BEHAR.

Kuen-Lun, a great snow-clad mountain-chain of central Asia, which forms the northern wall of the Tibetan plateau, as the Himalayas do the southern. Starting from the Pamir plateau (82° E. long.), the Kuen-Lun curves eastward to 94° E. long., its width varying from 100 to 150 miles. The peaks are 18,000 to 25,000 feet high, and the passes 13,000 to 18,000 feet.

Kuilenburg. See CULENBORG.

Kuka, or KUKAWA. See BORNU.

Kulja, a town of Zungaria, central Asia, stands on one of the great highways leading from China to West Turkestan, and on the Ili, which flows 750 miles from the Tian-Shan Mountains to Lake Balkhash. Kulja (pop. 12,500) is the chief town of a fertile district (Kulja or Ili), which revolted against China in 1865, was occupied by Russia in 1871, but ten years later restored to China, except 4300 sq. m. now incorporated in Semiretchensk. The Chinese province has an area of 23,130 sq. m. and a pop. of 70,000. New Kulja, 25 miles W. of Kulja, was destroyed by the rebels in 1866; it then had 75,000 inhabitants.

Kulm, a village of Bohemia, 3 miles NE. of Teplitz. Here the French were routed by the Prussians and Russians, 29–30th August 1813.

Kum, next to Meshed the most sacred city of Persia, is a straggling, half-ruined town between Ispahan and Teheran. Its shrines and tombs of

Mohammedan (Shiite) saints attract thousands of pilgrims. Pop. 20,000.

Kumamoto', a town on the west coast of the island of Kiu-siu, Japan. Pop. 64,500.

Kumania. See CUMANIA.

Kumaun, a district in the North-west Provinces of India. It lies chiefly on the south slope of the Himalayas, and comprises summits rising to over 20,000 feet. Almora is the capital. Area, 7151 sq. m.; pop. 1,250,000.

Kunawar, a division of Bashahr (q.v.).

Kunduz. See AFGHANISTAN.

Kunersdorf, a village in Prussia, 4 miles E. of Frankfort-on-the-Oder. Here Frederick the Great, after gaining a half victory, was routed by the Russians and Austrians, August 12, 1759.

Kungur, a town in Russia, 50 miles SSE. of Perm. Pop. 15,300.

Kura, a river of the Caucasus.

Kuram, a river rising in Afghanistan near the northern end of the western Suliman range, and flowing to the Indus near Isakhel.

Kurdistan' ('the Country of the Kurds'), an extensive geographical, though not political, region mainly to the NE. of Turkey in Asia, S. and W. of Erzerûm, but including the part of Persia about Urumia. Area, 50,000 sq. m.; pop. over 2,250,000—nearly 1,500,000 in Turkey, 700,000 in Persia, and 45,000 in Russian Transcaucasia. The surface ranges from 5000 up to 15,000 feet in altitude. Numerous rivers force their way through the mountains, and go to feed the Tigris and the Euphrates. The bulk of the inhabitants are Kurds (the ancient *Carduchi*), partly nomad and pastoral, partly settled and agricultural, by race Turanian, but speaking an old Persian dialect. Their forays have been a sore affliction to their Armenian neighbours. In 1880 an extensive Kurdish rising against Persia took place. Some Nestorian Christians inhabit the valley of the Tigris; but the Kurds are Mohammedans. The chief towns are Bitlis, Van, Urumia, Diarbekr, and Kermanshah. See Millingen, *Wild Life Among the Koords* (1870).

Kuria-Muria, a group of five islands, 21 miles from the south-east coast of Arabia. Area, 21 miles; pop. 34. They were ceded to England in 1854 by the Imam of Muscat. On one of them is a signalling telegraphic station.

Kuriles, a sparsely-populated group of twenty-six islands, extending from Kamchatka to Yezo, and belonging to Japan. In 1875 the Japanese surrendered their good claims on the southern part of Saghalien (resumed by the treaty of 1905 closing the war with Russia), and received in exchange from Russia the northerly portion of the Kuriles. With a few exceptions the population remains in this misty and inhospitable region only during the summer, as long as the fishing season lasts.

Ku'risches Haff, a fresh-water lagoon of East Prussia, extending 61 miles south from Memel, with an average width of 14 miles. It is connected with the Baltic by the 'Memel Deeps,' a channel 500 yards wide and 20 feet deep. The spit of sand-dunes, 1 to 2 miles wide, that separates it from the Baltic, is encroaching on the haff.

Kurland. See COURLAND.

Kurrachee (*Karat'chi*), the capital of Sind and the chief port of entry for the Punjab, stands at the northern end of the great Indus delta, and close to the frontier of Beluchistan. It is 1169 miles by rail (about 700 direct) SW. of Delhi. Kurrachee has an extensive harbour, sheltered by a breakwater and a long reef, with a fixed light 120 feet high. The landing-place is on Kiamari Island, which is connected with the town by the Napier mole, 3 miles long. The harbour improvements, completed in 1873, cost £450,000; there is now a lowest depth over the bar of 20 feet. The Frere municipal hall (with a library and museum) was named after Sir Bartle Frere, of whom there is also a statue here. To the east and north are the cantonments, and, close by, a public garden of 40 acres. There are ironworks and large cotton presses in the town, the cotton of Sind and the Punjab forming an important article of export, though less so than wheat and oil-seeds. The annual trade of the port has risen to above £7,000,000; the inland trade extends to Afghanistan and Beluchistan. Pop. (1881) 73,560; (1901) 115,407. See Baillie, *Kurrachee, Past, Present, and Future* (1890).

Kursk (*Koorsk*), chief town of a Russian government, 312 miles by rail S. by W. of Moscow and 274 NNE. of Kieff. The chief industry is tanning; but soap, tobacco, candles, and spirits are also manufactured. Kursk is celebrated for its orchards, and has an observatory. Pop. 52,957. Near the town a great fair is held after Easter.—The *government* has an area of 17,931 sq. m., and a pop. (1897) of 2,396,900.

Kuruman, a mission-station in Bechuanaland, 130 miles NW. of Kimberley. Dr Moffat laboured here for years, and here too was Livingstone.

Kusi, a considerable tributary of the Ganges, rises in the Nepal Himalayas, NW. of Mount Everest, and flows 325 miles generally south, in a rapid stream.

Kus'koquim. See ALASKA.

Kustendji, or more properly since 1878 CONSTANZA, a seaport in the Dobrudja, Roumania, stands on the Black Sea, at the end of Trajan's Wall and of the railway to Tchernavoda on the Danube. Pop. 12,800. Not far distant was Tomi, the place of Ovid's banishment.

Küstenland ('coast-land'), an Austrian division comprising Görz, Gradisca, Istria, Trieste.

Küstrin, a fortified town of Prussia, amidst great marshes, at the confluence of the Warthe with the Oder, 51 miles E. of Berlin. Pop. 17,500.

Kutaia, or KUTAYA, a town of Asia Minor, 70 miles SE. of Brusa, and connected by rail with Eski-Shehr and the railway system. Pop. 45,000.

Kutaïs, capital of a Black Sea department of Transcaucasia, 70 miles NE. of Batoum. Pop. 25,000.

Kuttenberg, a silver-mining town of Bohemia, 185 miles by rail NNW. of Vienna. Close by is a large imperial tobacco-factory. Pop. 15,154.

Kwando, or CHOBE. See ZAMBESI.

Kwango, a tributary of the Congo.

Kwanza. See COANZA.

Kwilu, a river of the French West African colony Gaboon, rises near the Lefimi, and reaches the Atlantic north of Loango.

Kyle, the central district of Ayrshire.

Kyleakin. See SKYE.

Kylemore, a district in the west of County Galway, 10 miles NE. of Clifden, with a castle, and a small lough from which a river runs 3 miles through a remarkable ravine to the sea.

Kyles of Bute. See BUTE.

Kyōto, Miako, or Saikio, from 784 A.D. to 1868 the capital of Japan, on the Kamo River, 26 miles inland from Ozaka. At the N. end are situated, in an enclosure, the plain wooden buildings where the emperors of Japan dwelt so long in seclusion. The Honganji temples of the Monto sect of Buddhists, the centre of the Buddhist faith in Japan, rise at the S. end of the city. The singing-girls of Kyōto are noted for their graceful dances. The pottery, porcelain, enamels, inlaid bronze-work, crapes, velvets, and brocades of Kyōto are highly esteemed. Pop. (1884) 255,403; (1892) 297,527; (1900) 354,230.

Kyouk-pyoo, a district of Arakan in Burmah, named from the capital (pop. 4000), on an island, 96 miles SE. of Akyab.

LAALAND, or Lolland, a flat and fertile Danish island, at the southern entrance to the Great Belt, 36 miles long by 9 to 15 broad. Area, 445 sq. m.; pop. 72,000. The capital is Maribo (pop. 2403); the largest town, Nakskov (pop. 6278).

Labrador, the north-eastern peninsula of the North American continent, lying between Hudson Bay and the Gulf of St Lawrence. The coasts were probably visited by Norsemen about the year 1000; they were sighted by Cabot in 1498. In 1500 the Portuguese Cortereal is said to have visited it and to have given it its euphemistic name of 'cultivable land.' But another tradition derives the name from a Basque whaler called Labrador. Labrador extends from 49° to 63° N. lat., and from 55° to 79° W. long. The greatest length is 1100 miles, and the area 420,000 sq. m. The portion draining into the St Lawrence forms the larger part of Quebec province; the Atlantic coast strip—to which the name Labrador is officially restricted—is attached to Newfoundland; the remainder is, since 1895, the territory of Ungava. The Atlantic coast is stern and precipitous (1000 to 4000 feet high), entirely destitute of vegetation, deeply indented with narrow fjords, and fringed with rocky islands. The interior, very imperfectly explored, consists mainly of a plateau 2000 feet above sea-level, and mostly covered with fine forest trees, firs, birches, &c. Numerous lakes, including Mistassini (q.v.), with the rivers, afford in summer continuous waterways for great distances. The only inhabitants of this interior plateau are Cree Indians, nomads. There are numerous rivers, 200 to 300 miles long and 2 and 3 miles wide at their mouths, flowing towards the Atlantic and Hudson Bay. The Grand Falls, 2000 feet high, on Grand River are amongst the largest in the world. Bears, wolves, foxes, martens, otters, beavers, lynxes, &c., are found. Iron and the felspar called labradorite are abundant. The climate on the coast is very rigorous, owing mainly to the ice-laden Arctic current which washes the shores. The short three-months' summer is marred by the swarms of mosquitoes and black flies. The mean annual temperature at the missionary stations varies from 22° to 28°. By far the most important wealth of the Labrador coast is its fish—cod, salmon, herrings, and trout; some 30,000 fishermen from Newfoundland, Canada, and the United States visit its fishing-grounds in the season. The 6000 permanent settlers, Eskimo and French Acadians, in the coast-region, are collected chiefly at the Moravian missionary stations—Nain (founded 1770), Okkak, Hebron, Hopedale, &c. See works by Hind (1863) and Packard (1892).

Labuan, an island 30 sq. m. in area, 6 miles from the NW. coast of Borneo. It has a good harbour (Victoria), and an extensive bed of excellent coal. It became British in 1846, and since 1891 is administered by the British North Borneo Company. Pop. 8500.

Laccadives (Sansk. *Laksha Dwipa*, 'the Hundred Thousand Islands'), a group of fourteen coral islands in the Arabian Sea, between 10° and 14° N. lat., and 200 miles W. of the Malabar coast. Area, 744 sq. m.; population, 15,500, Mohammedans of Hindu descent. They are low and flat, and all but two are comparatively barren. The cocoa-nut is the chief plant, and *coir* (cocoa-nut fibre) the staple product. The group was discovered by Vasco da Gama in 1499.

Lachine (*La-sheen'*), a summer residence of Quebec, 8 miles SW. of Montreal by rail. There is a canal hence to Montreal to avoid the Lachine Rapids of the St Lawrence. Pop. 5600.

Lachlan, an Australian river, a tributary of the Murrumbidgee, which flows to the Murray.

Lackawanna River, Pennsylvania, is a tributary of the Susquehanna, and its valley nearly coincides with the Wyoming and Lackawanna coal basin (55 miles long).

Lacock Abbey, a Wiltshire seat, 3½ miles S. by W. of Chippenham. Representing an Augustinian nunnery (1232), it was the home of W. H. Fox Talbot, the photographic inventor.

La Crosse, capital of La Crosse county, Wisconsin, stands on the Mississippi, at the mouth of La Crosse River, and at the junction of six railways, 195 miles by rail WNW. of Milwaukee. It has a Roman Catholic cathedral, and manufactures of farming-implements, engines and boilers, sashes and blinds, &c., besides large lumber-mills, iron-foundries, and breweries. Pop. (1870) 7785; (1900) 28,895.

Ladakh', one of the outlying governorships of Cashmere, in the valley of the Upper Indus, and behind the great central range of the Himalayas. The Ladakhis, some 30,000, are of Turanian stock and Buddhists in religion. The capital is Leh.

Ladismith, (1) a village of 800 (named from a colonial governor's wife), in Cape Colony, at the southern base of the great Zwarte Bergen, 70 miles inland from Aliwal South.—A larger place is distinguished from it as Ladysmith (q.v.).

Lado, a station on the left bank of the White Nile, in 8° 5′ N. lat., established by Gordon in 1875. The Lado enclave, over which Britain has sovereign rights, but through which it has leased to the Congo State certain rights of access to the Nile, extends from the river on the east to 30° E. long. on the west, the Congo boundary on the SW., and 8° 50′ N. lat. on the north.

Lad'oga, Lake, the largest lake of Europe, a little N. of St Petersburg, on the Finnish frontier. It is 129 miles long and 78 broad. The lake receives the waters of Lakes Onega and Ilmen in Russia, and of Lake Saima and other lakes in Finland; and its own waters are carried off to the Gulf of Finland by the Neva (q.v.). The average depth does not exceed 300 feet, except in the NW. (730 feet). The navigation is exceedingly dangerous owing to shallows and sunken rocks. Of the canals connected with it the chief

is the Ladoga Canal (70 miles long and 60 feet wide). This canal-system forms the thoroughfare for a very extensive traffic between the Volga and the Baltic. Two of the islands in the north-west, Valaam and Konevetz, have monasteries (founded 960 and 1393) much visited by pilgrims.

Ladrones, or MARIANA ISLANDS, a group of fifteen islands in the western Pacific, north of the Carolines, in 13°—21° N. lat. and 144°—146° E. long., disposed in a row almost due north and south; their united area is 420 sq. m. They were discovered by Magellan (1521), whose sailors called them the 'Thieves' (*Ladrones*) Islands;' in 1668 they received the name of Mariana Islands. A channel divides them into two groups. Most of the group are thickly wooded, and all are fruitful. Pop. 10,000. In 1898 Guam, the largest island (pop. 7000), was ceded by Spain to the United States, and in 1899 the remainder of the group were sold to Germany.

Ladybank, a police-burgh of Fife, 5½ miles SW. of Cupar. Pop. 1350.

Ladysmith (see also LADISMITH), a town of 6000 in Natal, 140 miles NW. of Durban. Here in 1899-1900 the British forces under Sir George White were invested by the Boers for 120 days, till relieved by Sir Redvers Buller.

Laeken (*Lā'ken*), a northern suburb of Brussels, containing the royal palace (1782), with valuable works of art and historical documents. Pop. (1902) 31,350.

Lafayette, in Indiana, on the Wabash River, is 63 miles NW. of Indianapolis. It contains the Purdue state university, and manufactures farming-implements, machinery, cars and wagons, &c. Pop. 20,000.

Lagan, a river of Ulster, flowing 35 miles to Belfast Lough at Belfast.

Laggan, a hamlet and parish of Inverness-shire, 11 miles WSW. of Kingussie, on the Spey. Loch Laggan, 7 miles farther to the SW., is 7 miles long, and discharges by the Spean to the Lochy. Between Laggan and Kingussie is Cluny Castle, seat of the chief of the Macphersons.

Lago Maggiore. See MAGGIORE.

Lagos, a seaport on the south coast of Portugal, 30 miles ENE. from Cape St Vincent. Pop. 7900. In the Bay of Lagos Boscawen defeated the French Toulon fleet in 1759.

Lagos, a British colony and protectorate on the Guinea coast of Africa. The colony comprises the islands of Lagos and Iddo (annexed in 1861), and about 140 miles of coast between Dahomey and Southern Nigeria. Area, 3460 sq. m.—The *protectorate* (arranged 1901) extends to the French possessions on the Middle Niger, and has an area of 25,240 sq. m. The total population is about 1,500,000. Lagos island is 3¾ sq. m. in area; at its W. end stands Lagos town (pop. 40,000), the only safe harbour for 1000 miles.

La Guaira. See GUAIRA.

La Hague, the north-west extremity of the peninsula of Cotentin (q.v.) over against Alderney. It is crowned by a lighthouse, 158 feet high.

Lahn, an important affluent of the Rhine in its middle course.

La Hogue, a roadstead on the east side of the peninsula of Cotentin (q.v.). On May 19, 1692, the French fleet under Tourville, which Louis XIV. had collected to invade England for James II., was defeated here by the English and Dutch fleets under the Jacobite Admiral Russell.

Lahore, capital of the Punjab, stands near the left bank of the Ravi, 1080 miles NW. of Calcutta by rail. Pop. (1868) 125,413; (1901) 202,964, of whom 85,000 are Mussulmans. A railway centre, Lahore is surrounded by a brick wall 16 feet high. The fort occupies a commanding position to the north-east, and near it are the mosque of Aurungzebe and Runjeet Singh's tomb. The British civil station is called Anarkalli, and a broad road, the Mall, connects it with the government house and the Lawrence Gardens. Three miles farther is the dreary cantonment of Miân Mir. The flourishing Punjab University was largely endowed by native chiefs and gentlemen —Moslem, Sikh, and Hindu. There are also the Oriental College, Government College, Government Medical School, Mayo Hospital, Roberts Institute, and a good museum. Under the Mogul empire the city, which dates from the 7th century A.D., had a pop. of over 1,000,000. The remains of the magnificent buildings erected by the Mogul emperors are still considerable, as well as Jahangir's wonderful gardens at Shádra and Shálimár. In 1849 Lahore became the capital of the new British province of the Punjab (q.v.).

Lahr, a town of Baden, on an affluent of the Rhine, 20 miles SSE. of Strasburg. Pop. 15,000.

Laibach (*Lī-bahh*), capital of the Austrian province of Carniola, on the Laibach, 92 miles NE. of Trieste. Pop. 36,691.

Laing's Nek, a defile in the Drakenberge Mountains, Natal, 16 miles from the N. point of its frontier. Here the Boers defeated the British forces under Colley, January 28, 1881.

Lairg, a Sutherland village, on the Shin, 67 miles by rail N. by W. of Inverness.

Lake District, the name applied to the picturesque and mountainous region comprised within the counties of Cumberland, Westmorland, and a small portion of Lancashire, within which are grouped as many as sixteen lakes or *meres*, besides innumerable mountain *tarns* and streams, and a series of mountains rising in four points to a height of over 3000 feet. The district extends about 30 miles from north to south by about 25 from east to west, and contains within its compass the utmost variety and wealth of natural scenery; it is fringed by such considerable towns as Penrith, Kendal, Lancaster, Barrow, Cockermouth, and Whitehaven. The principal lakes are Windermere, Esthwaite Water, and Coniston in the south; Ullswater and Hawes Water in the east; Bassenthwaite in the north; Wast Water, Ennerdale Water, Buttermere, and Crummock Water in the west; and Derwentwater, Thirlmere, Grasmere, and Rydal Water in the heart of the district. The highest mountain-summits are Scafell Pike (3210 feet), Scafell (3161 feet), Helvellyn (3118 feet), and Skiddaw (3060 feet). The lakes are fed and emptied by beautiful mountain-streams and *becks*, often forming noble waterfalls or *forces*. Among the places most visited are the towns or villages of Keswick, Coniston, Bowness, Hawkeshead, Ambleside, Ulverston, Rosthwaite, Grasmere, Patterdale, and Borrowdale; the Langdale Pikes; the Duddon Valley, Honister Pass, and Kirkstone Pass; the Castle Rock of St John, celebrated in Scott's *Bridal of Triermain;* and such minor but imposing mountain-peaks as Blencathara or Saddleback (2847 feet), near Keswick; Coniston Old Man (2633), near Coniston; and the Great Gable (2950), near Wastdale Head.

See Wordsworth's *Description of the Scenery of the Lakes* (1822); Professor Knight's *English Lake District, as interpreted by Wordsworth* (new ed.

1891), and his *Through the Wordsworth Country* (1887); also Harriet Martineau's *English Lakes* (1858), and books by Bonney (1876), Waugh, Rawnsley, Bradley, and Collingwood (1902).

Lake of the Thousand Islands, an expansion of the St Lawrence (q.v.) extending about 40 miles below Lake Ontario. It contains some 1500 rocky islets, the largest, Wolfe Island (48 sq. m.; pop. 2383), measuring 21 miles by 7.

Lake of the Woods, a lake of North America, studded with wooded islands, in 49° N. lat. and 95° W. long. It is mostly in Ontario, but extends into Manitoba and Minnesota. Nearly 100 miles long, and 300 in circuit, it is fed by the Rainy River, and drained by the Winnipeg.

Lakhnao. See LUCKNOW.

Laleham, a Middlesex village, on the Thames, 2 miles SSE. of Staines. Matthew Arnold was born and is buried here.

Lalitpur, capital of a district in the United Provinces of India, 55 miles S. of Jhansi. Pop. 12,000.

La Mancha. See MANCHA.

Lambay, an island of Dublin county, 3 miles SE. of Rush. It measures 1½ by 1 mile, and rises 418 feet. Pop. 61.

Lambayeque (*Lam-ba-yeh'ke*), a province of Peru, with an area of 17,939 sq. m., and a pop. of 85,984.—The capital, Lambayeque, is 7 miles from the mouth of the river Lambayeque, and 128 miles NW. of Trujillo. Pop. 8300.

Lambeth, a metropolitan and parliamentary borough S. of the Thames, but within the county of London, has an area of 6½ sq. m. Since 1885 it returns four members, its pop. (1901) being 301,895. Lambeth Bridge dates from 1862. Lambeth Palace has been the official residence of the archbishops of Canterbury since 1197. It contains a splendid series of portraits of the archbishops, and a library of 30,000 volumes, with many fine MSS. The Lollards' Tower, so named in comparatively modern times from the notion that heretics were here imprisoned, was really a water tower. It dates from 1434. See the Rev. J. Cave-Browne's *Lambeth Palace* (1883).

Lambourn, a Berkshire town, on the river Lambourn, 7 miles N. by W. of Hungerford. Pop. of parish, 2238.

Lamlash', an Arran village, 5½ miles S. by E. of Brodick, on a beautiful bay protected by Holy Isle (1030 feet high). Pop. 315.

Lammermoors, a broad range of moorish hills in Haddington and Berwick shires, extending east-north-eastward from the vale of Gala Water to the German Ocean at St Abb's Head, and culminating in Lammer Law (1733 feet).

Lampedu'sa, a small Mediterranean island, 150 miles S. of Sicily, and 80 E. of Tunis. Belonging physically to Africa, it has since 1843 been reckoned part of Sicily. Pop. 1074.

Lam'peter, a market-town of Cardiganshire, 27 miles by rail NNE. of Carmarthen. It is the seat of St David's College (1827), which was founded by Bishop Burgess, and has power to grant B.A. and B.D. degrees. Pop. 1769.

Lan'ark, the county town of Lanarkshire, on a slope near the right bank of the Clyde (q.v.), 33 miles by rail SW. of Edinburgh, and 31 SE. of Glasgow. It has an interesting ruined church, a large Catholic chapel (1859), the county buildings (1836), a good racecourse, memories of Wallace, and some weaving and other industries. A royal burgh since the 12th century, it unites with Falkirk, &c. to return a member to parliament. Pop. (1851) 5008; (1901) 6567.—NEW LANARK, 1½ mile S. by W., is a manufacturing village, founded in 1783 by David Dale, and for twenty-eight years the scene of the social experiments of his son-in-law, Robert Owen. Pop. (1831) 1901; (1901) 795.

Lan'arkshire, or CLYDESDALE, a Scottish county, enclosed by Stirling, Dumbarton, Linlithgow, Edinburgh, Peebles, Dumfries, Ayr, and Renfrew shires. Its length is 50 miles, its greatest breadth 32 miles, and its area 889 sq. m. Drained almost entirely by the Clyde (q.v.) and its numerous affluents, Lanarkshire is subdivided into three wards, of which the upper or southern comprises 332,338 acres, the middle 194,211, and the lower 42,319. These offer a striking diversity of aspect—lonely uplands, smiling orchards, busy coalfields and manufacturing district. The principal hills are Green Lowther (2402 feet) and far-seen Tinto (2335); whilst the mining-village of Leadhills (1300 feet) is the highest in Scotland. The county possesses great mineral wealth—coal, ironstone, fireclay, shale, and lead, with some silver and even gold. The coal alone in the Lanarkshire coalfield is estimated to exceed 2000 million tons. The soil is as various as the scenery; and barely one-half of the whole area is in cultivation, whilst woods occupy 20,000 acres, orchards nearly 600, and market-gardens over 1300. The orchards of Clydesdale were famous as early as the time of Bede, and yielded into the 19th century £8000 per annum; but now the ground is more profitably employed in producing strawberries, gooseberries, vegetables, &c. for the Glasgow market. Lanarkshire is not a great grain county; but much of it is excellently adapted for the rearing of stock and for dairy purposes. The sheep are Cheviots and black-faced, the cattle Ayrshires; and the celebrated Clydesdale cart-horses issue from a Flemish cross (about 1720). The mineral, textile, and other industries are very extensive, and are noticed under the towns—Glasgow, Rutherglen, Lanark, Hamilton, Airdrie, Coatbridge, Motherwell, Wishaw, &c. Besides prehistoric and Roman remains, Lanarkshire contains the castles of Bothwell, Douglas, and Craignethan (Scott's 'Tillietudlem'), the priories of Blantyre and Lesmahagow, and the battlefields of Langside, Drumclog, and Bothwell Brig. Among its worthies have been Joanna Baillie, Dr John Brown, Sir Colin Campbell, Thomas Campbell, Lord Dundonald, David Livingstone, and Sir John Moore. Though only the twelfth in size, Lanarkshire is far the most populous and wealthy of all the thirty-three Scottish counties. Pop. (1801) 147,692; (1841) 426,972; (1901) 1,339,327—Lanarkshire now including the whole of Glasgow under the Local Government (Scotland) Act of 1889.

See works by Hamilton of Wishaw (Maitland Club, 1831), Irving and Murray (1864), and others cited at GLASGOW, CLYDE, BIGGAR, &c.

Lan'cashire, a county palatine of England, ranking sixth in point of area, first in population, and first in return of revenue from all sources. It forms the north-western division of England, stretching along the Irish Sea from the river Duddon and the mountains of Cumberland on the north to the river Mersey on the south. The extreme length from N. to S. (including the hundred of Furness) is 75 miles, and the greatest breadth at the south end 43, at the north end 10 miles. The area is 1905 sq. m., or 1,219,221 statute acres. Pop. (1801) 673,486; (1841) 1,667,054; (1861) 2,429,440; (1901) 4,406,787. The coast is low, with numerous far-reaching

estuaries. This has made the county the principal outlet for the commerce of the country in a westerly direction, one-third of the whole foreign trade of Great Britain being carried on from its ports. The chief rivers are the Mersey, Ribble, Lune, Wyre, Kent, Leven, and Duddon. An outlying portion of the county, called Furness, 25 miles long by 20 wide, is separated from the main portion by Morecambe Bay, and seems to belong properly to the Lake District. Coniston, Esthwaite, and Windermere lakes lie within its borders. The highest point here is 'Coniston Old Man' (*alt maen*, 'high rock'), 2633 feet high. The larger division is intersected in the north and east by branches of the hill-system which runs southward through the counties of York and Derby, the chief eminences being Pendle Hill (1831 feet), Bleasdale Moor (1709), Boulsworth Hill (1689), and Rivington Moor (1545). Coal is the chief mineral product, the coalfield being estimated at 217 sq. m. in extent. Limestone and iron are common in the north; lead, copper, sulphur, and fireclay are also found. The whole surface of the county is covered with a network of canals and railways. Lancashire is the great centre of the cotton manufacture of the world, having about two-thirds of the entire trade; and there are other textile manufactures, such as woollens, silk, carpets. It is pre-eminent in the manufacture of engineers' tools; and the making of all kinds of iron and steel machinery is extensively carried on; as also shipbuilding, sail-making, the manufacture of boots, shoes, and hosiery. The county returns, since 1885, twenty-three members to parliament (formerly eight), besides thirty-two for the seventeen boroughs (Ashton-under-Lyne, Barrow-in-Furness, Blackburn, Bolton, Burnley, Bury, Liverpool, Manchester, Oldham, Preston, Rochdale, St Helens, Salford, Stalybridge, Stockport, Warrington, and Wigan). The phrase, 'Lancashire Witches,' which is now used as an expression of admiration for the young maidens of the county, arose from the prevalence of the 'crime' of witchcraft in Lancashire in the reign of James I. At the time of the Reformation the Roman Catholic party was extremely strong in Lancashire; and an unusually large proportion of the land-owners still adhered in the reign of James I. to the old faith. The people of Lancashire have long been noted for their love of music and natural history; while their politics and opinions have had such influence in the country that the proverb has arisen that 'What Lancashire thinks to-day England says to-morrow.' Amongst Lancashire's worthies have been Mrs Gaskell, Mrs G. L. Banks, and Miss Martineau; Roscoe, De Quincey, Sir Robert Peel, Horrocks, Clough, Dalton, Hodgkinson, Joule, Greg, Bamford the weaver poet, Edwin Waugh, William Henry the chemist, Sir W. Fairbairn, Sir J. Whitworth, Bishop Lightfoot, James Martineau, and Gladstone; and, connected with the success of the cotton trade, John Kay (inventor of the fly-shuttle), Crompton, Arkwright, Hargreaves.

See Baines, *Lancashire* (1836; new ed. by Croston, 1888); Espinasse, *Lancashire Worthies* (1873–77); Nodal and Milner, *Dialect* (1882); and other works by Butterworth (1841), Grindon (1866, 1882, 1892), Axon (1883), and Fishwick (1894).

Lan'caster, the capital of Lancashire, is picturesquely situated on an eminence on the left bank of the Lune, 7 miles from its mouth, 51½ NNW. of Manchester and 231 NW. of London by rail. The ancient castle, which overlooks the town, was built on the site of a Roman castle, and was restored by John of Gaunt, 'time-honoured Lancaster;' it is now used as the county jail. The church of St Mary (15th century) contains some good oak-carvings and stained glass. The Ripley Hospital is an asylum for orphan children. The Lune is here crossed by a bridge of five arches, erected in 1788, and by an aqueduct carrying the Lancaster Canal across the river. Owing to the sanding of the Lune, large vessels have to unload at Glasson, 5 miles distant. The chief manufactures are furniture, cotton, silk, oilcloth, table-covers, machinery, and railway plant. A public park was presented in 1881. Sir R. Owen and Dr Whewell were natives. In 1698 the town was nearly burned to the ground. A very ancient municipal borough, it returned two members from 1547 to 1867, when it was disfranchised for corrupt practices. The municipal boundary was extended in 1888 and 1900. Pop. (1851) 14,602; (1901) 40,329. See works by Hall (1843) and Simpson (1852).

Lancaster, (1) capital of Fairfield county, Ohio, on the Hocking River and Canal, 32 miles SE. of Columbus, with machine-works and railway shops. Pop. 9555.—(2) Capital of Lancaster county, Pennsylvania, 69 miles by rail W. of Philadelphia. It has a large court-house, the Franklin and Marshall (German Reformed) College, large cotton-mills, tanneries, breweries, potteries, and extensive warehouses for tobacco. Founded in 1730, Lancaster was the state capital from 1799 to 1812. Pop. (1870) 20,233; (1900) 41,460.

Lancaster Sound, a western outlet of Baffin Bay, first navigated by Parry in 1819.

Lan-chau, or LAN-CHOW, capital of Kan-su province, China, on the Hoang-ho, near the Great Wall. It is an important commercial centre, and has manufactures of cloth, &c. Pop. 500,000.

Lancing, a Sussex watering-place, 8½ miles W. of Brighton. St Nicholas's College (1848) here is a High Church middle-class school. Pop. of parish, 1245.

Landau (*Lan-dow*), (1) a town of the Bavarian Palatinate, 11 miles W. of the Rhine and 17 SW. of Spires. In 1816 Bavaria became mistress of it; and in 1870–71 its fortifications were razed. Pop. 15,136.—(2) Another town of Bavaria, on the Isar, 72 miles NE. of Munich. Pop. 3165.

Landaur, a sanitary station in the North-west Provinces, forming part of the town of Masuri. It is on the slope of the Himalayas, 7459 feet above the sea.

Landerneau, a seaport in the French dep. of Finistère, stands at the head of Brest harbour, 12 miles by rail NE. of Brest. Pop. 6520.

Landes (*Lonḍ*), a dep. of southern France, one of the largest and most thinly peopled in the country, is bounded on the W. by the Bay of Biscay. Area, 3598 sq. m.; pop. (1876) 303,508; (1901) 291,657. The chief river is the Adour (navigable). The greater portion of the dep. consists of the *landes*, tracts of barren sand, interspersed with marshes and forests of pine and oak and cork. Much land has been rendered available by draining and planting with pines. The dep. is divided into the three arrondissements of Mont-de-Marsan (the capital), St Sever, and Dax.

Landguard Fort (*Lang'gard*). See HARWICH.

Landquart, a village of E. Switzerland, on the Landquart, a tributary of the Upper Rhine, 8 miles N. of Chur, and 31 NW. of Davos by rail.

Landsberg, a Prussian town, on the Warthe, 80 miles by rail NNE. of Berlin. Its industrial establishments include sawmills, machine-works, breweries, distilleries, &c. Pop. 33,600.

Land's End. See CORNWALL.

Landshut (*Lands-hoote*), a picturesque town of Upper Bavaria, on the Isar, 44 miles by rail NE. of Munich. Of its eleven churches, St Martin's (1477) has a steeple 436 feet high. The castle of Trausnitz (c. 1232) was partially restored in 1872–74. Landshut has manufactures of tobacco, beer, wagons, hats, &c. The Dominican monastery (1271) was the seat of the university, removed hither from Ingolstadt in 1800, and transferred to Munich in 1826. Here, on 16th April 1809, the Austrians drove back the Bavarians, but were in turn defeated by Napoleon five days later. Pop. 22,500.

Landskrona, a Swedish seaport, on the Sound, 16 miles NNE. from Copenhagen. A fortress down to 1870, it has a good harbour, and carries on sugar-refining, shipbuilding, and the manufacture of tobacco and leather. Pop. 14,633. Opposite lies the island of Hvem, on which Tycho Brahé built his observatory of Uranienborg.

Lanercost, an Augustinian priory, founded about 1169, lies in the valley of the Irthing, 16 miles NE. of Carlisle. It is partly in ruins; but the nave is used as a parish church. Naworth Castle, 1 mile S. of the priory, is associated with the 'Belted Will Howard' of Scott's *Lay of the Last Minstrel;* it contains old armour, tapestry, &c. See R. S. Ferguson's *Lanercost* (1870).

Langdale Pikes, two Westmorland summits, at the head of Great Langdale Valley, 2401 and 2323 feet high.

Langeland (i.e. 'long land'), a low, fertile Danish island, 33 miles long by 5 broad, at the southern entrance to the Great Belt. Area, 106 sq. m.; pop. 19,000. Chief town, Rudkjöbing (pop. 3179), on the west coast.

Langensalza (*Lang-en-salt'za*), a town of Prussian Saxony, 13 miles by rail N. by W. of Gotha, with a pop. of 12,924, a neighbouring sulphur-spring, and woollen and cloth manufactures. Here, on 27th June 1866, 19,000 Hanoverians encountered 8200 Prussians; the latter were at first defeated, but being reinforced compelled the former to capitulate two days later.

Lang'holm, a market-town of Dumfriesshire, at the junction of Ewes and Wauchope Waters with the Esk, 23 miles SSW. of Hawick, and 22 (by a branch-line) N. of Carlisle. Near the town-hall is a marble statue of Admiral Sir Pulteney Malcolm (1768–1838), and on White Hill an obelisk to his brother, General Sir John Malcolm (1769–1833). Shepherd's plaid and tweeds have been manufactured since 1832. In 1890 Thomas Hope, a New York merchant and native of Langholm, left £80,000 to found a hospital here. Langholm is a burgh of barony (1643), under the Duke of Buccleuch, whose seat, Langholm Lodge, is close by. The Douglases were defeated here in the battle of Arkinholm (1455). Pop. 3143.

Langkat, a place on the NE. coast of Sumatra, 30 miles S. of the frontiers of Atcheen, producing tobacco and petroleum.

Langley Castle, a ruin in Northumberland, 2 miles S. of Haydon Bridge.

Langness, a headland at the south-east extremity of the Isle of Man.

Langport, a Somerset market-town, on the Parret, 14 miles E. by N. of Taunton. Pop. 890.

Langres (*Longr*), a town in the French dep. of Haute-Marne, lies 1530 feet above sea-level (one of the highest towns in France), 184 miles ESE. of Paris by rail. As key of the communication between the Seine and the Rhone, it has been strongly fortified since 1868, and has a cathedral of the 12th and 13th c. Pop. 7846. Langres (anc. *Andematunnum*) in Cæsar's time was capital of the Lingones, whence the name.

Langside, a southern suburb of Glasgow. Here, after her escape from Loch Leven, Queen Mary's forces were defeated, 13th May 1568. A monument (1887) commemorates the battle.

Lang-son, a town in Tongking, situated north-east of Ha-noi, near the Chinese frontier.

Languedoc (*Lâng-doc'*), a former province of the south of France, bounded E. by the Rhone, and S. by the Mediterranean, and now embraced in the deps. of Lozère, Gard, Ardèche, Aude, Hérault, Upper Loire, Tarn, and Upper Garonne. The name is derived from *langue d'oc*, the southern French dialect, or Provençal, so called from its use of *oc* instead of the northern *oui* for 'yes.'

Lannion, a town in the French dep. of Côtes-du-Nord, on the Guer, 69 miles by rail ENE. of Brest. Pop. 5593.

Lansdown, a hill (813 feet) to the north of Bath, commanding a prospect of exceptional beauty. Lansdown Tower (130 feet) was built by Beckford, and 2 miles beyond, on 5th July 1643, Waller's entrenchments were stormed by the Cornish royalists. On the spot where Sir Bevil Grenville fell Lord Lansdowne raised a monument in 1723.

Lansing, the capital (since 1847) of Michigan, on the Grand River, 85 miles WNW. of Detroit, at the meeting-point of four railways. It contains the state capitol, library, agricultural college, a school for the blind, several manufactories, &c. Pop. 17,000.

Lansingburg, a village of New York, annexed to the city of Troy in 1901. It contains an Augustinian priory, and has extensive manufactures of brushes and oilcloth.

Laodicea, a name given to several cities—eight at least can be distinguished—founded or rebuilt by the Seleucid rulers of Syria; it is adapted from Laodice, a favourite name for the female relatives of these sovereigns. The most famous, situated 2 miles from the river Lycus in Phrygia, is now a heap of ruins, known as Eski-Hissar. One of the Seven Churches of Asia, it was stigmatised as lukewarm (Rev. iii. 16), but was the scene of great church councils in 363 and 476.—For another Laodicea, see LATAKIA.

Laon (*Lâ'on'*), chief town of the French dep. of Aisne, is situated on a steep isolated hill (594 feet), 87 miles by rail NE. of Paris. Occupying a naturally strong position, it has been a fortress since the 5th century, was capital of the kings of the West Franks, and from 515 to 1790 was the seat of a bishop. The Gothic 12th-century cathedral, and the bishop's palace (now a law-court), still remain. The inhabitants are noted market-gardeners. At Laon, in March 1814, Napoleon was repulsed by Blücher and Bülow; and it surrendered to a German force on 9th September 1870, when the explosion of the powder-magazine by a French soldier cost 500 lives. Pop. 12,000.

Laos. See SHAN STATES.

La Paz, (1) a dep. of Bolivia, bordering on Peru; area, 171,200 sq. m.; pop. 646,139.—The capital, La Paz, lies in a valley 11,952 feet above the sea, 42 miles SE. of Lake Titicaca. It is from time to time (as in 1893) capital also of the whole

country. It has a handsome but unfinished cathedral, and a trade in copper, alpaca wool, cinchona, &c. Pop. 50,000.—(2) A town of Argentina, on the Paraná, 530 miles by river N. by W. of Buenos Ayres. Pop. 9800.

Lapland is a collective name for the extensive region (Norwegian, Swedish, Finnish, and Russian) in the north of Europe that is inhabited by the Lapps, who belong to the Ural-Altaic stock. N. it is bounded by the Arctic Ocean, NW. by the Atlantic, E. by the White Sea. The total Lapp pop. is about 28,000—18,000 in Norway, 7000 in Sweden, 800 in Finland, and 2000 in Russia.

La Plata (*La Plah'ta*), the capital of the Argentinian province of Buenos Ayres, was founded in 1884, after Buenos Ayres City, from which it is about 30 miles SE., had been made the federal capital. The new city was rapidly built, with wide streets, and over a score of squares; the central portion is lit with the electric light, and there are tramways. Buildings of note are the handsome capitol, an observatory, and a fine railway station. Cottons and woollens are manufactured; and a canal connects a harbour here with a larger outer one at Ensenada, on the La Plata River. Pop. 75,000.

La Plata, Rio de, a wide estuary of South America, between Uruguay on the north and the Argentine Republic on the south, through which the waters of the Paraná and the Uruguay sweep down to the ocean. It is about 200 miles long, 28 wide at Buenos Ayres, and 140 broad at its mouth. The northern shore is somewhat steep and lofty, but that along the province of Buenos Ayres is low and flat, with wide sandbanks. The estuary has thus no shelter from the tempestuous storms from the SW.; and even the only good harbour, that at Montevideo, is open to the SE. The outflow of the estuary is exceeded only by that of the Amazon; the yellow, muddy stream is recognisable 60 miles out at sea. The estuary was discovered in 1515 or 1516 by Diaz de Solis, who was shortly afterwards roasted and eaten by the Indians on its bank. *Plata* is the Spanish word for 'silver.' See Sir Horace Rumbold's *Great Silver River* (2d ed. 1890).

Laporte, capital of Laporte county, Indiana, 50 miles ESE. of Chicago. Pop. 7126.

Lar, capital of Laristan, in south Persia, 170 miles SE. of Shiraz. Pop. 12,000.

Lar'acor, a Meath parish, on the Boyne, 3 miles SE. of Trim. Swift was vicar of Laracor.

Lar'amie, a river which rises in northern Colorado, and flows 200 miles NE. through south-eastern Wyoming to the North Fork of the Platte at Fort Laramie. It gives name to the Laramie Plains, a treeless plateau, 7500 feet above sea-level, and 3000 sq. m. in extent; and to the Laramie Mountains, a Rocky Mountain Range which bounds this plateau N. and E. Laramie City, Wyoming, on this great plain, and on the Union Pacific Railroad, 573 miles W. of Omaha, has a rolling-mill and railway shops. Pop. 8388.

Larbert, a railway junction in Stirlingshire, 2 miles W. by N. of Falkirk.

Lare'do, capital of Webb county, Texas, on the Rio Grande, opposite Nuevo Laredo, by rail 153 miles SSW. of San Antonio and 840 N. of Mexico. Pop. 14,000.

Largo, a village of Fife, on Largo Bay, and at the base of Largo Law (965 feet), 14 miles NE. of Kirkcaldy. It has a bronze statue (1885) of Alexander Selkirk, who was born here. Population, 481.

Largs, an Ayrshire watering-place, on the Firth of Clyde, 14 miles S. of Greenock, and 11 N. of Ardrossan by a railway (1885). Here, on 12th October 1263, Alexander III. defeated Haco of Norway. Pop. 3500.

Larissa (Turkish *Yenisher*), anciently the chief town of Thessaly, and ceded by Turkey to Greece in 1881, stands on the Salambria (anc. *Peneus*), and manufactures silk and cotton goods and tobacco. The seat of a Greek archbishop, it is connected by rail (37½ miles) with the port of Volo: an Athens-Larissa railway was in progress in 1894. Pop. 15,169.

Laristan, the south-west part of the Persian province of Kerman (q.v.). Area, 22,954 sq. m.; pop. about 90,000.

Lark, a river of Suffolk and Cambridgeshire, flowing 26 miles NW., past Bury St Edmunds and Mildenhall, to the Ouse near Littleport.

Larkhall, a Lanarkshire town, 3½ miles SSE. of Hamilton. Pop. (1861) 2685; (1901) 11,879.

Larkhana, the capital of a Sind district, called 'the Eden of Sind,' 150 miles N. of Hyderabad by rail. Pop. 13,188.

Lar'naka (anc. *Citium*), the chief port of Cyprus, 27½ miles S. of Nicosia. The British have built a court-house, custom-house, &c., on the sea front, as well as two iron piers. Sea-going vessels have to lie 1½ mile from the shore owing to the shallow water. Pop. 7933.

Larne, a seaport of County Antrim, at the entrance of Lough Larne, 25 miles NE. of Belfast by rail. There is daily communication with Stranraer by mail-steamer. Pop. 6670.

Larnica. See Larnaka.

La Rochelle. See Rochelle.

Larvik. See Laurvik.

La Salette. See Salette.

La Salle, a city of Illinois, at the head of steam-navigation on the Illinois River, 99 miles by rail WSW. of Chicago, with which it is also connected by the Illinois Canal. Bituminous coal is mined here, and the city has manufactures of zinc, glass, and iron. Pop. 10,500.

Lashkar. See Gwalior.

Las Palmas, chief town of the Canary Islands, on the north-east coast of Gran Canaria, is the seat of a bishop. Pop. 47,800.

Lassa. See Lhassa.

Lasso'die, a collier-village of Fife, 4 miles NNE. of Dunfermline. Pop. 1300.

Lasswade', a Midlothian village, on the North Esk, 6½ miles SSE. of Edinburgh. Drummond of Hawthornden is buried in the churchyard (memorial, 1893); and Scott and De Quincey lived here. Pop. 869.

Lataki'a (Turk. *Ladikiyeh*; anc. *Laodicea ad Mare*), a decayed seaport of Syria, with a sanded-up harbour, stands on a rocky cape 75 miles N. of Tripoli. It possesses remains of Roman buildings, and was still a wealthy city at the time of the Crusades. Pop. 20,000, who export the Latakia tobacco, grown on the hills in the interior, and some grain, silk, sponges, oils, &c.

Lathom House, the seat of the Earl of Lathom, in Lancashire, 4½ miles ENE. of Ormskirk. It is a Grecian mansion, built about 1750. Its predecessor was splendidly defended by Charlotte de la Tremouille, Countess of Derby, in 1644.

La Trappe. See TRAPPE, LA.

Lauban, a town of Prussian Silesia, on the Queiss, 15 miles E. of Görlitz. Pop. 14,336.

Lauder, a quaint little royal burgh of Berwickshire, on Leader Water, 25 miles SE. of Edinburgh. Near it is Thirlestane Castle, the seat of the Earl of Lauderdale. Till 1885 with Haddington, &c. it returned one member. Pop. 719.

Lauenburg, or SAXE-LAUENBURG, a German duchy, formerly united to the crown of Denmark, and lying on the Elbe's right bank between Holstein and Mecklenburg. In 1876 it was incorporated with Sleswick-Holstein, of which it is now a district. Area, 457 sq. m.; pop. 52,000.—The town of Lauenburg, once capital of the duchy, stands on the Elbe, 25 miles SE. of Hamburg. Pop. 5748.—LAUENBURG, in Pomerania, 38 miles NW. of Danzig, has a pop. of 10,500.

Laugharne, or LLAUGHARNE, a market-town at the Corran's influx to the Taf estuary, 12 miles SW. of Carmarthen. It has a fine church and a ruined castle. Pop. 1150.

Launceston (*Launs'ton* or *Lon'son*), till 1838 the county town of Cornwall, on the Kensey, a tributary of the Tamar, 36 miles NW. of Plymouth and 50 W. of Exeter by branch-lines opened in 1865 and 1886. It has a fine granite church (1511); the circular Norman keep of a castle which figured in the Great Rebellion, and in which Fox the Quaker was imprisoned (1656); an old gateway; and a new town-hall (1887). A municipal borough since 1227, it returned two members till 1832, one till 1885. Pop. (1851) 3397; (1901) 4053, the boundary having been extended in 1889. See a work by A. F. Robbins (1885).

Launceston, the second city of Tasmania, is to the north of the island what Hobart, the capital, is to the south—the chief port of entry and mart of trade. It stands in a valley enclosed by hills at the junction of the Esk with the Tamar, which, after a course of 40 miles, enters Bass Strait at Port Dalrymple. There is a railway (133 miles) to Hobart. The principal buildings are the government-house, new post-office, theatre, townhall, and mechanics' institute. Launceston was incorporated in 1858, and raised to a city in 1889. Pop. (1881) 12,753; (1901) 21,180.

Laurencekirk, a Kincardineshire market-town, 30 miles SW. of Aberdeen. The 'minstrel' Beattie was a native, and Ruddiman the grammarian was schoolmaster here. Pop. 1526. See Fraser's *History of Laurencekirk* (1880).

Laurentian Mountains. See CANADA, p. 148.

Lauriston Castle, a Midlothian mansion, 3¾ miles WNW. of Edinburgh. It was the seat of the famous financier, John Law.

Laurium, a mountain (1171 feet) of Attica, NW. of Cape Colonna, and connected by a railway with Athens. It was famous for its silver-mines, already exhausted in Strabo's day. Since 1874, however, the great heaps of slag have been profitably worked, and fresh deposits found of argentiferous lead and of zinc ore. The modern mining-town has a pop. of over 8000.

Laurvik, a seaport of Norway, at the head of a small fjord on the west side of Christiania Fjord, 98 miles by rail SSW. of Christiania. It has several sawmills. Pop. 11,261.

Lausanne (*Lazann'*), capital of the Swiss canton of Vaud, on the S. slope of the Jura Mountains, close to the N. shore of the Lake of Geneva, the village of Ouchy (where Byron wrote *The Prisoner of Chillon*) forming its harbour. It is bisected by a valley, across which a fine bridge (617 feet long and 82 high) was thrown in 1844. Lausanne is famous for its educational institutions; amongst them are the new cantonal university (1891), and industrial, music, and other schools. The cathedral is a beautiful Gothic building of the 10th and 13th centuries. Here, too, are the cantonal museum of natural history and antiquities, the Arlaud Museum (1846) of Art, a statue of Tell, &c. Since 1875 Lausanne has been the seat of the Federal Tribunal. Benjamin Constant was a native; and here Gibbon wrote most of the *Decline and Fall*. John Kemble, the actor, died and was buried here. Pop. nearly 50,000, of whom 86 per cent. are Reformed, and 78 per cent. speak French.

Lausitz. See LUSATIA.

Lauterbrunnen (*Lowterbroon'nen*), an Alpine valley in the Swiss canton of Bern, through which flows the Weisse Lütschine, a principal feeder of the Aar. It is surrounded by perpendicular walls of sandstone 1000 to 1600 feet high, down which pour a score of waterfalls. Of these the *Staubbach* ('dust-stream') is 866 feet high.

Laval, capital of the French dep. of Mayenne, picturesquely situated on the river Mayenne, 46 miles by rail E. of Rennes. Its chief buildings (both 12th century) are the cathedral and the old ducal castle (a prison now). Since the 13th century, when Flemish weavers settled here, the town has been a centre of linen-manufactures—linen, ticking, sacking, &c. Near it the Vendeans under Larochejaquelein defeated the Republicans in 1793. Pop. 27,110.

La Valetta. See VALETTA.

Lavaur, a town in the French dep. of Tarn, on the Agout, 25 miles ENE. of Toulouse. A bishop's see from 1317 to 1801, it was the strongest fortress of the Albigenses, but in 1211 was taken by Simon de Montfort. Pop. 6293.

La Vendée. See VENDÉE.

Lavenham, a Suffolk town, 10½ miles SSE. of Bury St Edmunds, with a noble flint-work church. Pop. of parish, 1908.

Lawfeldt, or LAVELD, close to Maestricht in Belgium. Here the French defeated the combined Austrian, Dutch, and English forces, 2d July 1747.

Lawrence, (1) capital of Douglas county, Kansas, on the Kansas River, 34 miles SSW. of Leavenworth by rail. It is the seat of the state university (1864), and has manufactures of flour, castings, furniture, &c. Pork-packing is extensively carried on. Lawrence was founded in 1854 by Free-soil settlers, shared in the violent struggle against slavery, and was partly burned by Quantrell's guerillas in 1863. Pop. 11,000.—(2) One of the capitals of Essex county, Massachusetts, and an important manufacturing city, on the Merrimack River, 26 miles N. of Boston by rail. The river, which here falls 28 feet in half a mile, is crossed by a dam of granite, 900 feet long and 40 high; and channels on either bank conduct the water to the mills. These, some of them amongst the largest in the world, manufacture cotton and woollen goods, cloth, and paper; and engines, boilers, machinery, clothing, hats, &c. are also produced here. Pop. (1870) 28,921; (1880) 39,151; (1900) 62,559.

Lawrence, St. See ST LAWRENCE.

Lawrenceburg, a city of Indiana, on the Ohio, 22 miles below Cincinnati. Pop. 4384.

Laxey, a coast-village in the Isle of Man, 7½ miles NNE. of Douglas. Near it are lead-mines.

Laxford (Norse, 'salmon fjord'), a stream and a sea-loch of NW. Sutherland, 5¼ and 3¾ miles long.

Laybach. See LAIBACH.

Laycock. See LACOCK.

Lazareff, PORT, a fine natural harbour, 40 to 60 feet deep, and 8 sq. m. in extent, in Broughton Bay on the east side of Corea. It is 390 miles from Vladivostok to the N. and 480 from Port Hamilton to the S., and is free from ice in winter.

Lazistan', a coast strip at the south-east corner of the Black Sea, partly Turkish, partly Russian, inhabited by the rough Lazes.

Le, or LEH, the walled capital of Ladakh (q.v.), stands 3 miles from the bank of the Indus, 11,538 feet above the sea. Pop. 4000.

Lea, a stream of Hertfordshire, Middlesex, and Essex, rises near Houghton Regis, and flows 46 miles SE. and S. to the Thames near Blackwall.

Leader, a Berwickshire stream, running 21 miles south-south-eastward to the Tweed at a point 2 miles E. by N. of Melrose.

Leadgate, a mining-town of Durham, 2½ miles ESE. of Shotley Bridge. Pop. 4660.

Leadhills, a village of Lanarkshire, the highest in Scotland (1300 feet), on Glengonner Water, 45 miles SSW. of Edinburgh. Allan Ramsay and Symington were natives. Lead has been mined here for six hundred years, the output ranging between 700 and 1800 tons. Pop. 835.

Leadville, a mining-town of Colorado, capital of Lake county, stands in a valley 10,200 feet above the sea, 70 miles (151 by rail) SW. of Denver. Its mines produce gold, silver, and lead. The town, which was incorporated in 1878, contains smelting-furnaces and stamp-mills. Pop. 12,500.

Leam, a river flowing 25 miles to the Avon, near Warwick.

Leamington (*Lem'ing-tun*), a watering-place of Warwickshire, is beautifully situated on the Leam, 2 miles NE. of Warwick. It is wholly of modern growth, having become important only since the rediscovery of its mineral waters in 1784. They are saline, sulphureous, and chalybeate; and the watering-season lasts from October till May. The town, too, stands in the centre of a good hunting-country. Among its buildings are the Pump-room (1868), the Warneford Hospital (1832), assembly-rooms (1813), music-hall (1821), tennis-court (1847), college (1844), new municipal offices, and the fine old parish church. The manufacture of cooking-ranges is an important industry. Visited by the Duchess of Kent and the Princess Victoria in 1830, Leamington in 1838 received the name of 'Royal Leamington Spa.' It was incorporated in 1875, and since 1885 has united with Warwick to return one member. Pop. (1811) 543; (1851) 15,692; (1901) 26,888, the borough having been extended in 1890. See F. W. Smith's *Leamington Waters* (1884).

Leasowes. See HALESOWEN.

Leatherhead, a town of Surrey, on the Mole, 4 miles SSW. of Epsom. Pop. 4700.

Leavenworth, a city of Kansas, the capital of Leavenworth county, on the Missouri River, 25 miles NW. of Kansas City by rail. First settled in 1854, it is now a handsome town, of broad avenues, and contains a Soldiers' Home, the state normal school, and large factories and mills. Eight lines of railway centre here, and the river is crossed by a fine iron bridge. Adjoining the city is Fort Leavenworth (1827), an important depot for troops and supplies, with large barracks, &c. Pop. 21,000.

Leb'anon, a mountain-range in Syria, extending from Homs in the north to Mount Hermon in the south. The name is derived from a Semitic root meaning 'white,' and was probably given, not because the peaks are snow-clad even in summer, but because of the whitish colour of the limestone rocks. They are divided into two parallel ranges, the Lebanon on the west and the Anti-Lebanon (or Anti-Libanus) on the east. Between them lies the deep valley of the Bukâ'a (anc. *Cœle-Syria*), 4 to 6 miles wide, which is watered by the Litany and El-Asi (anc. *Orontes*). The former flows SW. and W. to the sea a little north of Tyre; whilst the latter flows NE. till, after crossing the plains of Hamath, it turns W. to the Mediterranean. The highest summits occur in the north in both ranges: in Lebanon they vary from 10,018 (El-Kazib) to 7000 feet and less, and in Anti-Lebanon are about 8000 or 9000 feet. In both ranges the eastern versant is the steeper and sterner. The western valleys and the lower slopes are generally verdant. Vines, mulberry-trees, olive-groves, and orchards (nuts and figs) abound everywhere. The higher slopes are in many districts covered with forests of oak, cypress, pine, plane, &c. Contrary to the current belief, remains of the great cedar forest of Solomon's time exist in more places than the single grove of 377 trees at the head of Kedisha Valley. Streams of clear water are numerous. The inhabitants (estimated at 221,000) are a hardy, ruddy race of people, of Syrian (Aramæan) descent, who keep large herds of sheep and goats. The predominating element is the (Christian) Maronites; next come the Druses, heretical Moslems. After the bloody quarrels of the Druses and Maronites in 1860, the district of Lebanon was separated (1861) from the Turkish pashalik of Syria, and put under a Christian governor, the European powers constituting themselves the 'guardians' of the new province.

Lebanon, capital of Lebanon county, Pennsylvania, 28 miles W. of Reading, with ironworks and mills. Pop. 20,000.

Lebedin, a town of Russia, 87 miles NW. of Kharkoff. Pop. 14,788.

Lebrija (anc. *Nebrissa-Veneria*), a town of Spain, 44 miles S. by W. of Seville. Pop. 11,879.

Lecce (*Let'chay*), a cathedral city of Italy, 7 miles from the Adriatic and 24 by rail SSE. of Brindisi. As Lycia (hence Lecce) it was the seat of a Norman countship. Pop. 32,051.

Lech, a right-hand tributary of the Danube, rises in the Alps in Vorarlberg, flows northward past Augsburg, and after a course of 177 miles joins the Danube a few miles east of Donauwörth.

Lechlade (*Letch'lade*), a Gloucestershire town, on the Thames, 23 miles SW. of Oxford. Pop. 1166.

Ledbury, a pleasant, old-fashioned market-town of Herefordshire, 13 miles ESE. of Hereford. It has an interesting church, Romanesque to Perpendicular in style, St Catharine's Hospital (1232; rebuilt 1822), and a clock-tower (1890) to the memory of Mrs Browning, who passed her girlhood here. Pop. 3300.

Lee, a river flowing 50 miles eastward to Cork harbour.

Lee Castle, a Lanarkshire mansion, 3 miles NNW. of Lanark. It is the ancient seat of the Lockharts, with the 'Lee penny' talisman.

Leeds, the first town in Yorkshire, and fifth in England in point of population, is a parliamentary, municipal, and county borough, returning since 1885 five members to parliament. By rail it is 25½ miles SW. of York, 196 NNW. of London, and 112 SSE. of Carlisle. It is situated in the north-west of the West Riding of Yorkshire, in the valley of the Aire, and is the seat of important manufactures, especially of clothing in all its branches. The woollen trade exceeds in extent that of any other part of England; and the iron industries, employing about 30,000 persons, are now as important as the woollen manufactures. The manufacture of leather is carried on in some of the largest tanneries in the kingdom, and about 100 firms are engaged in making boots and shoes. Other manufactures are those of locomotives, machines, glass, ready-made clothes, tobacco, oil, chemicals, earthenware, worsted, and silk. St Peter's Church in Kirkgate, rebuilt in 1838 at a cost of £29,770, is 180 feet long by 86 wide; the tower is 139 feet high, and contains a peal of thirteen bells. St John's, New Briggate, consecrated by Archbishop Neile in 1634, is an almost unique example of a 'Laudian' church, and still retains the original fittings. The town-hall (1858) has a tower 225 feet high, and a richly-decorated great hall, with one of the largest organs in Europe. There are colossal statues of Queen Victoria and the Prince-Consort in the vestibule, and of Wellington in the front of the building. Contiguous to the town-hall are the municipal buildings (1884–88, comprising also reading-room, free library, and fine art gallery), and the school-board offices. The General Infirmary was erected in 1868 from designs by Sir G. G. Scott, at a cost of £120,000; the mechanics' institute (1867) contains a lecture-hall accommodating 1700 persons; and the grammar-school (1859), from designs by Barry, is a cruciform Decorated structure. Other buildings are the Royal Exchange (1875); the fine oval corn exchange; the new general post-office, on the site of the old coloured-cloth hall (demolished 1889); the Coliseum; the Philosophical Hall, with a fine museum; the Wesleyan training-college (1868); Turkish Baths; Beckett's Bank, a fine work by Sir G. G. Scott. There is also a library of 80,000 volumes, founded by Priestley in 1768. The University of Leeds, which received its charter in 1903, was founded in 1874 as the Yorkshire College, and was a member of the Victoria University; in 1905 it had 28 professors, of whom eight were in the medical faculty. In 1885 it was housed in a handsome Gothic pile. The Central Higher Grade School (1880) provides for 2000 scholars. Since 1897 the mayor of Leeds is called Lord Mayor. The municipality owns the markets, gas and water works, tramways, electric light, free libraries, and cemeteries, subsidises technical education, and provides garden allotments. Kirkstall Abbey (q.v.) is about 3 miles from Leeds. Roundhay Park, 2 miles from Leeds, was bought by the corporation in 1872, at a cost of £140,000, and converted into a recreation ground. Near Adel Church (erected 1140), about 4 miles from Leeds, was a Roman station. Pop. (1851) 172,270; (1881) 309,112; (1901) 428,935. Amongst Leeds worthies have been Dean Hook; Dr Priestley; Cope and Rhodes, artists; the Teales, physicians, &c.; besides the Becketts, the Baines's, the Gotts, the Fairbairns, the Denisons, and other families identified with the town. See Ralph Thoresby's *Ducatus Leodiensis* (1715); Baines's *Historic Sketch of Leeds* (1822); and Jackson's *Guide to Leeds* (1889).

Leek, a manufacturing and market town of Staffordshire, on the Churnet, 13½ miles SSE. of Macclesfield, and 24 NNE. of Stafford. The parish church, dating from 1180, but mainly Decorated in style, was restored by Street in 1867–75. There are also a grammar-school (1723), a cottage-hospital (1870), and, 1½ mile distant, the ruined Cistercian abbey (1214) of Dieulacres (De la Croix). Leek, whose civic charter dates from the days of King John (1208), is the largest centre of silk-dyeing in England. Pop. (1851) 8877; (1901) 15,484. See works by Sleigh (2d ed. 1884) and M. H. Miller (1891).

Lee Priory a mansion in Kent, on the Little Stour, 4 miles E. by S. of Canterbury. It was the seat of Sir Egerton Brydges.

Leer (*Layr*), a port in (Prussian) East Friesland, on the Leda, near its entrance to the Ems, 32 miles NW. of Oldenburg. Pop. 12,500.

Lees, a Lancashire village, 1½ mile E. by S. of Oldham.

Leeuwar'den, capital of the Dutch province of Friesland, 113 miles by rail NNE. of Utrecht. It has a fine town-hall and law-courts, an old palace of the Princes of Orange, a library with valuable archives, and manufactures of linen fabrics, mirrors, pianofortes, and wagons, besides being a great fruit and cattle market. The population is about 34,000. In the 13th c. it stood on an arm of the sea, now sanded up.

Leeuwin, Cape, the south-west corner of Australia, notable on account of the tempestuous weather usually encountered there.

Leeward Islands. See West Indies.

Lefkosia. See Nicosia.

Leghorn (Ital. *Livorno*), the third seaport of Italy, is situated on the west coast, 13 miles by rail SW. of Pisa, and 62 W. by S. of Florence. Its importance dates from the decline of Pisa; its growth was especially rapid after it fell into the hands of Florence in 1421. Cosimo I. declared it a free port, and invited foreign traders to settle there. Early in the 19th century it was a great depot for the British trade with the Levant. It ceased to be a free port in 1868; and its foreign commerce, carried on chiefly with Britain (Newcastle and Cardiff), France (Marseilles), and the United States, is less than its coasting trade. The imports include spirits, sugar, dyeing materials, woven goods, corn and flour, and machinery; the exports, wine, silk, marble, olive-oil, boracic acid, hemp, iron, preserved fruits, leather, coral, and straw hats ('Leghorn hats'). The harbour (improved in 1854–63) is an enclosed basin, on which stand two arsenals and numerous shipbuilding-yards. The roadstead is protected by an artificial breakwater (1883). There has been a lighthouse since 1303, and outside the harbour stands a lazaretto. Besides shipbuilding, the most important industry is the manufacture of coral ornaments. The north-western portion of the city is intersected by numerous canals, and called 'New Venice.' The most interesting buildings are the cathedral (17th century), its façade designed by Inigo Jones, the Jewish synagogue (next in size to that of Amsterdam), the former grand-ducal palace (1605), the Academy of Sciences, and the naval academy. The sulphur-springs and sea-bathing attract many visitors. Leghorn is defended by forts, bastions, &c., constructed for the most part in 1835–37. Smollett and Francis Horner lie buried in the English cemetery. The composer Mascagni was born here. Pop. of the city (1861) 83,543; (1871)

80,948; (1881) 78,988; of the commune (1871) 97,096; (1905) 100,000.

Legnago (*Len-yá'go*), one of the four fortified towns of northern Italy known as the Quadrilateral, is on the Adige, 33 miles by rail SE. from Verona. The fortifications, razed by Napoleon in 1801, were rebuilt in 1815. Pop. 3500.

Leh. See LE.

Le'high, a river flowing 120 miles through E. Pennsylvania to the Delaware. Some of its scenery is very picturesque, but the valley is more famous for its anthracite coal-mines.

Leicester (*Lester*), the county town of Leicestershire, a municipal, parliamentary, and county borough, is situated on the Soar, a tributary of the Trent, 22 miles S. of Nottingham, 38 ENE. of Birmingham, 20 NNE. of Rugby, and 97 NNW. of London. Traditionally founded by the British king Lear, it occupies the site of the Roman *Ratæ;* and pavements, urns, and other Roman relics have been found, while the 'Jewry Wall,' 20 feet high and 75 long, which got its name from the mediæval ghetto, is composed of rubble and Roman bricks. Its present name comes from the Anglo-Saxon *Leirceastre*, or 'fortress of the Leire,' as the river was called of old. The Norman castle, dismantled by Charles I. in 1645, is represented chiefly by the modernised assize hall, and by an artificial earthwork, the Mount or Castle View, on which stood the donjon-keep; the Abbey of Black Canons (1143), where Wolsey died in 1530, is an insignificant if picturesque ruin. In the Blue Boar Inn, demolished about 1829, Richard III. slept the night before Bosworth (1485); and his corpse was brought back hither for burial. A handsome memorial cross or clock-tower (1868) bears the effigies of Simon de Montfort, Earl of Leicester, Sir Thomas White, Alderman Newton, and William of Wyggeston. There is a statue also of Robert Hall; and among the other edifices are the old town-hall, with good carving and stained-glass of Henry VII.'s time; the new municipal buildings (1876), Queen Anne in style, with a clock-tower 134 feet high; the post-office (1887), public baths (1879), free library (1870), school of art (1876), opera-house (1877), poor-law offices (1883), corn exchange (1852), lunatic asylum (1836), the museum (1848), rich in local antiquities; the Wyggeston Hospital Schools (1513; rebuilt 1877–78); and five interesting old churches—St Nicholas', St Mary's, All Saints', St Margaret's, and St Martin's, the last with a spire 218 feet high. The New Walk is a pleasant tree-shaded promenade; the racecourse of 1806 is now a recreation ground, known as the Victoria Park, its successor being at Oadby, 3½ miles distant; the Abbey public park was opened by the Prince of Wales in 1882; and there is a third public park called the Spinney Hill Park. The abnormally rapid growth of Leicester has been due to its central position, to its transit facilities by three railway companies and by water, and to the great extension of its industries. The manufacture of plain and fancy hosiery, introduced in 1680, is equalled only by Nottingham; in that of pegged and riveted boots and shoes Leicester vies with Northampton; elastic webbing, sewing-cotton, and lace are made, and iron-founding is carried on. First chartered by King John, Leicester has returned two members from Edward I.'s time. Leicester, which is the see of a bishop-suffragan under Peterborough, is an anti-vaccination centre. Pop. (1801) 17,005; (1861) 68,056; (1881) 122,351; (1901) 211,574.

See local histories by Throsby (1777–91), T. Robinson (1793), Thompson, Hollings, Read, Mrs Johnson (1892); and the *Records of the Borough*, edited by Miss Bateson (1899–1905).

Leicestershire, a midland county of England, surrounded by Nottingham, Lincoln, Rutland, Northampton, Warwick, and Derby shires. It has a maximum length and breadth of 44 miles by 40, and contains 803 sq. m., or 514,164 acres. Pop. (1801) 131,081; (1841) 215,867; (1901) 433,994. Its surface is for the most part undulating tableland, the highest ground being at Charnwood Forest in the north-west, where Bardon Hill attains 853 feet above sea-level. The Soar, itself an affluent of the Trent, which for a short distance borders the county on the north, is, with its tributary the Wreak, the principal river. The soil, varying in fertility, is generally loamy: in the north-west are valuable coal-mines, also granite, slate, and limestone quarries, but, the greater part of the county being under pasture, the quantity of corn grown is comparatively small. The principal objects of agriculture are grazing and sheep and cattle breeding, Leicestershire being especially noted for its breed of the former. The chief manufactures are of hosiery and boots and shoes; basket-making is carried on at Castle Donnington; and Stilton cheeses are for the most part made in this county. Leicestershire comprises six hundreds, the parliamentary borough of Leicester, and the municipal borough of Loughborough, and 332 parishes, almost entirely in the diocese of Peterborough, and, for judicial purposes, in the Midland Circuit. Leicester is the assize town, and other towns are Ashby-de-la-Zouch, Hinckley, Loughborough, Lutterworth, Market Harborough, and Melton Mowbray, the last two being great hunting centres. There are four parliamentary divisions. In the battle of Bosworth Field (1485) Richard III. lost his life; whilst Leicestershire worthies have been Wyclif, Cardinal Wolsey, Lady Jane Grey, Mary, Queen of Scots, Beaumont the dramatist, George Villiers, Duke of Buckingham, Cleveland the poet, George Fox, Simpson the mathematician, Dr Johnson, Lord Macaulay, Hobart Pasha, Colonel Burnaby, and last, but not least, Daniel Lambert. See works by Burton (1622; 2d ed. 1777), Nichols (4 vols. 1795–1815), and Curtis (1831).

Leiden. See LEYDEN.

Leigh (*Lee*), a town of Lancashire, 21 miles NE. of Liverpool and 16 W. of Manchester. Silks and cotton goods are extensively manufactured; and there are also iron-foundries, breweries, malt-kilns, and glass-works, with neighbouring coal-mines. Pop. (1861) 10,621; (1901) 40,000. See Worsley's *History of Leigh* (1870).

Leighlin (*Lay'lin*), a village of County Carlow, 71 miles SSW. of Dublin. It was the seat of a diocese, now united to Ossory and Ferns.

Leighton-Buzzard (*Lay'ton*), a market-town of Bedfordshire, on the Ouse, 41 miles by rail NW. of London. Its fine cruciform church, mainly Early English, has a spire of 193 feet, and was restored in 1886; in the market-place is a pentangular cross; the corn exchange was built in 1862. Straw-plait is the staple industry. The suffix *Buzzard* is a corruption of Beaudesert or Bosard, a great family here in the 14th century. Pop. about 6500.

Leinster (*Lens'ter*), one of the four provinces of Ireland (q.v.), occupies the south-east portion of the country, comprising the counties of Carlow, Dublin, Kildare, Kilkenny, King's, Longford,

Louth, Meath, Queen's, Westmeath, Wexford, and Wicklow.

Leipa, a town of Bohemia, 40 miles N. by E. of Prague. Pop. 10,700.

Leipzig (Fr. *Leipsic*), the fifth city of Germany, is situated in a large and fertile plain in the kingdom of Saxony, 80 miles by rail WNW. of Dresden, and 101 SSW. of Berlin, within 6½ miles of the Prussian border, and 3 miles above the junction of the three small streams, Elster, Pleisse, and Parthe. The inner or ancient town, the centre of the business activity, with narrow and crooked streets and quaint houses, is separated by a broad, tree-shaded promenade (laid out since 1784 on the site of the old walls) from the much more extensive modern suburbs, bounded in their turn by a girdle of busy manufacturing 'villages.' Pop. (1800) 32,146; (1860) 85,394; (1880) 149,081; and in 1905 about 475,000, after the extension of the boundary so as to include the villages. Many handsome edifices have been erected, and great civic improvements effected in the last quarter of the 19th century. The Thomaskirche and the Nicolaikirche date respectively from 1496 and 1525; the quaint old Rathhaus, or town-hall, from 1556. The old castle, the Pleissenburg, used as barracks and magazine, and till lately partly also as an art-school, succeeded in 1549–51 an older fortress dating from 1213. Amongst the modern buildings are the Municipal Theatre (1868), one of the largest and handsomest in Germany; the Museum (1856–86); the new Exchange (1886); the Observatory (1861); the Booksellers' Exchange (1888), with an interesting museum; St Peter's Church (1885), a fine specimen of modern German Gothic; and the Lawcourts. The New Gewandhaus has since 1884 superseded the old Gewandhaus (so called because originally a drapers' hall), in which, since 1781, some of the best concerts in Europe were given. Of numerous squares and open spaces, affording ample room for the stalls and booths of the retail dealers at the fairs, the largest is the Augustus-Platz; the quaintest the Marketplace, in which a large war monument for 1870–71 was unveiled in 1888. The Rosenthal and the Johanna-Park are fine parks on the outskirts; while farther out are oak and beech woods.

Leipzig has been the seat of the supreme court of the German empire since 1879, the new building for which dates from 1888. The university, founded in 1408 by a secession from Prague, has nearly 220 professors and lecturers, and over 3500 students. The Augusteum, or main building, in the old town, was rebuilding in 1894; it is supplemented by a great system of spacious and admirably equipped medical and physical laboratories and other 'institutes' in other parts of the town, including a magnificent new library-building with 550,000 vols. and 5000 MSS. The City Library has 120,000 vols. and 1500 MSS. Among the numerous other educational establishments are two gymnasia, a justly famous School of Commerce, a conservatory of music, reckoned amongst the first in Europe, &c. The hospital system of Leipzig has largely benefited the medical faculty of the university. As a seat of trade Leipzig is inferior only to Hamburg and Berlin in Germany. The chief articles of commerce are furs and skins, cloth, leather, and books. The famous Leipzig fairs are held at Easter, Michaelmas, and the New Year, and last from three to five weeks. Their origin is traced as far back as 1180; their importance dates from about 1500; but since 1865 that importance has gradually dwindled, though they are still attended by about 30,000 strangers, including Jews, Turks, Greeks, Armenians, Persians, and even Chinese. Transactions to the extent of over £10,000,000 sterling are said to take place at the Easter fair. Nearly 500 houses are engaged in the book-trade, and there are also about eighty printing establishments; while type-founding has here its chief centre in Germany. The wool-market, in June, is still much frequented. Among the chief manufactures (carried on largely in the 'villages') are pianofortes, paper, chemicals, oils, scientific instruments, spirits, beer, tobacco, and some textiles, with iron-founding.

Leipzig (formerly *Lipzk*, from the Slavic *Lipa*, a 'lime-tree'), originally a Wendish settlement, is first mentioned as a town in 1015. It suffered greatly in the Thirty Years' War, in the Seven Years' War, and amidst the terrible struggles of the years 1812 and 1813, when it was alternately in possession of the French and of the allies, whose signal victory over Napoleon was fought during October 16–18, 1813. In 1866 it was occupied for some months by Prussian troops. Leipzig was the birthplace of Leibnitz and of Wagner, and a residence of Bach and Mendelssohn. One of the scenes in Goethe's *Faust* is placed in Auerbach's Keller here.

Leiston (*Lay'son*), a town of Suffolk, 4 miles ESE. of Saxmundham by rail. It manufactures agricultural implements, and has a ruined abbey (1363). Pop. 3500.

Leith, the sixth largest town in Scotland, an important seaport, and a municipal and parliamentary burgh, stands on the southern shore of the Firth of Forth, at the mouth of the Water of Leith, 2 miles N. of Edinburgh, with which it is now connected by continuous lines of streets. It is even less attractive than most seaport towns; still, great improvements have been effected since 1877. Among the public buildings are the court-house or town-hall (1827), custom-house (1812), exchange, corn exchange (1862), Trinity House (1816), hospital (1850), Sailors' Home (1883–84), and St James's Episcopal Church (1862–69), by Sir G. G. Scott, with a spire 180 feet high. Leith Fort (1779) is now the artillery headquarters in Scotland. The harbour-works have cost upwards of a million sterling. They comprise five docks, constructed between 1801 and 1881, and having an aggregate area of 43 acres; seven graving-docks; and two piers, 1177 and 1041 yards long. The construction of a sixth dock (60 acres in area) was undertaken in 1892, and it was completed in 1904. The imports (corn, flour, wines, chemicals, sugar, esparto, timber, fruits, &c.) have an annual value of more than £12,500,000; the exports (coal, iron, paraffin, whisky, beer, linen goods, paper, &c.) of about £4,500,000. There is regular steamboat communication with London, the north of Scotland, several continental ports, and New York. Shipbuilding is carried on; and employment is also afforded by large flour-mills, sugar-refineries, distilleries, breweries, engineer-works, sawmills, rope-works, chemical works, &c. Leith was constituted a parliamentary burgh in 1833, and with Portobello and Musselburgh returns one member. Its nine months' siege by the Protestants (1559–60), the surprise of its citadel by the Jacobites (1715), and royal visits innumerable, are the chief events in its history. Home, the author of *Douglas*, was a native; John Logan was a minister; and Robert Nicoll is buried here. Pop. (1841) 26,026; (1881) 59,485; (1901) 77,439. See works by A.

Campbell (1827), D. H. Robertson (1851), and J. Martine (1888), with others cited at EDINBURGH.

Leitha (*Lei'ta*), an Austrian stream rising in Lower Austria, and flowing NE. to join the Danube nearly along the frontier of Lower Austria and Hungary. See AUSTRIA.

Leit'meritz, an old town, partly walled, of Bohemia, at the head of steamboat navigation on the Elbe, 34 miles W. by N. of Prague. It has a cathedral (1671) and a town-house (1535). Brewing is the staple industry. Pop. 13,854.

Leitomischl, an old town of Bohemia, 85 miles ESE. of Prague. Pop. 8258.

Leitrim (*Lee'trim*), a county in the NE. of the province of Connaught, in Ireland. Its greatest length, north-east to south-west, is 51 miles; its greatest width, 21 miles; and its area 588 sq. m., or 376,212 acres, of which 282,400 are arable, 11 per cent. barren, and 7 per cent. bog. The county touches the ocean on the north, and is divided into two parts by Lough Allen (q.v.), from which the Shannon forms the south-west boundary of the county. The southern division contains numerous small lakes. The northern division is intersected by several ridges. Leitrim is more a grazing than a tillage district, 53 per cent. of its area being grass-land. Coal is found in the Lough Allen basin; and iron and lead ores are abundant, though little mined. The county town is Carrick-on-Shannon. Leitrim returns two members. Pop. (1841) 155,297; (1901) 69,201.

Leman, Lake. See GENEVA (LAKE OF).

Le Mans. See MANS.

Lemberg (formerly *Löwenburg;* Polish *Lwów*), the capital of the Austrian province of Galicia and Lodomeria, is situated on a small tributary of the Bug, in a narrow basin among hills, 212 miles E. of Cracow. Pop. (1869) 87,109; (1905) 162,000. Several of the churches are fine buildings, as the Dominican, with its venerated image of the Virgin; the Greek cathedral (1740–79); the Gothic Roman Catholic cathedral (1350–1460); and the Armenian cathedral, dating from the 14th century. The university (1784; reorganised 1817) has nearly 1200 students and a library of 86,000 volumes and 470 MSS. Here also is the seat of the national institute (1817), with a library of 81,000 volumes and 3000 MSS., chiefly of Polish literature, and large collections of coins, paintings, &c. The manufactures embrace machinery, earthenware, oil, beer, &c. Founded in 1259, Lemberg was an important Polish city from 1340. It fell to Austria at the first partition of Poland.

Lemnos, a Turkish island, 40 miles SE. of Mount Athos, and 40 SW. of the Dardanelles. It is nearly split in two by two large bays on the south and north coasts. The interior consists of an undulating plateau. None of the hills exceed 1400 feet. Area, 180 sq. m.; pop. 30,000, all Greeks, except 5000 Turks. In 1657 Lemnos passed to the Turks from the Venetians. The chief town is Kastro (anc. *Myrina*), on the W. coast; pop. 3000.

Lena, a river of eastern Siberia, 3000 miles long, rises amid the mountains on the north-west shore of Lake Baikal, in the government of Irkutsk, flows first NE. to Yakutsk, where it is 6½ miles wide, then N. to the Arctic Ocean, into which it falls by several mouths, forming a delta 250 miles wide. It receives the Vilui (1300 miles) on the left, and the Vitim (1400), Olekma (800), and Aldan (1300) on the right. Navigation is open from Yakutsk upwards from May till October. During spring the waters overflow their banks. See Melville's *In the Lena Delta* (1885).

Lencoran, a Russian seaport on the Caspian Sea, 130 miles S. of Baku. Near it are sulphur-springs. Pop. 5540. Persia ceded it in 1813.

Lencziza, an ancient Polish town, 80 miles WSW. of Warsaw. Pop. 15,546.

Lennep, a town of Rhenish Prussia, 18 miles E. of Düsseldorf. Pop. 9844.

Lennox (*Levenachs*, 'fields of the Leven'), an ancient Scottish territory, comprising the basin of the Leven and Loch Lomond—the whole of Dumbartonshire, great part of Stirlingshire, and a portion of Perthshire. The Lennox Hills, between Dumbarton and Stirling, attain 1894 feet. The Lennox gave name to an earldom (1174–1581), and then to a dukedom, conferred by Charles II. in 1680 on one of his illegitimate sons, Charles, Duke of Richmond and Lennox, who in 1702 sold the Lennox estates to the Marquis of Montrose. See *The Lennox*, by Sir W. Fraser (3 vols. 1874).

Lennoxtown, a village of Stirlingshire, 11 miles N. by E. of Glasgow by rail, with bleach-works, print-works, and alum-works. Pop. 2638.

Lens (*Lon?*), a town in the French dep. of Pas-de-Calais, 17 miles by rail SW. of Lille. Here are coal-mines, sugar-factories, &c. Pop. 24,862.

Lentini (anc. *Leontini*), a town of Sicily, on a lake, 17 miles SW. of Catania. Pop. 17,740.

Leobschütz, a town in Prussian Silesia, 24 miles by rail NW. of Ratibor. Pop. 15,239.

Leominster (*Lemster*), a market-town of Herefordshire, on the Lug, 13 miles N. of Hereford. A monastery was founded here in 658; and the fine church of a later priory presents every style from Norman to Perpendicular. The quaint old timber Butter Cross (1633) was in 1855 transferred to a new site to make room for an Italian town-hall; there is also a corn exchange (1859). Leather gloves are the staple manufacture, and there is a great trade in hops and cider. Incorporated as a municipal borough by Queen Mary, Leominster till 1868 returned two members, and till 1885 one. Pop. (1851) 5214; (1901) 5826. See local histories by Price (1795) and Townsend (1863).

León, an ancient kingdom of Spain, equivalent generally to the modern provinces of Leon, Palencia, Valladolid, Zamora, and Salamanca. The modern *province* has an area of 6167 sq. m. and a population of 390,000.—The capital, LEON (the *Legio septima gemina* of the Romans), is situated in a plain, 256 miles by rail NW. of Madrid, and has important linen manufactures. The beautiful cathedral (c. 1195–1512) contains the tombs of many sovereigns, saints, and martyrs. Pop. 17,500.—LEON is also the name of a part of Brittany.

León, a city of Mexico, 32 miles W. of Guanajuato, is a great industrial centre, manufactures saddlery, cottons, and woollens, and has a cathedral, convents, and theatres. Pop. 50,000.

León, a city of Nicaragua, 32 miles by rail (1882) SE. of its port, Corindo. Once the boast of Spanish America, founded at the head of Lake Managua in 1523, removed hither in 1610, and sacked by Dampier in 1685, it is now partly in ruins, and of its noble buildings only the cathedral and churches remain. Pop. 35,000.

Leonfor'te, a walled Sicilian town, 49 miles by rail W. by N. of Catania. Pop. 19,645.

Lepanto (anc. *Naupactus;* mod. Greek *Epakto*),

a small town of Greece, seat of a bishop, is situated on the north side of the entrance to the Gulf of Corinth. Near it was fought the great naval battle in which the Papal, Venetian, and Spanish galleys under Don John of Austria defeated the Turks, 7th October 1571.

Ler'ida, a town of Spain, capital of a province (area, 4775 sq. m.; pop. 285,417 in 1887, having decreased from 314,530 in 1860), on a tributary of the Ebro, 114 miles by rail W. by N. of Barcelona. The second city of Catalonia, it has a castle and two cathedral churches, one an ancient Byzantino-Moorish edifice, now used as a barracks, the other a modern Græco-Roman building. It manufactures woollens, cottons, leather, paper, and glass. Pop. 25,311.

Lérins (*Leran^{g}*), a group of French islands in the Mediterranean, 2½ miles SE. of Cannes. In a fortress on Sainte-Marguérite (anc. *Lerona*), 4 miles in circumference, the Man with the Iron Mask and Marshal Bazaine were confined, Bazaine escaping hence in 1874. On Saint-Honorat (anc. *Lerina*), 2 miles in circuit, are the ruins of a once famous monastic school.

Lerwick (*Ler'wik*), the county town of Shetland, on the east coast of Mainland and on Bressay Sound, 116 miles NE. of Kirkwall. Demolished and refounded in the 17th century, it has been much improved since 1850, and has a town-hall (1883), county buildings (1872), water and drainage works (1871); whilst, to meet the growth of its shipping and fisheries, extensive harbour-works were carried out during 1883–86. Pop. 4541.

Lesbos, or MYTILENE, a Turkish island in the Ægean, 10 miles from the coast of Asia Minor, north of the Gulf of Smyrna. Area, 676 sq. m.; pop. 36,000, mostly Greeks. The ancient capital was Mitylene; the existing town, Castro, 'a straggling dirty village' (pop. 12,000), stands on a peninsula on the east coast, and has a mediæval castle and a shallow harbour. The modern town of Agiasso has 8000 inhabitants. Between 700 and 500 B.C. Lesbos was the flourishing home of poets and literary men—Alcæus, Sappho, Terpander, Pittacus, Theophrastus, Theophanes, &c. It belonged successively to Macedonia, Pontus, Rome, and Byzantium, and from 1355 to 1462 was owned by a Genoese merchant family, who lost it to Mohammed II.

Leslie, a town of Fife, 12 miles SW. of Cupar, and 3 W. of Markinch. It has flax-spinning, bleaching and paper works. Pop. 3621.

Lesmaha'gow (Celt., 'green of St Machutus'), a Lanarkshire village, on the Nethan, 6 miles SW. of Lanark. It was the seat of a Tironensian priory (12th c.). Pop. 1737. See a work by J. Greenshields (1864).

Letchworth, in Herts, is the first practical development of the 'garden city' movement, and was commenced in 1903. It is on the Great Northern Railway, between Hitchin and Cambridge, and 34 miles N. of London. Pop. in 1905, 1600.

Letterfrack, a tourist centre on the west coast of County Galway, 8½ miles N. of Clifden.

Letterkenny, a town of Donegal, on the Swilly, 16 miles WSW. of Londonderry. Pop. 2370.

Leucadia. See LEUKAS.

Leuchars, a Fife village, 4 miles WNW. of St Andrews, with a fine Norman church. Pop. 711.

Leuctra, a village of Bœotia. Here the Thebans under Epaminondas routed the Spartan king Cleombrotus (371 B.C.).

Leuk (Fr. *Loèche*), a town (pop. 1411) in the Swiss canton of Valais, on the Rhone's right bank, 15 miles above Sion. It is the station, on the Simplon railway, for the *Baths* of Leuk (4643 feet above sea-level), 5 miles N. The springs (124°–199° F.) are saline, chalybeate, and sulphureous, and are used both for drinking and bathing, chiefly in skin and stomachic diseases.

Leukas, LEUCADIA, or SANTA MAURA, one of the Ionian Islands, lies close to the west coast of Greece; about 660 B.C. the Corinthians cut through the peninsula that joined it to the mainland. It is 20 miles long by 8 wide, with an area of 110 sq. m. The backbone of the island is a ridge of white limestone; hence the name (*leukos*, 'white'). Pop. 25,000.—The capital, Amaxichi or Leukas, on the east coast, is the seat of an archbishop; pop. 3800. Long Venetian, the island was occupied by Britain in 1810.

Leuthen, a village of Prussia, in Lower Silesia, 10 miles W. of Breslau. Here, on 5th December 1757, Frederick the Great defeated the Austrians.

Levant' (from the Ital. *Levante*, the 'Orient,' or 'Rising'—i.e. the East), the eastern parts of the Mediterranean Sea and the coast-regions of Syria, Asia Minor, and Egypt. In a wider sense, the name is given to all the regions eastward of Italy, as far as the Euphrates and the Nile.

Leven, a police-burgh (1867) of Fife, on the Firth of Forth, at the mouth of the river Leven, near a rich coalfield, 11 miles by rail NE. of Kirkcaldy. It is a summer-resort, and has good golf-links. Pop. (1841) 1827; (1901) 5577.

Leven, LOCH, a salt-water loch between Argyll and Inverness shires, extending 11½ miles westward to Loch Linnhe. See also LOCHLEVEN.

Levis, or POINT LEVI, capital of a county south of the St Lawrence, opposite Quebec (q.v.), with a large graving-dock. Pop. 8000.

Levkosia. See NICOSIA.

Levuka, till 1882 the capital of Fiji (q.v.).

Lewes, the county town of Sussex, 50 miles S. of London, is picturesquely situated on the eastern declivity of one of the South Downs, at the foot of which flows the navigable river Ouse on its way to the sea at Newhaven, 7 miles distant. Pop. (1831) 8592; (1901) 11,249. The chief objects of interest are the ruins of a priory and castle which once stood here, the former built (1072–78) by William de Warenne, Earl of Surrey, who with his wife Gundreda, a daughter of William the Conqueror, was buried within its precincts. Of the castle which stood on high ground in the centre of the town, the keep and gateway, the only portions now remaining, are occupied as a museum. Lewes has seven churches, mostly Perpendicular in style, a county hall (1812), free library (1862), school of science and art (1868), and a town-hall (1872). Newspaper-printing and tanning are carried on. Till 1867 the town, which was incorporated in 1881, returned two members, till 1885 one. Race-meetings are held three times a year near Mount Harry on the Downs, where, on 14th May 1264, Henry III. was routed by Simon de Montfort. See works by Horsfield (2 vols. 1824–27), Mantell (1846), and Lower (3d ed. 1880).

Lewis, or SNAKE RIVER, the great southern branch of the Columbia (q.v.). See IDAHO.

Lewisham, 6 miles SSE. of Charing Cross, since 1885 a parliamentary borough (pop. 67,500).

Lewiston, a city of Maine, on the Androscoggin River, 35 miles N. of Portland. The

river, which is crossed by several bridges, has here a fall of 50 feet. The principal manufactures are woollens and cottons. Lewiston contains a Baptist college. Pop. 25,000.

Lewis-with-Harris, a Scottish island, the largest and most northerly of the Outer Hebrides, separated from the mainland by the Minch, and containing the town of Stornoway (q.v.), 43 miles NW. of Poolewe and 180 N. by W. of Oban. Its length is 60 miles; its greatest breadth is 28 miles; and its area is 859 sq. m., of which 683 belong to Lewis, the Ross-shire portion, in the north, and 176 to Harris, the Inverness-shire portion, in the south. The coasts are wild and rugged, the chief indentations being Broad Bay and Lochs Erisort, Seaforth, Resort, and Roag. The Butt of Lewis, a promontory at the extreme north, rises sheer to a height of 142 feet; the surface, attaining 2662 feet in Harris and 1750 in Lewis, consists mainly of hill, moor, and moss, treeless and almost shrubless, with much peat and freshwater lakes innumerable. Less than 4 per cent. of the entire area is in cultivation. In 1844 'the Lews' was purchased for £190,000 from the Mackenzies of Seaforth by Sir James Matheson (1796–1878), who expended £330,000 on improvements. Pop. (1801) 12,164; (1831) 18,440; (1901) 32,160, mostly Gaelic-speaking—a population of crofters and fishermen greater than the island is well able to sustain. See W. A. Smith's *Lewsiana* (1875).

Lexington, (1) capital of Fayette county, Kentucky, stands in the fertile blue-grass region, 77 miles S. of Cincinnati. It is a handsome city, its principal edifices the court-house, state university, and state lunatic asylum. The Henry Clay monument also is noteworthy. There are manufactures of spirits, hemp, and especially of tobacco. Pop. (1880) 16,656; (1900) 26,369.—(2) A village of Massachusetts, 11 miles WNW. of Boston, where the first blood of the Revolution was shed, April 19, 1775. A monument has been erected to the eight men who fell here.—(3) Capital of Lafayette county, Missouri, on the Missouri River, 42 miles by rail (84 by water) E. of Kansas City. It contains Baptist and Methodist ladies' colleges, and manufactures hemp and woollen goods. Pop. 4537.—(4) A pretty village of Virginia, on the North River, 32 miles NNW. of Lynchburg. It is the seat of the Washington and Lee University and the Virginia Military Institute; and here Robert E. Lee and 'Stonewall' Jackson are buried. Pop. 3771.

Leyburn, a town of Yorkshire, 7½ miles SSW. of Richmond. Pop. of parish, 850.

Leyden (Dutch pron. *Lī-den*), a town of Holland, on the Old Rhine, 5 miles from the North Sea, and by rail 9 miles N. by W. of The Hague and 31 W. of Utrecht. It is a typical Dutch town, spotlessly clean, with canals bordered by avenues, and sleepy squares and streets. It has an air of academic repose, and is the seat of a celebrated university, which formerly attracted students from all parts of Europe, including Prince Rupert, Sir Thomas Browne, Evelyn, Boswell, Goldsmith, John Wilkes, Alexander Carlyle, and Alexander Monro; whilst among its professors and other students have been Arminius, Gomarus, Grotius, Descartes, Salmasius, Scaliger, Boerhaave, Hemsterhuis, Linnæus, Ruhnken, Valckenaer, &c. It was founded in 1575 by William of Orange as a reward to the citizens for their heroic twelve months' defence against the Spaniards (1573–74). It has about 50 teachers and 800 students; a library of 160,000 volumes and 5000 oriental and other MSS.; a botanic garden; a magnificent museum of natural history, &c. The town art museum contains pictures by Rembrandt, Jan Steen, Gerard Douw, Lucas of Leyden, the family Mieris—all natives of the town, and others. Here too were born some of the Elzevirs, the celebrated printers, and John of Leyden, the Anabaptist. The quaint and picturesque town-hall dates from 1574–98. In the centre of the town stands an old round tower, said to date from the Roman occupation. Leyden was in the 15th century famous all over Europe for its manufactured cloth, baize, and camlet. The same industries, but to a much less extent, together with the manufacture of cotton, twine, and yarn, the dyeing of cloth and leather, &c., are still carried on. In 1650 the pop. numbered 100,000; but a century later it had fallen to 75,000, and by 1800 to 30,000. In 1876 it was 40,724, and 56,000 in 1905.

Leyland, a town of Lancashire, 4½ miles S. of Preston. Pop. 6972.

Leyton, a suburban town of Essex, 1 mile N. of Stratford. Pop. 99,106.

Lhassa ('the Seat of the Gods'), the capital of Tibet, and a sacred city of the Buddhists, is situated in a fertile plain, 45 miles NE. of the junction of the Ki-chu with the Yaro San-po, 11,910 feet above the sea, and surrounded by mountains from 2000 to 4000 feet higher. The densely packed city proper is surrounded with a wall, outside which lie extensive suburbs, the houses standing in gardens, ranged on each side of broad, tree-shaded streets. The monasteries, some fifteen in number, are scattered over the plain and in the suburbs. Just outside the central city on the north-west stands a conical hill, Potala, which is thickly encrusted with palaces and temples, their roofs all gilded; this is the abode of the Grand Lama. Lhassa is not only the centre of the Lamaist form of Buddhism, but is an important trading centre. The resident population, exclusive of many thousands of monks, is about 15,000; sometimes augmented by a floating population of 40,000 pilgrims and traders. Its mysteries were first fully revealed to the British expedition which forced its way hither in 1904, and concluded a treaty here. See TIBET, and the works on Lhassa by Landon, Candler, and Waddell (all in 1905).

Liakhov Islands. See SIBERIA.

Liao-tung, properly the part of southern Manchuria east of the river Liao, but latterly restricted to the peninsula at the end of which Port Arthur (q.v.) and Dalny (q.v.) are situated. —Liao-yang, scene of one of the great battles in 1905, is on a western tributary of the Liao.

Libau (*Lee'bow*), a seaport and watering-place of Courland, in Russia, on the Baltic, 146 miles by rail W. by S. of Riga. Its fine harbour admits vessels that draw 17 and 18 feet, and is free from ice except for a fortnight in the year. The exports consist of grain, linseed and linseed oil-cake, petroleum, eggs, spirits, flax, hemp, &c.; the imports of coals, herrings, artificial manures, cotton, dye-wood, and iron. In 1890 the Russian government began to construct a first-class naval harbour; there already existed shipbuilding-yards and a school of navigation. The industries include iron-founding, brewing, &c. Trinity Church contains an organ (1886), one of the largest in the world. Pop. 65,540.

Liberia, a Negro republic on the Pepper Coast (Guinea) of West Africa, extending 500 miles NW. and NE. of Cape Palmas, and reaching 200 miles

inland. The coast-region consists of mangrove swamps, lying behind a belt of sand-dunes, is traversed by numerous rivers, and interrupted by projecting headlands of rock. About 20 miles or so inland the surface begins to rise into undulating uplands. The climate and vegetation are tropical, the temperature ranging between 75° F. and 88° F. The rainy season lasts about seven and the dry season five months. The chief exports are coffee, sugar, palm-oil and palm-kernels, cocoa, arrowroot, caoutchouc, ivory, kola nuts, &c. The total value of the trade does not probably much exceed £500,000. The pop. amounts to 2,068,000, of whom 18,000 are liberated American slaves and their descendants, the remainder indigenous Negroes, including the Kroomen. Capital, Monrovia (pop. 5000), now greatly decayed. Liberia owes its origin to the American Colonising Society, which in 1821 bought land here and settled a small body of freed African slaves. As newcomers arrived from the United States, fresh lands continued to be bought. In 1847 the republic was constituted; and it has enlarged repeatedly its boundaries, being joined in 1854 by the Negro republic Maryland (founded 1821), to the east of Cape Palmas. The constitution is modelled on that of the United States, with a president, a House of Representatives, and a Senate. No white man is allowed to acquire citizen's rights or to hold property. There is no standing army, but all citizens capable of bearing arms are enrolled in the militia. Complete religious toleration exists, the Methodist forms prevailing. The republic does not enjoy much favour in the eyes of the native Negroes, nor yet of those in the United States, although a few immigrants still arrive. There has been much intertribal warfare in the interior, but at Monrovia in 1904 all the important chiefs signed a declaration of peace.

Liberton ('leper town'), a Midlothian village, 2¼ miles SSE. of Edinburgh. Pop. 550.

Libourne, a town in the French dep. of Gironde, at the confluence of the Isle with the tidal Dordogne, 22 miles by rail NE. of Bordeaux. It is one of the ancient free towns founded by the English, about 1269. Woollens and military clothing are manufactured. Pop. 18,245.

Libyan Desert. See SAHARA.

Libyan Hills. See EGYPT, p. 247.

Lichfield (*Litch'field*), a municipal (and till 1885 parliamentary) borough of Staffordshire, and the seat of a bishopric, is pleasantly situated in a valley watered by an affluent of the Trent, 15 miles SE. of Stafford and 118 NW. of London. Pop. (1801) 4712; (1901) 7902. Its cathedral—a noble pile, measuring 411 feet by 66 (or 149 across the transepts), and surmounted by three towers with spires, the central 258 feet high—dates from the 13th century, when the Mercian see, founded in 656, and constituted an archbishopric 786–800, was, after its translation to Chester in 1075, and subsequently thence to Coventry, re-established here at its original seat. Despoiled, and with its central tower beaten down during the siege of Lichfield by the parliamentarians (1643), the cathedral was subsequently (1661–70) effectively repaired, and 1860–84 both the exterior and interior were ably restored at a cost exceeding £40,000. At the north-east angle of the Close, adjoining the cathedral, is the Bishop's Palace (1687), and hard by once stood the vanished castle, with memories of Richard II. Amongst other edifices may be noted the grammar-school, at which Addison, Dr Johnson, and Garrick were educated; two hospitals founded 1495 and 1504; the theological college (1857); and a concert hall. A statue of Dr Johnson was erected in 1838 in the market-place, opposite the house in which he was born, and which was bought by a Mr Johnson in 1887 'to save it from the hands of spoilers.' Among residents or natives have been Ashmole, Bishop Newton, Dr Darwin, his biographer Miss Seward, and Honora Sneyd, afterwards Mrs Edgeworth. See works by Harwood (1806) and Beresford ('Diocesan Histories' series, 1883).

Lichtenstein, a town of Saxony, on the Rödlitz, 45 miles SSE. of Leipzig. Pop. 7395.

Liddesdale (*Lidsdale*), in Roxburghshire, the valley of Liddel Water, which flows 27 miles SSW. near to or along the Border, till it joins the Esk 12 miles N. of Carlisle. See a work by R. B. Armstrong (1883).

Liechtenstein, a mountainous independent principality of Europe, separated from Switzerland on the west by the Rhine; on the east it is bounded by Vorariberg. Area, 61 sq. m.; pop. 9634. The chief town, Vaduz or Liechtenstein (pop. 1139), lies 28 miles SSW. of Bregenz on Lake Constance. The Prince of Liechtenstein possesses extensive estates in Austria, Prussia, and Saxony. The little state is a constitutional sovereignty, and belongs to the Austrian customs, postal, judicial, and coinage system.

Liége (*Lee-ayzh'*; Ger. *Lüttich*, Flemish *Luik*), a city of Belgium, at the confluence of the Ourthe with the Meuse, 62 miles by rail S. by E. of Brussels and 47 SW. of Aix-la-Chapelle. It consists of the old town, built on the hills that overlook the Meuse on the left, the new town, down below on the right bank, and several suburbs. It is a fine city, with elegant bridges, handsome squares and gardens, and fine churches and private houses. Its defences consist of a ring of modern forts and the citadel (1650) on the high ground on the Meuse's left bank. The old cathedral church, St Lambert's, was founded in 712, destroyed by the French republicans in 1794, and wholly removed in 1802. Since then St Paul's (968–1528) has been the church of the see. The former bishop's palace (1508–40) has been converted into law-courts. The university was founded in 1817, and has over 1200 students, and a library of 210,000 vols. Situated in the centre of the east Belgian coal-mining district, Liége is one of the first manufacturing cities in Belgium. Its great staple is firearms, of which it turns out annually large numbers. But manufactures of wool, leather, and iron-plates, together with breweries, and distilleries, give large employment. The government have here a cannon-foundry and a small-arms factory. At Seraing (q.v.), 4 miles distant, are the huge Cockerill Works. Pop. (1876) 115,851; (1900) 173,706, mostly Walloons. The Bishop of Maestricht transferred the see to Liége in 720; his successors became princes of the empire with the title of Dukes of Bouillon. The city was seized by Charles the Bold of Burgundy in 1467 and 1468, in 1691 by the French, in 1702 by Marlborough, and once more by the French in 1792. The Congress of Vienna assigned the city and its territories to the Netherlands; but in 1831 they were incorporated in the new kingdom of Belgium.—The province of Liége has an area of 1117 sq. m. and a pop. of 860,000.

Liegnitz, a town of Prussian Silesia, on the Katzbach, 38 miles W. by N. of Breslau. In the neighbourhood (Wahlstadt) the Mongols in 1241

defeated the Poles, and filled nine sacks with the ears of their slaughtered foes. Liegnitz came to Prussia in 1742. Here in 1760 Frederick the Great routed the Austrians, and in 1813 Blücher defeated the French (Katzbach). It is now a place of great industrial activity, with iron-foundries, machine-shops, pianoforte-factories, and manufactures of woollens, cloth, hats, gloves, &c. Pop. 56,000.

Lierre, a town of Belgium, 11 miles by rail SE. of Antwerp, manufactures silk, lace, shoes, beet-root sugar, salt, and beer. Pop. 28,156.

Liffey, a river of Ireland, winding 50 miles westward and east-north-eastward through Wicklow, Kildare, and Dublin counties, to Dublin Bay.

Lifford, the county town of Donegal, on the Foyle, opposite Strabane, and 15 miles SSW. of Londonderry. Pop. 450.

Ligny (*Leen'yi*), a Belgian village, 13 miles NE. of Charleroi. Here Napoleon defeated the Prussians under Blücher, 16th June 1815, the same day as Quatre-Bras.

Ligonyi, or Elgon, a mountain, 14,000 feet high, W. of Lake Baringo in East Equatorial Africa, with extensive artificial caves.

Ligurian Republic, the name given by Bonaparte to the republic of Genoa (q.v.) in 1797, from Liguria, the ancient name of the region.

Lille (Flemish *Ryssel*), a manufacturing town and first-class fortress of France, chief town of the dep. of Nord, is situated on a sub-tributary of the Scheldt, 66 miles by rail SE. of Calais. Lille derives its name from the 11th-century castle of the Counts of Flanders around which it arose, and which from its position in the midst of marshes was called L'Isle. Burgundian from 1365, Lille was conquered by Louis XIV. in 1667, and finally handed over to France in 1713. Its defences consist of Vauban's pentagonal citadel, and a series of seven forts encircling the town. The old fortifications were mostly levelled from 1858 onwards. The town possesses few notable buildings except the church of Notre Dame (1855), and the town-hall with the museum, the famous Wicar collection of drawings by the Old Masters, and a library of 41,000 volumes. It has a Catholic 'free university,' independent faculties of medicine and science, technical schools, a music school, and an academy of art. Lille is a great centre of textile industries: the spinning of linen and cotton, the manufacture of thread, damask, cloth, tulle, tickings, &c.—these textile industries employ 20,000 workpeople—as also of tobacco, beer, paper, sugar, machinery, &c. Pop. (1872) 152,775; (1901) 215,431.

Lillebonne, a Norman town on the Bolbec, 28 miles WNW. of Rouen by rail. The *Julia Bona* of the Romans, it has remains of a Roman theatre, a 15th-century church, and a ruined castle of William the Conqueror. Pop. 5705.

Lima (*Leema*), the capital of Peru, lies in a broad valley 6 miles E. of Callao, its port, with which it is connected by two railways (9 miles). The archiepiscopal cathedral (rebuilt 1746) is, after that of Mexico, the most noteworthy in Spanish America. The university (1551) is now housed in the old Jesuits' college. The national library was looted during the Chilian occupation (1881–83), and numerous statues and works of art found their way to Santiago. This disaster, added to revolutions and earthquakes (the worst that of 1746), has wrought sad havoc in Lima, which, with its wide and regular streets, remains still picturesque, but somewhat shabby and very dirty. The trade is almost entirely in the hands of foreigners. The manufactures include iron-casting, copper-smelting, and the making of furniture, silver-ware, gold-lace, and stamped leather. There is a railway to Oroya (128 miles). Lima is the old Indian name revived of what was founded as *Ciudad de los Reyes* in 1535 by Pizarro (murdered here in 1541, buried in the cathedral crypt). Pop. 115,000.

Lima, capital of Allen county, Ohio, 71 miles N. of Dayton, on the Ottawa River. It has steam-mills and manufactures of engines, furniture, &c. Pop. 23,500.

Limasol, or Limassol (Gr. *Lemisou*), the chief seaport of Cyprus, though it has no harbour. There is a large trade in wine and carobs. Limasol is the only place in Cyprus where English troops are permanently quartered. Pop. 8388.

Limavad'y, a market-town, on the Roe, 16 miles NE. of Londonderry. Pop. 2696.

Limbach, a Saxon town, 10 miles WNW. of Chemnitz, manufactures hosiery. Pop. 12,494.

Limburg, a territory on the Meuse, lying between the provinces of Liége and Brabant. In 1839 it was finally re-divided, the lands to the west of the Meuse remaining with Belgium, whilst a long narrow strip on the east side was constituted the Dutch province of Limburg. The Belgian province has an area of 931 sq. m. and a pop. (1892) of 225,000. Capital, Hasselt. The area of the Dutch province is 850 sq. m.; pop. (1892) 261,853. Capital, Maestricht.—The well-known *Limburg cheese* is made at the little town of Limburg (pop. 4768), the former capital of the duchy, which is now in the province of Liége, 19 miles E. of the city of Liége.—Limburg-an-der-Lahn, a town of Hesse-Nassau, 32 miles E. of Coblenz, has a fine Catholic cathedral (Rhenish style, 1243); pop. 8485.

Limehouse, a Thameside parish of E. London.

Limekilns, a Fife coast-village, on the Firth of Forth, 3 miles SSW. of Dunfermline. Pop. 552.

Lim'erick, a county of Munster, separated by the Shannon on the N. from Clare, and bounded elsewhere by Tipperary, Cork, and Kerry. Its greatest length is 35 miles, its greatest breadth 54 miles, and its area 680,842 acres, or 1063 sq. m. Pop. (1841) 330,029; (1861) 217,223; (1901) 146,018, mainly Roman Catholics. The surface is an undulating plain, except in the extreme N. and S. The soil in general is fertile, especially the Golden Vale, and a portion beside the Shannon below Limerick. Dairy-farming flourishes; woollens, flour, and paper are manufactured. The county returns two members. Limerick is the only town of any size. Limerick is more than usually rich in antiquities, both ecclesiastical and civil, of the Celtic as well as the Anglo-Norman period. There are monastic ruins at Adare, Askeaton, &c.

Limerick, the county town, stands at the head of the estuary of the Shannon, 120 miles by rail WSW. of Dublin. The town consists of English Town, the original English settlement made in the reign of King John, on King's Island; Irish Town, immediately S., on the left bank; and Newtown-Pery, S. of Irish Town, the handsomest part of the city, dating from 1769. There are few objects of interest except the Protestant cathedral of St Mary (1180; rebuilt 1490); the Gothic R.C. cathedral (1860); and the fine bridges over the Shannon. Limerick manufactures a little lace, grinds flour, and cures bacon. Fourth among Irish seaports, it has a graving and a floating dock, and extensive quays; and imports grain,

petroleum, wine, spirits, and timber. It returns one member (till 1885 two). Pop. (1851) 53,448; (1901) 38,085. See the county history by Fitzgerald and M'Gregor (2 vols. Dublin, 1826–27).

Limfiord. See DENMARK.

Limoges (*Lee-mozh'*), capital of the French dep. of Haute-Vienne, and of the former province of Limousin, is picturesquely situated on the Vienne, 248 miles S. by W. of Paris and 218 N. of Toulouse. Its Gothic cathedral was begun in the 13th century and completed in 1851. The manufacture of porcelain employs over 5000 people; and flannels, cotton, paper, &c. are also made. The enamel-work for which Limoges was formerly celebrated is now no longer carried on. There is a fine ceramic museum (1867). Pop. (1826) 48,862; (1905) 85,000. Limoges was an important town under the Romans, and is so still in spite of plagues, fires, and sieges (the worst that by the Black Prince in 1370).

Limon, a port of Costa Rica, founded in 1861, on the Caribbean Sea. The railway begins here, and the place has a landing-pier. Pop. 4400.

Limpopo, OORI, or CROCODILE RIVER, rises in the heart of the Transvaal, and after a course of 800 miles, during which it describes a great curve northwards, falls into Delagoa Bay. Some 50 miles are navigable by steamer; the Olifant is the chief tributary.

Linares (*Lee-nä'res*), a town of southern Spain, 90 miles by rail ENE. of Cordova, is celebrated for its mines of lead and copper, and has lead and iron foundries, gunpowder and dynamite factories. Pop. 35,229.

Linclu'den, a ruined abbey, 1½ mile NNW. of Dumfries, at the Cluden's influx to the Nith. It was founded about 1164 for Benedictine nuns. See M'Dowall's *Chronicles of Lincluden* (1886).

Lincoln (*Lin'con*), the capital of Lincolnshire, and a parliamentary, county, and municipal borough, is situated on the Witham, 42 miles S. of Hull, 33 NE. of Nottingham, and 130 N. by W. of London. Built on the slope of a hill, which rises 210 feet above the river, and is crowned by the cathedral, the city is imposing in effect, and can be seen from afar in the flat fen-country. It is very ancient, is irregularly laid out, and contains many interesting specimens of early architecture—notably the castle, commenced in 1086 by William I.; the Newport Gate, or Roman arch, on the north side of the city; the Exchequer and Stonebow gateways, the latter supporting a guildhall of mediæval architecture; the Jew's House (Norman), associated with the legend of Hugh of Lincoln; St Mary's Guild (Norman); and the middle grammar-school, founded in 1567 in the Grey Friars. But the chief glory of Lincoln is its cathedral, admittedly one of the finest in England. Erected between 1075 and 1501, it measures 524 feet by 82 (or 250 across the transepts), and in style is mainly Early English. Its matchless central tower (1235–1311; 265 feet high) was previous to 1547 surmounted by a spire, as till 1808 were the two western towers (completed 1450). Other noticeable features are the west front (partly Norman), with its three doorways (1123); the Galilee or south porch (*c.* 1240); the Decorated choir (1254); the decagonal chapter-house; Norman font (1075–93); and Great Tom of Lincoln (5½ tons), hung in the central tower, which also contains a mellow-chiming clock (1880). There are also a county hall (1823–26), theological college, school of science, and bishop's palace (1887) embodied with a former palace of 1149. Several iron-foundries and important manufactories of agricultural machinery are in operation here, and an active trade is done in flour. The spring horse-fair is one of the largest in the world, and the race-meetings date back to James I.'s reign. One member is returned to parliament for the city. In the history of Lincoln the most noteworthy incidents have been frequent invasions by the Danes (786–875); great fires (1110 and 1124); a battle (1141) between the adherents of Stephen and the Empress Matilda; the second coronation of Henry II. (1155–58); an earthquake (1185); the battle of Lincoln, or Lewis Fair, fought 4th June 1218; five parliaments (1301–86); and lastly, the siege of the town, and desecration of the cathedral, by the parliamentarians (1644). Pop. (1801) 7398; (1881) 37,313; (1901) 48,784.

Lincoln, (1) capital of Nebraska, on Salt Creek, 66 miles by rail SW. of Omaha. Laid out in 1867, it is a handsome and thriving city, with state capitol, university, prison, insane asylum, and the United States court-house. There are flour and planing mills, foundries, &c.; limestone is largely quarried, and there are extensive salt-works in connection with brine-springs near by. Pop. (1880) 13,003; (1900) 40,169.—(2) Capital of Logan county, Illinois, 28 miles NNE. of Springfield, manufactures castings and farm-implements. Here are Lincoln University (Cumberland Presbyterian) and a state asylum for feeble-minded children. Pop. 9200.—(3) A town of Rhode Island, 6 miles by rail N. of Providence, containing several cotton-manufacturing villages. Pop. 8950.

Lincoln, MOUNT, a peak (14,297 feet) of the Rocky Mountains, in Colorado, 8 miles NE. of Leadville. A railway was made to silver-mining works at the summit, and here is a meteorological station conducted by Harvard College.

Lincolnshire, a maritime county of England, after Yorkshire the largest in the country, is bounded N. by the Humber, E. by the North Sea, the Wash, and Norfolk, and elsewhere by Cambridge, Northampton, Rutland, Leicester, Nottingham, and York shires. Measuring 75 miles from N. to S., and 48 from E. to W., it has a seaboard of about 90, and contains 2672 sq. m., or 1,767,879 acres. Pop. (1801) 208,557; (1841) 362,602; (1901) 498,781. The surface is comparatively flat: along the coast stretch low-lying marshes, from which in places the sea is only kept out by means of embankments. West of these marshes lie the Wolds, a range of chalk downs, which, commencing near Barton-on-Humber in the north, extend thence 40 miles south-eastward to the neighbourhood of Spilsby and Horncastle. The western side of the county, from the Humber in the north through Lincoln to Grantham in the south, consists principally of light uplands, whilst in the south-east are fens forming part of the Bedford Level (q.v.). The chief rivers are the Trent, Witham, and Welland; and a noticeable feature of the county are the numerous canals which intersect it—Car-dyke and Foss-dyke, the two largest, being probably the work of the Romans. Near Ancaster limestone is extensively quarried, and in the western districts ironstone abounds. The chief crops are corn and turnips, and in places flax is cultivated; the county is famous for its rich 'warp-lands' along the banks of the Trent, and its immense flocks of sheep. Horse-breeding, too, is extensively prosecuted, with great horse-fairs at Horncastle and Lincoln; other industries are the manufacture of agri-

cultural implements and machinery, and the shipping trade and fisheries of Grimsby.

Lincolnshire is divided into three districts or 'Parts'—viz. the Parts of Holland in the south-east, comprising the greater part of the Fens, the Parts of Kesteven in the south-west, and the Parts of Lindsey, which is by far the largest, occupying the remainder of the county. These Parts, each with its own county council, are subdivided into thirty-one wapentakes or hundreds, the city of Lincoln and the municipal boroughs of Boston, Grantham, Great Grimsby, and Louth, with part of Stamford (the rest being in Northamptonshire), and contain in all 757 parishes, almost entirely situate in the diocese of Lincoln and midland circuit. For parliamentary purposes the county is divided into seven divisions, and the boroughs of Boston, Grantham, Grimsby, and Lincoln, each returning one member. Other towns are Cleethorpes (practically a suburb of Grimsby), Gainsborough, Sleaford, Spalding, and Sutton.

The insurrection known as the 'Pilgrimage of Grace' (1536) broke out in Lincolnshire; and in 1643, during the Civil War, Ancaster, Gainsborough, Grantham, and Winceby were the scene of contests between the rival forces. To the antiquary Lincolnshire is of special interest on account of the beauty of its many churches—Boston, Crowle, Grantham, Heckington, Louth, Long Sutton, and Tattershall amongst them; whilst of other places of interest it will suffice to mention here the ruined abbey of Crowland, and Bolingbroke Castle, the home of John of Gaunt and of his son Henry IV. Other eminent persons associated with the county include Bishop Grosseteste; John Foxe, the martyrologist; William Cecil, Lord Burghley; Captain John Smith; Archbishop Whitgift; Heywood, the dramatist; Sir Isaac Newton; Thomas Sutton, founder of the Charterhouse; Dr Busby, head-master of Westminster; John Wesley; Scott, the commentator; Sir John Franklin; Dr Dodd, the forger; Dr Lingard; Lord Tennyson; Dr Latham; Worth 'of Paris;' Jean Ingelow; and Conington. See works by Allen (1834), Anderson (1880), Venables and Perry (1897).

Lindisfarne. See HOLY ISLAND.

Lindores. See NEWBURGH.

Lindsay, capital of Victoria county, Ontario, on the river Scugog, 60 miles NE. of Toronto, with trade in grain and lumber, and manufactories of agricultural machinery, &c. Pop. 7500.

Lingah, a Persian port near the entrance of the Persian Gulf. Pop. 9000.

Linköping, one of the oldest towns in Sweden, capital of East Gothland, 142 miles SW. of Stockholm, with a Romanesque 12th-century cathedral. Pop. 15,968.

Links of Forth. See FORTH.

Linlithgow, an ancient royal burgh, the county town of Linlithgowshire, lies 16 miles W. of Edinburgh, near the southern shore of Linlithgow Loch, which, 150 feet above sea-level, covers 102 acres, and deepens westward from 10 to 50 feet. On a promontory, 66 feet high, stands the stately ruin of Linlithgow Palace, mostly rebuilt between 1425 and 1628, fired by Hawley's dragoons in 1746, and repaired in 1892. It was the birthplace of James V. and Mary Stuart. The neighbouring parish church of St Michael's (restored 1894–95) is a very good Decorated structure of mainly the 15th and 16th centuries; within its south transept James IV. received the Flodden warning. Another event in Linlithgow's history was the murder of the Regent Moray. The Cross Well (rebuilt 1807) and the town-hall (1889) are also noteworthy. With Falkirk, &c., Linlithgow returns a member. Pop. (1831) 3187; (1901) 4279. See a work by Waldie (3d ed. 1879).

Linlithgowshire, or WEST LOTHIAN, a Scottish county, washed on the north for 17 miles by the Firth of Forth, and elsewhere bounded by Edinburgh, Lanark, and Stirling shires. Its length south-westward is 22 miles, its average breadth 7 miles, and its area 127 sq. m. The only large streams are the Almond on the south-eastern, and the Avon on the western boundary; the principal eminences are Cairnnaple (1016 feet), Cockleroe (912), Dechmont Law (686), and Glower-o'er-'em (559), the last with a monument to General Adrian Hope, who fell in the Indian Mutiny. Coal has been largely mined since the 12th century, as also are ironstone, fireclay, and shale for the manufacture of paraffin. Excellent sandstone is quarried at Binny. Of the whole area 73 per cent. is in cultivation; woods cover 4982 acres. Towns, noticed separately, are Linlithgow, South Queensferry, Bathgate, Bo'ness, and Broxburn; among the mansions are Hopetoun, Dalmeny, Dundas, and Kinneil; and the antiquities include prehistoric and Roman remains, the Romanesque church of Dalmeny, the castles of Barnbougle, Blackness, Niddry, &c., and the preceptory at Torphichen of the Knights of St John. The county returns one member. Pop. (1801) 17,844; (1841) 26,872; (1901) 65,708. See works by Sibbald (1710) and Small (1883).

Linmouth. See LYNMOUTH.

Linnhe, LOCH (*Lin'nie*), a sea-loch of Argyll and Inverness shires, extending 31 miles north-eastward to Fort William, and 8½ miles to 1½ furlongs (at Corran Narrows) wide. The upper 9¾ miles are sometimes called Lower Loch Eil.

Linton, EAST, a Haddingtonshire police-burgh, on the Tyne, 23½ miles E. by N. of Edinburgh. Pop. 920.—WEST LINTON, a Peeblesshire village, on Lyne Water, 16 miles SSW. of Edinburgh. Pop. 412.

Linz (*Lintz*), capital of Upper Austria, on the right bank of the Danube (here crossed by an iron bridge 780 feet long), 117 miles by rail W. of Vienna. It has a splendid Gothic cathedral (1862–90), the old cathedral (1670), the bishop's palace, a museum, a library of 33,000 vols., &c. Its industries include the manufacture of woollen goods, tobacco, linen, leather, machinery, and shipbuilding. Pop. 59,560.

Lions, GULF OF (*Golfe du Lion*), the large Mediterranean gulf of S. France, from the Spanish frontier E. to the Hyères Islands.

Lip'ari Islands, known also as the ÆOLIAN ISLANDS, a volcanic group in the Mediterranean, off the N. coast of Sicily, NW. of Messina. It comprises six larger and numerous smaller islands, with an aggregate area of 116 sq. m. Many of the smaller islands form part of the rim of a gigantic crater. Stromboli (3022 feet) is almost constantly active, and Vulcano (1017 feet) intermittently; the rest are extinct. The ancient classical poets localised in these islands the abode of the fiery god Vulcan—hence their ancient name, *Vulcaniæ Insulæ*. Their collective pop. is 19,312, of whom 7542 belong to the island of Lipari (area, 32 sq. m.), the largest of the group. The warm springs are much resorted to, and the climate is delightful. Lipari, the chief town, is a bishop's see and a seaport; pop. 4968.

Lipetzk, a town in the Russian government of Tamboff, on the right bank of the Voronezh, a

tributary of the Don, 300 miles by rail SSE. of Moscow. It has chalybeate springs. Pop. 25,860.

Lippe (*Lip'pey*), or LIPPE-DETMOLD, a principality of northern Germany, lying between Westphalia on the W. and Hanover on the E. The Weser touches it on the N. and the Teutoburger Wald crosses it in the S. Area, 475 sq. m.; pop. (1875) 112,442; (1900) 139,238, mainly Protestants. Capital, Detmold (q.v.); other towns, Lemgo and Horn. The surface is hilly; woods cover 28 per cent. Every spring some 12,000 of the inhabitants spread themselves over central Europe, even to south Russia, as brick-burners and tile-makers, returning home in autumn. The state is named from the Lippe river, a tributary of the Rhine, outside the present principality.

Lippstadt, a town of Prussia, on the Lippe, 30 miles E. by N. from Dortmund. It manufactures spirits, beer, cigars, brushes, ropes, iron, &c. Founded in 1168, it was captured by the Spaniards in 1620, and by the French in 1757. Pop. 13,504.

Liria, a town of Spain, 14 miles NW. of Valencia. Pop. 9029.

Lisbon (Port. *Lisboa*), capital of Portugal, stands on the northern shore of a bottle-shaped expansion of the Tagus, 9 miles from its mouth; it is 412 miles by rail WSW. of Madrid. The city extends for 4 or 5 miles along the shore, and climbs up the slopes of a low range of hills, occupying a site of imposing beauty. The oldest part of Lisbon is that which escaped the earthquake of 1755; it lies on the east, round the citadel, and consists of narrow, intricate streets, not over clean. It is still known by its Moorish name of Alfama. The western portions were built after the earthquake, with wide and regular streets, fine squares, and good houses. The summits are mostly crowned with what were formerly large monasteries. The gloomy cathedral of the 'patriarch,' built in 1147, restored after 1755, has a Gothic façade and choir. The large church of St Vincent contains the tombs of the royal (Braganza) family. The church of Estrella is a reduced copy of St Peter's at Rome. In San Roque is a chapel thickly encrusted with mosaics and costly marbles. But the finest structure in the city is the Gothic monastery and church of Belem, a monument to the great seamen of Portugal; it was begun in 1500 on the spot from which Vasco da Gama embarked (1497) on his momentous voyage. Inside the church are new tombs (1880) to Camoens and Vasco da Gama, and the grave of Catharine, wife of Charles II. of England. The monastery is now used as an orphanage and foundling hospital. Neither of the royal palaces possesses features of great interest. A fine square facing the bay is surrounded with government offices, the handsome custom-house, and the marine arsenal. There are an academy of sciences (1779), with a library of 60,000 vols., a polytechnic school, a medical school, a conservatory of music, a public library of 200,000 vols. and 9500 MSS., museums, two observatories, &c. A magnificent aqueduct (1738) brings water to the city from springs 9 miles to the north-west. In the cemetery of the English church Fielding was buried in 1754. The pop. of the city was 246,343 in 1878; but the municipal boundaries were enlarged in 1885 so as to include Belem and other suburbs, and the pop. is now about 350,000. A series of forts protect the seaward approaches. The harbour is one of the finest in the world, well sheltered, deep close to the quays, and capacious enough to hold all the navies of Europe at once. Nevertheless the government spent (1886–1900) £2,400,000 in improving the port. The imports include corn, cotton goods, sugar, fish, coal, timber, tobacco, coffee, and petroleum; the exports, wine, cork, fish, cattle, oil, salt, and fruits. The most important industries are in gold and silver wares and in jewellery; next come cotton-spinning and weaving, the manufacture of silk, hemp, chemicals, hats, boots, tobacco, soap, cutlery, and stoneware, and iron-founding.

Lisbon is a contraction of Olisipo, its name as capital of the Lusitanians. From the Romans it passed to the Goths, from the Goths to the Moors (716), who kept their hold of it down to 1147, when Alfonso I. of Portugal seized it with the help of English, German, and Flemish crusaders. It was made the capital of the kingdom in 1422. In 1580 it was seized by Alva for Philip II. of Spain; and it was from this port that the 'invincible' Armada set sail. When the Duke of Braganza roused his countrymen to shake off the Spanish yoke (1640), he recaptured Lisbon, and once more it became the capital. On 1st November 1755, in less than ten minutes, the greater part of the city was made a heap of ruins, 30,000 to 40,000 persons were killed, and damage done to the extent of nearly 20 millions sterling. The French held the city for ten months during 1807–8. St Antony of Padua, Camoens, and Pope John XXI. were natives. See Macedo, *Guide to Lisbon* (1875).

Lisburn, a town (since 1898 wholly) in Antrim, on the Lagan, 93 miles by rail N. by E. of Dublin, and 8 SW. of Belfast. The Conway family built a castle here in Charles I.'s time, and introduced the existing industries—manufactures of linens, damasks, muslins, &c., with flax-spinning and bleaching. Its parish church is the cathedral of Down, Connor, and Dromore, and contains a monument to Bishop Jeremy Taylor. Pop. (1851) 6569; (1901) 11,459.

Liscard, a township in Wallasey parish, Cheshire, containing New Brighton (q.v.).

Lisdoonvarna, a spa in County Clare, 9 miles N. of Ennistimon station, with one sulphurous and several chalybeate springs.

Lisieux (*Lee-zi-yuh'*; anc. *Noviomagus Lexoviorum*), a town in the French dep. of Calvados, 30 miles by rail E. by S. of Caen. In the church of St Pierre (1045–1233; a cathedral down to 1801), Henry II. of England married (1152) Eleanor of Guienne. Lisieux is the centre of an extensive manufacture of coarse linens (*cretonnes*, from the original maker), woollens, flannels, cottons, &c. Population, about 16,000. Four miles distant is Val Richer, where stood the abbey of which Thomas Becket was first abbot; its ruins were restored as a summer residence for Guizot.

Liskeard (*Lis'kard*), a municipal borough in Cornwall, stands on steep hills overlooking the Looe, 18 miles WNW. of Plymouth. It has manufactures of leather and iron, and trade with the neighbouring mines. St Martin's Church, Perpendicular in style, is one of the largest in Cornwall, with a 14th-century tower. The town-hall (1859) is a good Italian building. A stannary or coinage town, Liskeard was made a free borough in 1250 by Richard, king of the Romans, who built a castle here. Till 1832 it returned two members (Coke and Gibbon the most illustrious), and then till 1885 one member. Pop. (1851) 4386; (1901) 4011. Two miles south is the famous spring of St Keyne (q.v.). See Allen's *History of Liskeard* (1856).

Lismore, a town on the Blackwater, in the two counties of Cork and Waterford, and 43 miles SW. of Waterford city. The cathedral, the parish church since the see was united to Cashel, was rebuilt in 1663, on the site of a monastery founded before 540. The castle, originally founded in 1185, was the residence of the bishops till the 16th century. In 1587 it was given to Sir W. Raleigh, who sold it to the 'great' Earl of Cork, and in it his son, Robert Boyle, was born. In 1753 it passed to the Duke of Devonshire. Lismore returned two members from Charles I.'s reign to the Union. Pop. 1532.

Lismore' (Gael., 'great garden'), an island of Lorn, Argyllshire, in Loch Linnhe, 1 furlong from the mainland, and 8 miles N. of Oban. It rises to 417 feet, and is 10½ miles long, 1½ mile broad, and 6014 acres in area. Besides a lighthouse (1833), it contains several interesting remains—the choir of the cathedral (1236) of the pre-Reformation diocese of Lismore or Argyll (since 1749 used as the parish church); Achanduin Castle, the residence of the bishops; and Castle-Rachal, a Scandinavian fort. Pop. (1831) 1790; (1901) 500, mostly Gaelic-speaking.

Lisnaskea, a town of Fermanagh, 11 miles SE. of Enniskillen. Pop. 773.

Lissa (Pol. *Leszno*), a Prussian town, 40 miles S. by W. of Posen, was during the 16th and 17th centuries the headquarters of the Bohemian Brethren in Poland: here were their most celebrated school, a seminary, a printing-office, and their archives. Pop. 15,000.

Lissa, a mountainous island of Dalmatia, in the Adriatic, 32 miles SW. of Spalato. Area, 40 sq. m.; pop. 9871—4317 at the capital, Lissa, and the rest at Comisa, both seaports. Fishing is the chief occupation. The island was held by Great Britain 1810–15. Off it the Italian fleet was defeated by the Austrians in 1866.

Listowel, a town of County Kerry, 20 miles NE. of Tralee by rail. Pop. 3606.

Litany. See LEBANON.

Litchfield, a town of Illinois, 50 miles NE. of St Louis. Pop. 5911.

Lithuania, a former grand-duchy, corresponding to the portion of Russia between the Baltic and the upper Dnieper (including Livonia, Courland, Kovno, Vilna, Grodno, Minsk, Mohilev, Smolensk, and Vitebsk). From the 14th century on it became closely associated with Poland (q.v.), with which it was finally united in 1569; in the 15th century it extended as far south as Odessa and the Sea of Azov, and as far east as the Moskva. The Lithuanians, a race to whom belong the Letts of Livonia, the Cours of Courland, and the Borussians or ancient inhabitants of East Prussia, constitute a main division of the Indo-European stock (akin to the Slavs), numbering some 3½ millions in all.

Littleborough, a town of Lancashire, 3¼ miles NE. of Rochdale, of which it is virtually a suburb. Pop. 11,270.

Little Falls, a post-village of New York, 73 miles WNW. of Albany. The Mohawk River here passes through a narrow rocky gorge, with falls of 44 feet, giving water-power to several mills and factories. Pop. 10,500.

Littlehampton, a seaport and watering-place of Sussex, 18 miles W. of Brighton and 63 SW. of London. It is the port for Arundel. Pop. 7455.

Littlemore, a hamlet 2½ miles SSE. of Oxford, with associations (1828–43) with Newman.

Little Rock, the capital of Arkansas, on the south bank of the Arkansas River, 280 miles from its mouth, and 345 by rail SSW. of St Louis. It contains the state capitol, prison, and blind and deaf-mute asylums, a U.S. arsenal, a Roman Catholic cathedral, and a college founded by the Freemasons in 1857. Pop. (1880) 13,138; (1900) 38,300.

Livadia (anc. *Lebadeia*), a town of Greece, 60 miles NW. of Athens. Pop. 5000.

Livadia, an estate, with a couple of palaces and magnificent gardens and vineyards, belonging to the imperial family of Russia, on the south coast of the Crimea, 30 miles SE. of Sebastopol.

Liverpool (prob. from the Cymric *Llyvrpwl*, 'the expanse at the pool'), if we include Birkenhead, on the south or opposite side of the Mersey, disputes with Glasgow the rank of second largest town in the United Kingdom; and as a port surpasses London for trade with America. It is situated ¾ hour distance by railway from Manchester (31½ miles), 4¼ hours from London (201 miles), 6 hours from Edinburgh (220 miles), and 7 hours by rail and steamer from Dublin. As a port Liverpool figures for about one-fifth of the British tonnage, one-tenth of the foreign, and one-sixth of the total, and just falls behind London in respect of the foreign tonnage. Through it passes one-fourth of the imports, more than two-fifths of the exports, and nearly one-third of the entire foreign trade of the United Kingdom. Of 160 million cwt. of bread-stuffs annually imported, Liverpool admits nearly 40 million; in 1892 it imported 15 million out of 16 million cwt. of cotton; and has usually exported more than half of the total cotton products. In 1903 the total imports had a value of £129,028,142; the total exports of £114,579,058. This gigantic trade has given rise to the magnificent system of docks extending along the margin of the river for a distance of nearly 6½ miles, containing 25 miles of quay-space and 380 acres of water-space, besides 9 miles of quay-space and 164 acres of water-space at Birkenhead, making a total of 34 miles and 544 acres respectively. There are also 17 acres of water-space in the docks worked by the various canal companies, besides the graving-docks on both sides of the river. Several of the docks are enclosed with large warehouses: the erection of those round the Albert Dock cost £358,000. The steamer traffic, conducted by regular liners with every port of importance in the world, draws large numbers of emigrant and other passengers to the town.

Seven railways have direct connection with the city. There are five tunnels under the town. The Mersey railway tunnel, 1230 yards long, connecting Liverpool with Birkenhead, was made in 1881–86, on a capital of £2,224,000. Proposals have been made to erect a bridge from Liverpool to Birkenhead. The Liverpool Overhead Railway, on a framework of wrought iron, runs (6 miles long, opened in 1893) along almost the whole length of the docks, and there is a very complete system of electric tramcars. In 1881–92 vast new water-works were constructed at Lake Vyrnwy (q.v.), about 25 miles from Oswestry, and 45 miles in a straight line from Liverpool. Liverpool has several extensive shipbuilding-yards, iron and brass foundries, chain-cable and anchor smithies, engine-works, tar and turpentine distilleries, rice and flour mills, tobacco, cigar, and soap manufactories, breweries, sugar-refineries, roperies, glass-works, chronometer and watch manufactories.

The architecture of the town has been greatly

improved in the later half of the 19th century, and it now possesses many fine thoroughfares, thronged with numerous splendid edifices. The Corinthian Town-hall was built in 1754, but has since been enlarged. St George's Hall (1838–54), in the Græco-Roman style, is nearly 500 feet long, and was built at a cost of £330,000. Municipal offices, custom-house, sailors' home, police-courts, workhouses, baths and wash-houses, water-works, and gas-offices are also noteworthy. The Free Library and Museum (1860) cost £40,000; with it are incorporated the Museums of Natural History and Antiquities. Other institutions are the Walker Art Gallery, Picton Reading-room, Botanic Gardens, Observatory, Liverpool College, Liverpool Institute, Queen's College, Medical Institute, Royal Institution, Academy of Fine Arts, the Exchange, Lyceum, and Athenæum. University College, on the model of Owens College, was inaugurated in 1882; its new Victoria Buildings were opened in December 1892. The college, affiliated to the Victoria University, Manchester, in 1884, is now by charter (1902) a distinct university, with about 50 professors and lecturers. Of some 270 churches and chapels, nearly 100 belong to the Established Church. The see of Liverpool was created in 1880. The Exchange, rebuilt and enlarged in French Renaissance style in 1864–67, cost about £600,000. There is a corn exchange, and several markets; the banks and clubs have handsome premises. Of monuments the chief are those of the Queen, Prince Albert, William IV., Nelson, Wellington, Huskisson, and Beaconsfield, besides several in the Town-hall, St George's Hall, Free Library, and parks. The parks are eight in number. There are seven cemeteries, only one of which is situated within the city. There are six daily (four morning and two evening) and four weekly newspapers, besides the *Daily Telegraph* and *Bill of Entry*, exclusively devoted to shipping matters, three weekly literary periodicals, and one scientific monthly magazine. Since 1885 Liverpool returns nine members.

Notable Liverpudlians have been Horrocks (the astronomer), Mrs Hemans, William Roscoe, A. H. Clough, Viscount Cardwell, Bishop Lightfoot, General Earle, and Mr Gladstone; the modern writers Hall Caine, William Watson, J. A. Noble, and Richard Le Gallienne, have been called the 'Liverpool school.' Pop. (1561) 690; (1697) 5000; (1760) 25,700; (1801) 85,300; (1861) 443,938; (1881) 552,208 municipal and 601,050 parliamentary; (1901) 684,958 in municipal borough and county of the city, and 626,634 in parliamentary—a temporary reduction in 1891 being caused by the pulling down of many houses to make room for new streets, increased trade requirements, &c.; and the removal of the population to the suburbs. In 1895 and 1902 the municipal boundaries were extended so as to take in a portion of the suburbs, bringing the pop. up to 702,247 (the parliamentary boundaries being unaltered). With Bootle, Birkenhead, and the suburbs beyond the new boundary, the population of the port may be stated to be over 880,000, of whom about 150,000 are Irish. The trade grew rapidly at the end of the 18th century, largely owing to the development of the cotton industry; and Liverpool, which gradually put Bristol in the shade, was the great headquarters of the slave-trade; as late as 1807 her shipowners had 185 vessels engaged in the business, capable of carrying about 44,000 slaves. It was expected that the port would not lose what Manchester gained by the opening of the Manchester Ship Canal (1894), but that the more economical management of the dock estate and reduced railway charges will bring more business to Liverpool than the canal will take away.

See Baines, *History of the Commerce and Town of Liverpool* (1852); Picton, *Memorials of Liverpool* (2 vols. 1873; 2d ed. 1876); and T. Ellison, *The Cotton Trade of Great Britain* (1886).

Liversedge, a township of Yorkshire, 6½ miles SE. of Bradford. It has manufactures of iron, cottons, woollens, &c. Pop. 13,968.

Livingston, a port of Guatemala, on the Dulce.

Livingstone, a township near the Victoria Falls of the Zambesi (q.v.).

Livingstonia, a mission station near the lower end of Lake Nyassa (q.v.).

Livonia (Ger. *Livland*), one of the three Baltic provinces of Russia, forms the eastern side of the Gulf of Riga, and is separated from Courland by the Dwina. The country is mostly flat, and nearly one-fourth of it is covered with forests. Lakes and streams and marshes are common. Area, 18,153 sq. m.; pop. (1870) 1,000,876; (1897) 1,300,640, of whom 43 per cent. are Letts, 41½ per cent. Esthonians. The Livonians proper, a Finnic race akin to the Esthonians, have dwindled down to about 2400. Capital, Riga; other towns, Dorpat, Pernau, Wenden.

Livorno. See LEGHORN.

Lixouri, a town of Cephalonia, on the Gulf of Argostoli, 3 miles W. of the capital, Argostoli, by water, but nearly 20 by road. Pop. 8000.

Lizard Point. See CORNWALL.

Llanberis (*Hlan-ber'ris; Ll-* nearly like *Thl-*), the 'Chamonix of Wales,' 9 miles ESE. of Carnarvon, lies at the north-west base of Snowdon, and near the foot of the wild Pass of Llanberis. The two lakes of Llanberis, 2 and 1¼ miles long, are sadly disfigured by slate-quarries. Population, about 3000.

Llandaff, a small town of Glamorganshire, on the right bank of the Taff, 2 miles NW. of Cardiff (q.v.). It is the seat of a very ancient bishopric, founded, it is said, by St Dubricius, who died in 612. The cathedral was built between 1120 and 1450, and is mainly Early English in style. It had fallen into utter ruin in 1575, in 1735–52 was barbarously patched up into an 'Italian temple,' and in 1843–69 was thoroughly restored. Pop. of parish, 5800. See works by E. A. Freeman (1850), Bishop Ollivant (1860), and R. J. King (1873).

Llandi'lo, a town of South Wales, on the Towy, 14 miles ENE. of Carmarthen. Pop. 1934.

Llandovery, a municipal borough (1484) of South Wales, on the Bran, 25 miles ENE. of Carmarthen. Pop. 1828.

Llandrindod, a Radnorshire spa, near the Ithon, 7 miles N. by E. of Builth.

Llandud'no, a fashionable watering-place in Carnarvonshire, North Wales, is situated on the level neck of a promontory between the Great and Little Orme's Heads, 48 miles by rail WNW. of Chester. Its bracing and delightful climate, its good sea-bathing, and its picturesque surroundings—the Great Orme's Head (700 feet) commanding views of Snowdon and Anglesey, and even of Man and the Cumberland mountains—have combined to raise Llandudno since 1841 from a small fishing-village to a yearly resort of some 20,000 visitors, with many hotels and boarding-houses, hydropathics, a fine promenade,

a pier (1250 feet), a 'marine drive' (5½ miles), &c. Resident pop. (1851) 1131; (1901) 9307.

Llanelly (*Hhlan-ehh'ly;* nearly like *Thlanethly*), a manufacturing town and seaport of Carmarthenshire, South Wales, 11 miles WNW. of Swansea. The mineral wealth of the vicinity, and the easy access to the sea, have raised it from a mere village in 1813 to a town of considerable commercial importance. The Cambrian Copper-works employ a great number of the inhabitants; but there are also silver, lead, iron, and tin works, potteries, chemical works, &c. Large docks have been constructed, and coal is largely exported. With Carmarthen it returns one member. Pop. (1851) 8710; (1901) 25,617.

Llanerchymedd, a village of Anglesey, 14 miles ENE. of Beaumaris. Pop. of parish, 1232.

Llanfairfechan, a pleasant little watering-place of Carnarvonshire, North Wales, at the base of Penmaenmawr, 7 miles WSW. of Conway. Pop. of parish, 2800.

Llanfyllin, one of the Montgomery boroughs, 15 miles NNW. of Montgomery. Pop. 1653.

Llangefni, an Anglesey market-town, 9 miles W. by S. of Beaumaris. Pop. 1750.

Llangollen (*Hhlan-gohh'len;* nearly *Thlangoth-len*), a town of Denbighshire, North Wales, picturesquely situated on the Dee, 22 miles SW. of Chester and 26 NW. of Shrewsbury. It has a town-hall (1866) and flannel manufactures, and is visited by tourists on account of the beauty of the famous Vale of Llangollen, and for its antiquities, among which are Dinas Bran or Crow Castle, Valle Crucis Abbey (1200), and Eliseg's Pillar (8th or 9th century). Plas Newydd, ¼ mile S. of the bridge, was for half a century the residence of the two Irish recluses, the 'Ladies of the Vale,' or 'Maids of Llangollen,' Lady Eleanor Butler (1745–1829) and Miss Sarah Ponsonby (1755–1831), who were visited here by Madame de Genlis, Miss Seward, De Quincey, and many other celebrities. Pop. 3325. See Simpson's *History of Llangollen* (3d ed. 1852).

Llangorse, a parish, with a lake 5 miles in circuit, and 6½ miles ESE. of Brecon.

Llanidloes (*Hlan-id'lō-es*), a municipal and parliamentary borough of Montgomeryshire, on the Severn, 56½ miles NW. of Hereford by rail and 56 SW. of Shrewsbury. Its interesting church, built partly with materials from Cwmhir Abbey, was restored in 1882. Manufactures of flannel and other woollen fabrics are carried on; and in the neighbourhood are extensive lead-mines. With Montgomery, &c., Llanidloes returns one member. Pop. 2774.

Llanrwst (*Hlan-roost'*), a market-town of Denbighshire, on the river Conway, 10 miles S. of Conway town. Pop. 2650.

Llantho'ny, on the Honddu, in Monmouthshire, 20 miles N. of Abergavenny, a Cistercian abbey, founded in 1108. Its church and chapter-house form a fine ruin in the Transition Norman style. In the Prior's Lodge, now an inn, Walter Savage Landor lived for three years after his marriage. Four miles up the valley is Llanthony 'Monastery,' founded by 'Father Ignatius.'

Llantrisaint, a town of Glamorganshire, 11½ miles NW. of Cardiff. It is one of the Cardiff boroughs. Pop. 1937.

Llerena (*L'yeraina*), a town of Spain, 83 miles by rail N. of Seville. Near here the British cavalry routed the French cavalry on April 11, 1812. Pop. 6609.

Loanda (*Lo-an'da*), Saint Paul de, chief town of the Portuguese possessions on the West Coast of Africa, on a small bay, 210 miles S. of the Congo's mouth. It has broad, tree-shaded, but dirty streets, forts (1578), and the residences of the governor and bishop. The harbour is sanding up, so that vessels lie 1¼ mile from shore to load and unload. Gas was introduced in 1893, and in 1892 was opened part of a railway to Ambaca, 140 miles inland. Pop. 50,000–15,000 Europeans.

Loango (*Lo-ang'go*), a coast-district of West Africa, stretching northwards from the mouth of the Congo to about 4° S. lat. By the Berlin conference of 1885 it was divided between the Congo Free State, Portugal, and France. The town Loango (former pop. 15,000) consists now of only a few mercantile establishments.

Loanhead, a police-burgh, 5 miles S. by E. of Edinburgh. Pop. (1861) 1310; (1901) 3011.

Löbau, a town of east Saxony, 12 miles SE. of Bautzen, has mineral springs and manufactures of linens, cottons, woollens, &c. Pop. 9977.

Lob Nor, a lake of central Asia, in the desert of Gobi, receiving the river Tarim.

Lobos Islands, two small groups of rocky islands, 12 miles off the coast of Peru, famous formerly for their guano.

Locha'ber, a district of S. Inverness-shire.

Lochearnhead, a Perthshire village, at the head of Loch Earn, 14 miles NNW. of Callander.

Lochee', a north-west suburb of Dundee.

Lochgelly, a police-burgh of Fife, 7½ miles ENE. of Dunfermline. Pop. 5500.

Lochgilp'head, a police-burgh of Argyllshire, 80 miles WNW. of Glasgow. Pop. 1310.

Lochinvar', a little lake of Kirkcudbrightshire, 6 miles NNE. of New Galloway.

Lochin'ver, a village in Assynt parish, in the SW. of Sutherland, on Loch Inver.

Lochle'ven, a beautiful oval lake of Kinrossshire, 23 miles NNW. of Edinburgh. Lying 353 feet above sea-level, and engirt by Benarty (1167 feet), the West Lomond (1713), and other hills, it measures 3⅝ miles by 2; discharges by the Leven, flowing 16 miles eastward to the Firth of Forth; is 10 to 90 feet deep; and has an area of 3406 acres, drainage operations having reduced its size by one-fourth in 1826–36. Of seven islands, the largest are sandy, treeless St Serf's Inch, an early seat of the Culdees, and Castle Island, with the 14th-century keep of a castle which in 1567–68 was for ten months the prison of Mary, Queen of Scots. Since 1633 and earlier the loch has been famous for its delicate pink-fleshed trout, and since 1856 for its fly-fishing. The imported American water-weed Anacharis proved for a while extremely troublesome. See Robert Burns-Begg's *History of Lochleven Castle* (Kinross, 1888). See also Leven (Loch); and for Lochs Lomond, Long, &c., see Lomond, &c.

Lochma'ben, a market-town of Annandale, Dumfriesshire, 10 miles by rail NE. of Dumfries. It stands amid seven lochs, two of which contain the rare vendace, and has a town-hall (1878), with a statue in front of it of Robert Bruce, and the Bruces' ruined castle. A royal burgh, it unites with Dumfries, &c. to return one member. Pop. 1050. See W. Graham's *Lochmaben* (1865).

Loch'winnoch, a Renfrewshire village, at the SW. end of Castle-Semple Loch, 17 miles WSW. of Glasgow. Pop. 2130.

Lochy, an Inverness-shire loch, 10 miles long, through which the Caledonian Canal (q.v.) passes; and the river (8 miles) that issues from it. Also a Perthshire stream which flows 15 miles to the Dochart near its influx into Loch Tay.

Lock'erbie, a market-town, with a great August lamb-fair, in Annandale, Dumfriesshire, 15 miles ENE. of Dumfries and 26 NW. of Carlisle. It has a conspicuous town-hall (1891). Pop. 2361.

Lock Haven, capital of Clinton county, Pennsylvania, in a beautiful mountain-valley, on the south bank of the West Branch of the Susquehanna River, 69 miles NE. of Altoona by rail. It contains a state normal school, foundries, tanneries, machine-shops, and mills. Pop. 7358.

Lockport, capital of Niagara county, New York, on the Erie Canal, 25 miles NNE. of Buffalo by rail. The canal here passes through a deep channel, cut in the solid limestone, and falls 66 feet, by ten combined double-locks. Its surplus water drives lumber, flour, woollen, and cotton mills, besides foundries, machine-shops, &c. Pop. 17,500.

Locle (*Locl*), a Swiss town, 10 miles NW. of Neuchâtel, is one of the chief seats of the Swiss watch-making industry. Pop. 12,464.

Loddon, a Norfolk village, 10½ miles SE. of Norwich. Pop. of parish, 1069.

Lodève (anc. *Luteva*), a town in the French dep. of Hérault, at the foot of the Cévennes, 43 miles by rail NW. of Montpellier. A bishop's see till 1790, it has a cathedral, founded in 950, but rebuilt in the 14th century. Cardinal Fleury was a native. Pop. 7761.

Lodi, a town of North Italy, on the Adda, 18 miles by rail SE. of Milan. It has a 12th-century cathedral; manufactures of linens, silks, and Majolica porcelain; and a great trade in cheese and wine. Pop. 28,689.—At Lodi Vecchio, a ruined village, 4 miles W., Bonaparte in 1796 forced the long, narrow bridge in the face of a tremendous fire from the Austrian batteries.

Lodomeria (Lat. for Vladimir), formerly an independent principality in Volhynia, and, since the partition of Poland in 1772, part of the Austrian 'kingdom of Galicia and Lodomeria.'

Lodore', a famous waterfall at the head of Derwentwater.

Lodz, sometimes called 'the Manchester of Poland,' lies 76 miles SW. of Warsaw on a branch railway. It consists chiefly of one main street, 6 miles or more long, and has over 120 manufactories making cotton and woollen stuffs. Pop. (1870) 39,078; (1881) 49,592; (1905) with an enlargement of the boundaries, 315,800.

Lofo'den, or Lofoten, a chain of islands on the north-west coast of Norway, between 67° and 69° 15′ N. lat., stretching SW. and NE. for 150 miles. They include the Lofoten proper and the Vesteraalen, lying farther north. Total area, 2247 sq. m. All of them are rugged and mountainous, many of the summits being crater-shaped. The highest point is 3090 feet. The waters on the east side of these islands are visited in January to March every year by vast shoals of cod-fish, which attract a large fleet of fishermen. Permanent pop. 30,000.

Loftus, a town of Yorkshire, 9 miles SE. of Saltburn. It manufactures cordage, and has large market-gardens. Pop. 6508.

Logansport, capital of Cass county, Indiana, at the confluence of the Eel River and Wabash, 75 miles N. by W. of Indianapolis. There are extensive railway-shops, besides flour and lumber mills and foundries. Pop. 17,328.

Logroño (Lat. *Julia Briga*), the capital of a Spanish province (1945 sq. m.; pop. 181,465), on the Ebro, 65 miles E. by N. of Burgos. It manufactures woollens, machinery, and leather goods. Pop. 19,993.

Loheia, a seaport of Arabia, on the Red Sea coast of Yemen, 170 miles NW. of Mocha, with 10,000 inhabitants, and a trade in coffee.

Loire (*Lwâr;* anc. *Liger*), the longest river in France, has its source in the Cevennes, in the dep. of Ardèche, at an elevation of 4511 feet, flows north and north-west through the centre of France as far as Orleans, where it bends round to the south-west and continues on to Tours; thence it follows, in general, a western course to its embouchure in the Bay of Biscay. It is tidal to Nantes, 35 miles from its mouth. Entire length, 620 miles. It becomes navigable a little above Roanne, 550 miles from the sea. At one time the depth of water at its mouth was 19½ feet at ebb-tide; now it is only 6½ feet. This is due to the vast quantity of sedimentary matter brought down by the river. To the same cause are due the numerous islands that obstruct its lower course and the sandbanks that lie athwart its mouth. The Loire is notorious for the destructive inundations it causes, although the lower part of its course is protected by large dykes or *levées*, 20 feet high. The chief tributaries are the Nièvre and the Maine (which is formed by the Sarthe, its affluent the Loir, and the Mayenne) on the right; and the Allier, Cher, Indre, and Vienne on the left. See *The Seine and the Loire*, with sixty-one illustrations by Turner (new ed. 1886).

Loire, a dep. of SE. France, formerly part of the province of Lyonnais and the county of Forez. The arrondissements are Montbrison, Roanne, and St Étienne (the capital). Area, 1838 sq. m.; pop. (1872) 550,611; (1901) 644,532.

Loire, Haute, a dep. of central France, formed out of Languedoc, Auvergne, and Forez. The Loire crosses it northwards, the Allier north-westwards. Area, 1915 sq. m.; pop. (1872) 308,732; (1901) 306,671. The arrondissements are Le Puy (the capital), Yssingeaux, and Brioude.

Loire-Inférieure (*Lwar-an-fayr'yehr*), a maritime dep. of W. France, formed out of southern Brittany, and comprising the arrondissements of Nantes (the capital), Ancenis, Paimbœuf, Châteaubriant, and St Nazaire. Area, 2654 sq. m.; pop. (1872) 602,206; (1901) 656,998.

Loiret (*Lwar-ay'*), a dep. of central France, formed out of the old provinces of Orléanais and Berri, and comprising the arrondissements of Orleans, Montargis, Gien, and Pithiviers, lies on the northern loop of the Loire. Area, 2614 sq. m.; pop. (1872) 355,021; (1901) 363,812.

Loir-et-Cher (*Lwar-ay-shayr'*), a dep. of France, formed out of the old province of Orléanais, comprises the arrondissements of Blois (the capital), Vendôme, and Romorantin. Area, 2452 sq. m.; pop. (1872) 268,801; (1901) 274,836.

Loja (*Lo-ha*), a decayed town of Spain, on the Genil, 32 miles by rail W. of Granada. It suffered from earthquake in 1885. Pop. 19,272.

Lok'eren, a town of Belgium, 11 miles by rail NE. of Ghent, with manufactures of linen, cotton, and woollen goods, lace, &c. Pop. 22,841.

Lom'bardy, that part of Upper Italy which lies between the Alps and the Po, having the

territory of Venice on the east, and Piedmont on the west. Milanese from 1337 till 1447, Lombardy then belonged to Spain till 1713, when the duchies of Milan and Mantua came into the hands of Austria, and were designated 'Austrian Lombardy.' Napoleon made it part of the Cisalpine republic, the Transpadane republic, and the kingdom of Italy successively. But in 1815 it was restored to Austria, and annexed politically to the newly-acquired Venetian territory under the name of the Lombardo-Venetian Kingdom. This union was dissolved in 1859, when Lombardy was given up to the new kingdom of Italy, which divided it into the provinces of Bergamo, Brescia, Como, Cremona, Mantua, Milan, Pavia, and Sondrio.

Lombok, one of the Sunda Islands (q.v.), between Java and Timor. It is mountainous (some volcanic peaks reach 11,620 feet) but fertile, producing maize, cotton, tobacco, indigo, sugar, and coffee. Area, 2098 sq. m.; pop. 635,000, mainly aborigines, Moslems in faith, with 20,000 Brahminical immigrants from Bali.

Lomond Hills. See LOCHLEVEN.

Lomond, LOCH, the 'queen of Scottish lakes,' in Dumbarton and Stirling shires, lies 23 feet above sea-level, and is 22 miles long, ¾ mile to 5 miles wide, 6 to 630 feet deep, and 27 sq. m. in area. It is studded with thirty wooded islands; receives the Endrick and six other principal streams; sends off the Leven 7 miles southward to the Clyde; contains trout, pike, and perch; is sometimes frozen over as far northward as Luss; and is engirt by hills and, towards its head, Highland mountains, the highest of which, Ben Lomond (q.v.), attains 3192 feet. In 1263 Norsemen launched their galleys on Loch Lomond, having drawn them across the narrow isthmus of Tarbet; on Inchcailloch stood of old a nunnery; and a cave is associated with both Bruce and Rob Roy.

Lomza, the capital of a Polish government (area, 4667 sq. m.; pop. 586,683), 80 miles NE. of Warsaw. Pop. 25,000.

London is situated mainly on the north or left bank of the Thames, about 60 miles from the sea, in 51° 30′ 48″ N. lat. and 5′ 48″ W. long. The city was, according to many authorities, founded in 43 A.D., when Aulus Plautius was the Roman governor of Britain. The name is Celtic, and would appear to signify a fort on a lake or lagoon, the Thames being here a tidal estuary. During the greater part of the Roman occupation of Britain London consisted of two forts, one at either end of the bridge, built where the Thames is 900 feet wide (narrower than either above or below). The unwalled suburbs seem to have been populous and wealthy from an early period; and, when abandoned by Suetonius, they were burned by Boadicea in 61 A.D. They were still undefended in 286 and long after. The wall which for so many centuries was destined to defend the boundaries of the city was built in 350–369, and enclosed 380 acres. From 369 till 412 London was the capital of Britain, with the title of *Augusta*. After the Roman departure London disappears from history until 457, when the Britons, fleeing before the victorious Hengest, took refuge behind the Roman wall. In 604 we find it named as the 'Metropolis'—the ecclesiastical capital—of the East Saxons. During the Danish wars London was abandoned and lay desolate for thirty years. To King Alfred we must look as the real founder of modern London. William recognised the great position and ancient rights of London in a special charter by which the privileges enjoyed by the citizens under Edward the Confessor were confirmed to them; but the most important grant from the crown was that of Henry I. in 1101. The 'Lord Mayor,' appointed for one year, is still held to rank as an earl, but within the city, where he has the position of the Lord-lieutenant of a county, next to the sovereign. The Court of Aldermen consists of twenty-six members. The Common Council was first elected in 1200; there are now upwards of 200 common councillors. The Common Hall consists only of members of the Livery Companies, and has obtained or usurped many of the rights of the whole body of citizens. The growth of the municipality was slow. Nevertheless, commerce increased, and the settlement of such foreign merchants as those of the so-called Steelyard, and of the Lombard and other Italian bankers, raised London by the time of Edward III. to a wealthy and prosperous condition. The usurpation, as many deemed it, of Henry IV. could hardly have succeeded had it not been for the support of the city; and Henry V., whose French victories inflated trade, was most popular with the citizens. After a period of depression, the reign of Edward IV., by reviving and creating outlets for foreign trade, restored the prosperity of the city. Under the Tudors there were great fluctuations. The tenets of the Reformation were warmly welcomed in London. The accession of Queen Elizabeth gave a considerable impetus to London trade; and the Merchant Adventurers, chartered by her father, now stepped into the place previously occupied by the Germans of the Steelyard. The last charter of Queen Elizabeth was granted to the East India Company. The silk manufacture, driven out of Flanders by the cruelties of the Spaniards, was naturalised in England; and even the short-sighted policy of the first Stuart could not repress the rapidly-growing enterprise of the Londoners, whom the discovery of America and of a sea-passage to India stimulated to greater and greater exertions.

While the wealth and population of London thus increased during the 16th and part of the 17th century, the city itself became less and less fit for habitation. Its unhealthiness was partly caused by the deficiency of the water-supply, partly by overcrowding; the plague scarcely ever left its narrow streets and filthy alleys. Sir Hugh Myddelton, by bringing clean water to the city in abundant quantity in 1620, bestowed upon it the greatest possible boon. James I. had reverted as far as he could to the mistaken policy of such kings as Henry III. and Richard II.; but it was reserved for Charles I., after a long series of high-handed proceedings, to seize the money of the city goldsmiths deposited in the Tower. His downfall was certain when the city turned against him; but, except for a very brief period, the Commonwealth found little favour in London, and Cromwell imposed one humiliation after another upon the citizens. Charles II. was warmly welcomed, but followed in the footsteps of his father. Extortion and oppression were the instruments of his policy, and in 1672 he closed the Exchequer, and ruined nearly all the London bankers at a blow. Meanwhile two even greater disasters had come—the Great Plague of 1665 and the Great Fire of 1666. During the fearful epidemic of 1665 the deaths during the year were officially stated at 97,306. As the population was reckoned at about 500,000, it will be seen that nearly a fifth perished. The Great Fire commenced on the 2d September, at 1 o'clock A.M., and raged for five days. It was estimated that 396 acres of houses were destroyed,

fifteen city wards were consumed utterly, and eight others damaged, comprising 400 streets, 13,200 private houses, 88 churches and St Paul's Cathedral, and four city gates. The loss in mere money was estimated at about four millions. Sir Christopher Wren built a new St Paul's, and many other beautiful buildings, including the Monument, a column 202 feet high, erected near where the fire began. St Paul's has a dome 404 feet high and 145 feet in external diameter; the length of the building east and west is 500 feet. It contains many memorials, the best of which are Wellington's, by Stevens; Lord Melbourne's, by Marochetti; and a recumbent figure of General Gordon, by Boehm. In the crypt are buried Lord Nelson (1805), Reynolds (1792), Turner (1851), Wellington (1852), Landseer (1873), and Wren himself (1723). The Exchange of Sir Thomas Gresham was burned, rebuilt, and then burned again, and finally rebuilt in 1844. The Guildhall, partly of the 13th century, partly of the 15th, which had been the scene of so many historical events, was damaged by the Great Fire of 1666, but not destroyed, and was handsomely restored. Among the churches spared by the fire is St Bartholomew's, in part a fine Norman structure; St Giles's, Cripplegate, built 1545, in which John Milton was buried, 1674; St Helen's, Bishopsgate, full of fine monuments; St Katharine Cree, said to have been designed by Inigo Jones, 1631; and St Andrew Undershaft, in which is Stow's monument.

Charles II. seized the charter and nominated a so-called Lord Mayor. At first James II. carried on his brother's evil policy towards the city. In December 1688 the citizens formally petitioned William to assume the crown, and in a few hours found ample funds for his use. The opposition of London, in old times fatal to a king or his family, affects still the fortunes of ministries. The remaining events that need be noticed here are the establishment of the Bank of England in 1694; the removal of the old wall and its gates in 1760; the clearing of the houses from London Bridge about the same time, and its complete rebuilding in 1831, when it was only one of a large number of bridges. Many have been built since then; the latest addition is a bridge below the Tower. The Mansion House is the official residence of the Lord Mayor. The population of the city has dwindled year by year, and especially since the multiplication of railways. Few tradesmen now live above their place of business, and the difference between the number of people who actually reside within the ancient boundaries and of those who only come in to business is immense. In 1881 there were 6493 inhabited houses and a night pop. of 50,526; but 25,143 houses were used during the day, when the pop. rose to 261,061. In 1891 the night pop. was only 37,694; while the day pop. was 301,384. Meanwhile the suburbs have spread in all directions, and the houses of Londoners are found in Berkshire, Buckinghamshire, Hertfordshire, and Sussex, as well as in Kent, Surrey, Essex, and Middlesex. The bishop resides in Westminster, and at an ancient manor-house of the see at Fulham. There is a dean of St Paul's who resides close to his church. He is assisted by four residentiary or stagiary canons, and by a precentor, a chancellor, and two archdeacons, and there are thirty canons of the old foundation, now usually called prebendaries, and a college of minor canons.

The County of London. Under the Local Government Act of 1888 a new county was defined, to consist of London and the suburban parishes of Middlesex, Surrey, and Kent—previously called 'the Metropolitan Area.' By the Act of 1888 a county council was provided for this district; the county of Middlesex was divided, one part forming a new county of Middlesex, and the other, united with parts of Surrey and Kent, forming the new county of London. By the Act of 1899 the administrative county of London (with the exception of the City), heretofore under more than a hundred and twenty local authorities (vestries, district boards, burial boards, &c.), was reorganised into twenty-eight municipal boroughs, each under a municipal council. These boroughs are: Battersea, Bermondsey, Bethnal Green, Camberwell, Chelsea, Deptford, Finsbury, Fulham, Greenwich, Hackney, Hammersmith, Hampstead, Holborn, Islington, Kensington, Lambeth, Lewisham, Paddington, Poplar, St Marylebone, St Pancras, Shoreditch, Southwark, Stepney, Stoke Newington, Wandsworth, Westminster, Woolwich. The councils have all the powers and duties of the old vestries and district boards, and some of those of the London County Council.

The suburbs of London grew in spite of city and parliament; by 1222 a continuous street united Westminster with London; another stretched beyond the Tower to Stepney; and a third, flowing out of Bishopsgate, reached northward to Islington. In the same 13th century a great 'ward without' was formed westward, extending to the Temple and Holborn Bars; and, on the north, part of Moorfields was made a 'ward without' in the jurisdiction of the alderman of Bishopsgate. But, except for the formal addition of Southwark in Surrey, made in 1327, confirmed and defined in 1550, no further extension of the city liberties took place.

The precinct of the Tower, eastward of the city wall, was formed partly by aggressions on the citizens, partly by acquisitions from the lord of Stepney, and partly by reclamations from the Thames. Two bastions of the old wall, generally called Roman, and certainly dating back to the reign of Alfred, were removed, and the White and Wakefield towers were built on them. Gundulf, a monk of Bec, designed the White Tower, begun in 1078; the chapel of St John in the White Tower being supplemented by the parish or precinct church of St Peter 'ad Vincula' on the Green in the reign of Henry II. The keep is approximately in the centre, and is surrounded by walls and towers forming the inner and outer wards. The towers of the inner ward were those chiefly used for prisoners' lodgings, but a complete royal palace was in the south-eastern corner. Of this palace, from which Queen Anne Boleyn went to her death on the adjoining green, scarcely a vestige remains. The lieutenant's lodgings, where, or in the chief-warder's house next door, Lady Jane (Grey) Dudley lived, is now called the Queen's House. The Beauchamp and Devereux towers seem to have held the most illustrious prisoners; they, with the Bell Tower, in which Fisher, Bishop of Rochester (1534), and Mary, Countess of Lennox (1565), were confined, form the western side of the inner ward. It is impossible to name more than a very few of the most famous persons who have suffered imprisonment in the Tower: Sir Thomas More, Sir Walter Raleigh, the Earl of Strafford, Archbishop Laud, the Duke of Monmouth, the Jacobite lords of 1715 and 1745. Many of these prisoners were buried in St Peter's Church, which having been burned

in 1512 was rebuilt in time to receive the bodies of Queen Anne Boleyn and other victims of the Tudor times. It was 'restored' some years ago in a very thorough manner, every vestige, except some monuments of the period which witnessed these sad scenes, being carefully obliterated. The crown jewels were long kept in the Brick Tower, at the north-eastern corner, but in 1867 were removed to a chamber in the Wakefield Tower, also now 'restored.' The great collection of armour, founded by Henry VIII. in his palace at Greenwich, is on the upper floor of the White Tower. The ticket-office, by which the visitor enters the fortress, is on the site of a menagerie which dates back to the time of Henry I., whence the saying 'to see the lions,' meaning to visit the Tower. The principal feature of the outer ward is St Thomas's Tower, or the Traitor's Gate, facing the Bloody or Garden Tower, the entrance of the inner ward. A little farther east, still on the Thames bank, we come to one of the numerous divisions, known as the Tower Hamlets, into which the original parish of Stepney has been parcelled. This used to be Ratcliffe and Wapping, but has long been known as St George's in the East. Next to it is Limehouse. Next to Limehouse is Poplar, which includes the Isle of Dogs ('Docks'), a kind of delta formed by the river Lea. Farther inland are Bethnal Green, a vast district, chiefly covered with factories and with the houses of artisans and labourers. Mile End, Old and New Towns, with Whitechapel north of the Tower, form a complete ring round Stepney. The Bethnal Green Museum of the Science and Art Department has housed and exhibited various fine collections of pictures and works of art. Much of Hackney, which adjoins Stepney on the north, has been kept open; an old park of the bishops being now laid out as Finsbury Park. South of this district, which stands high, are Haggerston and Hoxton, densely populated parishes, comprising the ancient Shoreditch, and reaching to the city wall. Westward are the two divisions of Finsbury, St Luke's and Clerkenwell. In Clerkenwell, but not strictly speaking of it, is the Carthusian monastery, now a kind of refuge for decayed gentlemen, known as the Charterhouse (see GODALMING). Clerkenwell, the site of the house of the Hospitallers, has still its St John's Gate, with memories of Dr Johnson. Islington, northwards and westwards, has a very ancient history, extending back to the Conquest; Stoke Newington has a curious old church and a new one; in St Andrew's, Holborn, Lord Beaconsfield was baptised, and in its cemetery, in Shoe Lane, Chatterton was buried. In Bloomsbury the British Museum is situated. St Giles's, long a rookery of wretched tenements, has been greatly cleansed and improved of late, but the too famous Seven Dials continue to deserve an evil reputation. Nell Gwynn lived in Wardour Street, the Duke of Monmouth in Soho Square, Dryden in Long Acre and in Gerard Street. The small parish of St Paul, Covent Garden, boasts of a church designed by Inigo Jones, of the greatest vegetable and flower market in London, and of innumerable literary associations. In Bow Street was Wills's Coffee-house, where Pepys met Dryden; Turner, the landscape-painter, was born in Maiden Lane; Charles Lamb lived in Russell Court; and there are memories also of Pope, Sheridan, Butler, and Prior. At the eastern end of the Strand, next to (the site of) Temple Bar, we have the colossal buildings of the New Law Courts (1874–82), of which George E. Street was the original designer, but so thwarted by the authorities, that only the best features, such as the noble hall (238 feet long) and the tower, can be considered his. North of the courts is Lincoln's Inn Fields, the largest square in London. Before we reach Waterloo Bridge we are in the precinct of the Savoy, of which the hospital was suppressed in 1703, and the chapel, where Gavin Douglas is buried, made 'royal' in 1773.

The Thames Embankment (1864–1903) borders the Strand from the city round a great bend of the Thames at Charing Cross to Westminster. When we pass the city boundary near the Temple, we are abreast of the offices of the London School Board, by Shaw, next to which is the river-front of Somerset House, by Chambers. Gardens beautifully laid out conduct us past the Savoy, the Adelphi Terrace, and the Egyptian obelisk called 'Cleopatra's Needle.' Charing Cross station occupies the site of Hungerford Market. The cross in the court toward the Strand was meant for a reproduction of the Eleanor Cross erected by Edward I. Northumberland Avenue was made in 1874. Trafalgar Square is on the site of the old Kings' Mews. Its chief ornament is the church of St Martin 'in the Fields,' by Gibbs (1726). The National Gallery is a poor building (by Wilkins, 1838). The monumental Corinthian column to Nelson is very conspicuous, with four lions by Landseer at its base. Behind it is a statue of General Gordon by Thornycroft. Cockspur Street leads us past the Haymarket and its great opera-house to Waterloo Place, where are the Guards' Memorial, a very poor bronze Victory; the Duke of York's column with statue by Westmacott; and monuments, mostly very bad, to Franklin, Lord Clyde, Lord Lawrence, &c. The clubs in Pall Mall and St James's Street are in many cases justly admired. Piccadilly begins a little to the eastward of Waterloo Place and its continuation Regent Street, and is called from a kind of tea-garden, Peccadillo Hall, which stood where the Criterion is now. The formation of Regent Street must be ascribed to Nash. In the Regent's Park are situated the Zoological and Botanic Gardens. In Piccadilly there are still some fine palaces, as Devonshire House, Northampton House, the residence of Lord Rothschild, Apsley House, and Burlington House (injured by alterations and additions). Here are lodged the Royal Academy, the Royal, the Antiquarian, the Linnean, and several other learned societies. The gardens are covered by the exhibition rooms of the academy, and by the offices and theatre of the university of London. Northward and westward is the great parish of St George, Hanover Square, which comprises Mayfair, Grosvenor Square, and Belgravia, extending from Oxford Street on the north to the Thames on the south. St George's Church is heavy in design, except the portico. The parish nearly all belongs to the Duke of Westminster. In St Pancras parish is Kentish town. The new parish church of St Pancras, in the Euston Road, was built in what was thought to be a Grecian style in 1822. The Midland Railway terminus at St Pancras, by Sir G. G. Scott, is one of the largest and most imposing buildings of the kind.

Tyburn, named from a little brook or bourne which formerly ran through it, was anciently the name of the parish which we know as St Marylebone. The place of execution was at first by the burnside. As the suburbs increased and crept towards St Marylebone, the gallows

was removed farther west. In 1512 it stood in the adjoining manor of Lilleston, close to the modern Marble Arch, and eventually it was set up for each execution at the foot of Edgware Road. At one or other of these places the Holy Maid of Kent (1534), many priests in the reign of Elizabeth, Felton, the assassin of Buckingham (1628), Jack Sheppard (1724), Jonathan Wild (1725), Lord Ferrers (1760), Mrs Brownrigg (1767), and the Rev. W. Dodd (1777) were hanged. The last execution here was that of John Austen (1783). Tyburnia is not in Tyburn, nor yet in Lilleston, but in Paddington. Oxford Street is called after Edward Harley, second Earl of Oxford and Mortimer, who married the heiress of the property on which it was built. North of St Marylebone is Hampstead (q.v.), with its splendid open heath, some parts of it 450 feet above the sea. Paddington lies wholly westward of the Edgware Road. A small part of Kensington Gardens is in Westbourne. Westward of Kensington (q.v.) is Hammersmith, a populous suburb, taken out of Fulham, which reaches down to the Thames, and forms the western extremity of the county. Fulham boasts of an ancient church and of the palace of the bishops of London. Chelsea (q.v.) adjoins Fulham.

Crossing the Thames, we reach that part of Surrey which has been included in the new county. Battersea is chiefly remarkable now for the beautiful park, opened in 1852. Westward of Battersea is Wandsworth, south of it is Clapham, and beyond that Penge, in which is the Crystal Palace, usually called from the neighbouring Sydenham (q.v.). Kennington, the site of a manor-house of the princes of Wales, Brixton a little farther south, and Norwood, on the summit of the southern line of hills which enclose what is called the London Basin, come next, and the manor of Lambeth (q.v.) faces Westminster. The domestic parts of Lambeth Palace are modern, but the chapel was built about 1250, the 'Lollards' Tower,' 1440, the gateway, 1490, and the hall, now the library, in 1663. Two modern buildings are very conspicuous at Lambeth—Doulton's terra-cotta factory, south of the palace, and St Thomas's Hospital, removed to this site in 1871.

From this point eastward to Southwark the low-lying area is occupied with mean streets and lanes, and with great warehouses, stores, and wharves; Shakespeare's Bankside Theatre is probably covered by the approaches to Waterloo Bridge. Eastward of Southwark are Bermondsey, where a famous abbey flourished before the Reformation, and Rotherhithe, at an abrupt bend of the Thames. Both districts are densely covered with factories and labourers' dwellings. Farther inland and southward are Newington, Walworth, the immense parish of Camberwell, with Dulwich (q.v.) College and picture-gallery, and Peckham. Eastward of Camberwell we enter those parishes which are taken from Kent. They comprise Lewisham, a good part of which is still open, and Deptford, Greenwich, and Woolwich, which are separately noted.

Westminster originally comprised a district outside of London, extending from the walls of London almost to the village of Kensington, but was gradually reduced in area. The present borough, included in the county of London, comprises the parishes of St Margaret and St John Westminster, St George Hanover Square, St James Westminster, St Martin-in-the-Fields, and the district of the Strand Board of Works and including the close of the collegiate church of St Peter Westminster. The name contains a reference to an ancient abbey church, probably founded about the time of Offa, but refounded by Dunstan in the time of King Edgar, about the year 971; as also to another minster, that of St Paul. Edward the Confessor, who lived chiefly at Westminster, rebuilt the church, and of his work an archway in the south transept may be identified. The church was consecrated in 1065, and Freeman was of opinion that the ill-fated Harold was crowned in it, as certainly was the Conqueror. In 1269 a new church, that which we now see, was consecrated, having been built by Henry III. in honour of Edward the Confessor (canonised 1163). The nave was finished under Richard II., but the western towers were not built till 1735. The chapel of the Annunciation, or chantry of Henry V., was built in the reign of Henry VI. The Lady Chapel, or chapel of Henry VII., an elaborate example of the last phase of the old Gothic style, was built by Henry VIII., who subsequently suppressed the monastery and made Westminster a bishopric (for ten years only), since which the surrounding town has been reckoned a city. James I. set up the last of the royal monuments—those, namely, to his mother, Mary of Scotland, and to his predecessor Elizabeth. The north front was rebuilt by Wren, and was a beautiful example of his taste in Gothic. It was pulled down, and a new and less appropriate design by Mr Pearson substituted in 1890. The church is the burial-place of thirteen kings of England, including Henry III., Edward I., Edward III., Richard II., Henry V., Henry VII., Edward VI., James I., Charles II., William III., and George II., as well as of five queens in their own right, and the queens of many of the kings. In the reign of Richard II. the practice of burying court favourites and others in the abbey commenced. The first poet to be laid in the south transept, often called the Poets' Corner, was Chaucer; here also are buried Spenser, Dryden, Garrick, Johnson, Dickens, Browning, Tennyson, and others of less note. The first Lord Lytton was buried in the chapel of St Edmund. Handel's grave is in the south transept, Dean Stanley's in the chapel of Henry VII. The north transept contains the graves of Mansfield, the two Pitts, the three Cannings, and other statesmen. In the nave are buried Newton, Sir Gilbert Scott, Street, Livingstone, Ben Jonson, Sir Charles Barry, Robert Stephenson, and Charles Darwin. Nearly all English kings and queens have been crowned here, and since Edward I.'s reign have used the chair holding under its seat the Stone of Scone. Shortly before the dissolution of the monasteries William Caxton had set up the first English printing-press in the Almonry, a little to the west of the western front of the abbey. He is commemorated by a monument in the church of St Margaret, where he is buried. The Westminster Assembly, called by the Long Parliament to settle the doctrine, ritual, and government of the Church of England, met first in 1643 in Henry VII.'s chapel, and held the most of its 1163 meetings in the Jerusalem Chamber. The abbey remains are numerous, some of them being in the occupation of the school. The cloisters, except for restorations, are unusually perfect, and the domestic buildings of the Confessor's period are extensive. The Abbot of Westminster was a peer of parliament, took precedence of all other English abbots, and had an income which would be reckoned at about £60,000 of our money.

The dean has succeeded to some of the privileges and more of the duties. The chapter includes six canons, one of whom is archdeacon. Kensington Gardens are still reckoned in the parliamentary borough of Westminster; and the palace of Kensington is within the boundary. The Dean of Westminster is still nominally lord of the manor, and appoints a steward, generally some nobleman of high rank. There are also a bailiff and sixteen burgesses. The deanery contains the 'chamber called Jerusalem,' probably from a painting of the holy city among its original decorations. Jerusalem forms a chapter-house, the original chapter-house in the east cloister having for centuries been used by the House of Commons; having become ruinous, it was almost rebuilt by Sir Gilbert Scott. The school closely adjoins the abbey, and the great school-room is part of the monks' dormitory, remains of the Confessor's buildings. Among the masters of the school, founded as St Peter's College by Queen Elizabeth in 1560, have been Camden, the Elizabethan antiquary, Busby, and Vincent Bourne; the scholars have included George Herbert, Cowley, Dryden, Prior, Cowper, and Southey, poets; the architect Wren; Locke and Gibbon; and the statesmen Warren Hastings, Lord Mansfield, and Lord Russell.

The churches of Westminster are now very numerous, but the original parish churches are only St Margaret's and St John's. St Margaret's seems to have first been built before 1140, but as we see it now is in a poor style of Gothic, with many modern additions. The headless body of Sir Walter Raleigh was buried in it in 1618. The east window is old Dutch. The church is supposed to be the special charge of the House of Commons. All the royal palaces of London used to be in Westminster, but since the parish has been dismembered only Whitehall, Kensington, and the Houses of Parliament can be reckoned within the boundaries. Of Whitehall but little remains. The chief relic was till lately the Chapel Royal, Whitehall. Henry VIII. first made a palace here. James I. constantly used Whitehall, and set Inigo Jones to design him a great palace on the site. Nothing was ever built except the chapel, as it was till lately called, then a banqueting hall. On the street front of this banqueting house are some blank windows; one of these, the fourth from the north end, was broken through to provide an exit from the ground-floor of the hall to a ladder outside, leading to the scaffold, and by this passage Charles I. went to his doom. The Chapel Royal was closed in 1890, and in the following year was made over to the Royal United Service Institution.

The present 'palace of parliament' stands on a site consecrated by nearly six centuries of representative institutions. According to the local tradition it was Canute or Knut who first lived at Westminster, and here he rebuked the tide. It became the chief residence of successive kings, and the headquarters of the courts of law. The palace had numerous great public chambers and halls, where cases could be heard, great court functions could be carried out, and banquets given to hundreds of guests together. As the centuries went on these chambers formed not a homogeneous house, but a village of single apartments, such as the Painted Chamber, the Whitehall, the White Chamber, the Star Chamber, the Court of Requests, St Stephen's Chapel, and the Great Hall. To the westward of the Great Hall were the law-courts, and to the north and east the royal apartments. William Rufus rebuilt the Confessor's hall on an immense scale. Henry III. improved the palace greatly. Richard II. transformed the hall, and raised over it the magnificent roof of oak which is still intact. In 1512 a fire took place in the royal apartments, and Henry VIII. removed his court first to Bridewell and then to Whitehall, but the law-courts were fixed in Westminster Hall from 1224. Many of the greatest events of English history, and all the greatest pageants have had their place in this old hall. In 1834 a conflagration resulted in the destruction of all that remained of the ancient palace, except the hall, the cloister of St Stephen's Chapel, and the crypt. All were worked into Sir Charles Barry's new design for the Houses of Parliament, in the Perpendicular style. The whole contains 11 courts, 1100 apartments, and cost some £3,000,000. The first bridge here was opened in 1750. The present Westminster Bridge was completed in 1862.

London University, founded by charter of 1836, was not a teaching but an examining body granting degrees in arts, science, medicine, law, and music. The Act of 1898, with the royal sanction of its statutes in 1900, reconstituted it as a teaching body, comprising numerous 'schools' in or near London—University College and King's College in all their faculties; in theology, five Nonconformist colleges; in arts, science, or agriculture, Holloway College, Bedford College, Westfield College, the Royal College of Science, the Agricultural College at Wye; in medicine, the schools attached to Bartholomew's, Guy's, St Thomas's, and eight other London hospitals; in engineering, the Central Technical College and the City and Guilds Institute; and in economics, the London School of Economics and Political Science. In all the University thus constituted reckons eight faculties—theology, arts, laws, music, medicine, science, engineering, and economics and political science; and the headquarters are now in the Imperial Institute at South Kensington.

While the London Government Act of 1899, establishing the borough councils, simplified the management of the capital, there is still much overlapping and conflicting of authorities. Amongst nearly 300 different authorities engaged in public administration are: London County Council, London School Board, City Common Council, Metropolitan Borough Councils (28), Commissioners of London Police, Sick Asylum Boards (2), District School Boards (4), Boards of Guardians (31), Thames and Lea Conservancy Boards. The administrative county of London, established in 1889, has an area of 118 square miles, and consists of the City and the districts which had grown up round it, known as the metropolis. Greater London (the Metropolitan and City of London Police Districts) includes the counties of London and Middlesex, and parts of Kent, Surrey, Essex, and Herts, and has an area of 693 square miles. The metropolitan water area is 620 miles in extent, and differs in boundary. The metropolis for criminal jurisdiction has an area of 420 square miles. The County Court and Police Court areas differ from all these and from each other. The population of the City (37,702 in 1890) was in 1901, 26,923, reckoning only persons sleeping within the area; the number entering the City during the day has been estimated at considerably over 1,000,000. The administrative county (4,228,317 in 1891) had in 1901 a pop. of 4,536,541, including the City. The Metropolitan and City Police District had

6,581,372. The rateable value of the City in 1901-2 was £4,888,378, and the corporation expenditure £649,215; and for the administrative county the corresponding figures were £35,455,315 and £4,595,364. London is divided into 60 parliamentary divisions, including West Ham (2), each returning one member, except the City, which has two.

The number of steam and sailing vessels which entered the Port of London, with cargoes and in ballast (excluding coast trade), in 1902 was 11,444, with a total tonnage of 10,179,023; and 8346 vessels, of 7,385,085 tons, cleared. The proportion of imports into London as compared with the remainder of the kingdom has slightly declined from 35 per cent. in 1872 to 32·5 per cent. in 1900.

The death-rate of London in 1855 was 24·3 per 1000; in 1901 it was 17·1 per 1000. At the census of 1901 there were in London 56,435 persons of Scottish birth and 60,211 of Irish birth. Of 135,277 foreigners, 38,117 were Russians, 15,420 Russian Poles, 27,427 Germans, 11,264 French, 10,889 Italians, 6189 Austrians, 5561 Americans (U.S.), 4249 Dutch, 4419 Swiss, 2102 Belgians, 1675 Swedish, 1067 Norwegian, 946 Danish.

See Stow's *Survey* (1599); Maitland's *History* (1756); Newcourt's *Repertorium* (2 vols. 1708); Cunningham's *Handbook* (1849; new ed. by Wheatley, 3 vols. 1891); Sharpe's *London and the Kingdom* (1894); Paul's *Vanishing London* (1896); Thorne's *Environs* (2 vols. 1877); Walford's *Greater London* (2 vols. 1885); Baedeker's *Handbook* (1889); Hutton's *Literary Landmarks* (4th ed. 1888); Cassell's *Old and New London* (6 vols. 1887); Loftie's *London* (1890); and a series of works (1892-1904) by Sir W. Besant.

London, a city and port of entry, capital of Middlesex county, Ontario, is situated at the junction of the two branches of the Thames, 116 miles by rail SW. of Toronto. It is a handsome city, regularly built; and the aim of its founders is visible in the names of the principal streets—Pall Mall, Oxford Street, Piccadilly, Cheapside, &c.—as well as of the river, which is crossed by a Westminster and a Blackfriars Bridge, and of the Covent Garden Market, Hyde Park, and St Paul's Cathedral. It has large petroleum refineries, foundries, mills, tanneries, &c.; and its white sulphur-springs attract many invalids. London is the seat of Anglican and R. C. bishops. Pop. (1881) 19,746; (1900) 37,983.

Londonderry, a maritime county of Ulster, 40 miles long by 34 broad, is bounded N. by the Atlantic, and elsewhere by Antrim, Lough Neagh, Tyrone, and Donegal. Area, 816 sq. m. Pop. (1841) 222,174; (1901) 144,404, of whom 65,296 were Catholics, 45,682 Presbyterians, and 27,804 Episcopalians. The surface rises inland, Mount Sawell, on the southern border, being 2236 feet high. The coast-line (30 miles long) is generally bold and precipitous; but the shore of Lough Foyle is in most places an unvarying plain, large tracts having been reclaimed. The river Bann from Lough Neagh forms part of the eastern border; the river Foyle intersects the western extremity. Thirty-seven per cent. of the area is permanent grass, and much of the cultivated soil is meadow land and clover. Linen is the staple manufacture. The county returns two members, and the county town, Londonderry, one. The other towns are Coleraine and Limavady.

Londonderry, or Derry, the county town, is situated on an eminence overlooking the river Foyle, 3 miles from its mouth and 18 from the entrance to Lough Foyle, by rail 163 miles NNW. of Dublin and 95 NW. of Belfast. Pop. (1851) 19,888; (1881) 29,162; (1901) 39,892. Londonderry grew up round a monastery founded in 546 by St Columba. It formed part of the escheated territory granted in 1613 to the London companies, and under their management rose to importance, and was strongly fortified. In the Irish war of the Revolution thirteen Londonderry apprentices closed its gates against James II.; and the townsfolk, shouting 'No surrender,' manned the walls. The 105 days' siege that then ensued, from April to August 1689, is one of the most celebrated events in Irish history. The walls still surround a part of the town one mile in circumference, but now the greater part of the city lies outside them. The left bank of the river is connected by an iron bridge, 1200 feet in length, with an extensive suburb called Waterside. The Protestant cathedral dates from 1633; it was restored in 1886. A handsome Roman Catholic cathedral, the court-house, guildhall (1890; cost £20,000), harbour-offices, post-office, custom-house, and banks are the other chief buildings. The siege is commemorated by a triumphal arch—one of the gates of the city—erected in 1789, and a column to the Rev. George Walker, who was the soul of the defence. The Presbyterian theological Magee College was founded in 1865. The industrial establishments include linen (shirt-making) factories, distilleries, iron-foundries, flour-mills, and shipbuilding-yards. In Lough Foyle are valuable salmon-fisheries. The harbour is deep, extensive, and safe. The imports include grain, flour, timber, and spirits; the exports are chiefly agricultural produce. Londonderry returns one member. See works by Hempton (1861) and Dwyer (1893).

Long, Loch, a beautiful Scottish sea-loch, striking off from the Firth of Clyde 17 miles north-north-eastward between the counties of Argyll and Dumbarton, and 3 furlongs to 2 miles broad. It sends off Loch Goil (q.v.); is flanked by steep and fantastic mountains, 2000 feet high; and at Arrochar, near its head, approaches to within 1¼ mile of Tarbet on Loch Lomond. A railway (1889-94) from Helensburgh to Fort-William skirts its eastern shore. Since 1862 the loch has been defiled with the dredgings from the Clyde at the rate of 1,250,000 tons a year.

Long Branch, a fashionable bathing-place of New Jersey, on the Atlantic, 30 miles S. of New York, and 13 S. of Sandy Hook. Pop. 9231.

Longchamp, the racecourse, on the SW. side of the Bois du Boulogne, to the W. of Paris, where the race for the *Grand Prix* is run.

Long Eaton, a Derbyshire town, 8 miles SSW. of Nottingham. Pop. 13,100.

Longford, an inland county of Leinster, Ireland, bounded W. by the Shannon and SW. by Lough Ree. Its maximum length is 29 miles, its maximum breadth 20. Area, 421 sq. m. Pop. (1841) 115,491; (1901) 46,672, of whom 91·6 per cent. were Roman Catholics. The surface is for the most part flat, and the soil on the whole fertile, though extensive tracts of bog exist; 51 per cent. of the area is permanent grass. The county is studded with numerous small lakes, and is crossed by the Royal Canal. It returns two members to parliament. The islands of Lough Ree are especially rich in monastic remains.—Longford, the county town, on the river Camlin and a branch of the Royal Canal, 76 miles NW. of Dublin by rail. Its best building is the new R. C. cathedral (1840-93). Pop. 3727.

Long Island, an island which forms three counties of New York state, bounded by Long Island Sound, the Atlantic, and the East River (spanned by the Brooklyn suspension bridge). It is 115 miles long, 12 to 24 wide, and 1682 sq. m. in area. On its south shore is a series of lagoons, the largest 40 miles long and 5 or 6 wide. A line of low hills rises in the interior to 384 feet. There are numerous small lakes and watercourses, and market-gardening is carried on with success—for the most part by Germans. But much of the island is waste land or forest, and such popular watering-places as Coney Island are planted among deserts of sand. There is still some game, and the fisheries and oyster-beds are very valuable. The chief towns are Brooklyn, Long Island City, and Flushing. Creedmoor is the principal American rifle-range.

LONG ISLAND SOUND, lying between Long Island and the mainland of New York and Connecticut, is from 2 to 20 miles wide, and from 75 to about 200 feet in depth.

Long Island City, on Long Island, separated from New York City by the East River, and from Brooklyn by the navigable Newtown Creek, was formed in 1870 from five villages. Pop. (1880) 17,129; (1900) 48,272. It is now included in the borough of Queens, New York City.

Longjumeau (*Longzheemo'*), a French town in Seine-et-Oise, 12 miles SW. of Paris. Pop. 2330.

Longleat, the seat of the Marquis of Bath, in Wiltshire, 4½ miles SW. of Warminster. It is one of the noblest Elizabethan mansions in the kingdom, with a fine collection of portraits, memories of Bishop Ken, and a magnificent park.

Long Melford. See MELFORD.

Longridge, a small manufacturing town of Lancashire, 6¼ miles by rail NE. of Preston, on the side of the Longridge Fell, which extends 5½ miles NE. to the Yorkshire boundary. Here are Preston reservoirs and manufactures of cotton, nails, &c. Pop. 4301. See Tom C. Smith, *History of Longridge* (Preston, 1839).

Longton, a municipal borough of Staffordshire, at the southern extremity of the Potteries, 2½ miles SE. of Stoke-upon-Trent, and included within its parliamentary boundary. It was incorporated as a municipal borough in 1865. The prosperity of the town is due to the manufacture of china and earthenware, though malting, brewing, and brick-making are also carried on. Close by are ironworks and collieries. Pop. (1851) 15,149; (1881) 18,620; (1901) 35,815, the borough having been extended in 1883.

Longtown, a town of Cumberland, on the Esk, 8½ miles N. by W. of Carlisle. Pop. of Arthuret parish, in which it is situated, 2439.

Longwood. See ST HELENA.

Longwy (*Long-wee'*), a small town in the extreme north of the French dep. of Meurthe-et-Moselle, 18 miles WSW. of Luxemburg. Its fortress capitulated to the Prussians in 1792, 1815, and 1871. Pop. 7448.

Lons-le-Saunier (*Lon^s-le-Soan-yay'*), capital of the French dep. of the Jura, stands in a basin of the Jura Mountains, surrounded with vine-clad hills, 42 miles by rail E. by S. of Châlon-sur-Saône. It was founded in the 4th century, when its salt-springs were discovered; these are still in use for bathing, and salt is manufactured. Population, 10,500. Rouget de Lisle, the author of the *Marseillaise*, was born here.

Loochoo (otherwise *Liukiu* or *Riu Kiu*), a group of thirty-seven Japanese islands. The islands extend SW. about halfway from Kyūshū in Japan towards Formosa. Their aggregate area is 1863 sq. m., and the pop. is 160,000. China has made a claim upon the islands, but they are essentially Japanese. Oshima possesses a good harbour, but Nafa, the port of Shuri, capital of Okinawa, is an unsafe anchorage. Sugar is largely raised, also the sago-palm, and an aromatic orange.

Loodiana. See LUDHIANA.

Looe, EAST and WEST, Cornish fishing-towns on Looe Bay, on either side of the Looe stream, 15 miles W. of Plymouth. The population of the urban district of Looe is 2700.

Lookout Mountain, a ridge extending from near Chattanooga, in Tennessee, across the north-west corner of Georgia, and into Alabama, and rising to 1600 feet above the Tennessee River. It was carried by General Hooker in the battle of 24th November 1863.

Lorca, a town of Spain, 36 miles SW. of Murcia. The gloomy Moorish part is picturesquely situated on an eminence crowned by a castle, whilst the modern town spreads out on the fertile plain. Here are saltpetre, gunpowder, and lead-smelting works, and manufactures of cloth, with neighbouring silver and sulphur mines. Pop. 68,239.

Lord Howe Islands, a main island, 5 sq. m. in extent, with some small islets, lying in the Pacific in 31° 33′ S. lat. and 159° 5′ E. long., 300 miles E. of Port Macquarie in New South Wales. It was discovered by Lieutenant Ball in 1788, colonised in 1840, and is attached administratively to New South Wales. It consists of three volcanic ridges, rising to 2840 feet, and is crescentic in shape. Pop. 50.—A group of the Solomon Islands bears the same name; and a Lord Howe's Island is one of the Society Isles.

Lorelei (*Lo-re-lī'*), or LURLEI, a rock rising 427 feet perpendicularly from the Rhine, near St Goar. It used to be dangerous to boatmen (through the fascinations of a siren, according to Heine's famous song), and has a celebrated echo.

Lorenzo Mar'ques, a Portuguese station on Delagoa Bay (q.v.), E. Africa. Pop. about 6500, of whom 3500 are Europeans.

Lore'to, an interior dep. of Peru, watered for thousands of miles by the Marañon and its tributaries. Area, 33,000 sq. m.; pop. 100,000. The capital is Iquitos.

Loretto (properly LORETO), a city of Italy, 3 miles from the Adriatic, and 15 by rail SSE. from Ancona. It has a royal palace (designed by Bramante); but is chiefly noticeable as the site of the *Santa Casa*, or Holy House, reputed to be the house in which the Virgin lived in Nazareth. It was miraculously translated, first in 1291 to the neighbourhood of Fiume in Dalmatia, thence in 1294 to a wood near Recanati in Italy, and finally to its present site in 1295. Pop. 7134.—See also MUSSELBURGH.

L'Orient (*Lor-yon^g'*), a seaport in the French dep. of Morbihan, 116 miles by rail NW. of Nantes, with a deep and spacious harbour. It was founded in 1664 by the French East India Company; but, after the ruin of their trade by the English, their plant was acquired by the government, who since 1815 have made L'Orient the principal naval shipbuilding-yard in France. The inhabitants are also engaged in fishing (especially sardines). Pop. (1872) 30,928; (1901) 39,781. Off this port a British fleet defeated a French one, 23d June 1795.

Lorne, a district of Argyllshire, between Lochs Leven and Awe.

Lorraine. See ALSACE-LORRAINE.

Los Angeles (*Lōs An'je-les*), a city of California, capital of Los Angeles county, 483 miles SE. of San Francisco by the Southern Pacific Railroad. It is one of the oldest towns in the western states, and was already a thriving place when the Franciscan fathers established a mission here in 1781; its full name being *Pueblo de la Reina de los Angeles*. In 1835–47 it was the capital of the state of California. To-day it possesses a handsome opera-house, the University of southern California, a magnificent observatory, a R. C. cathedral, fine botanic gardens, &c. Pop. (1870) 5728; (1900) 102,479, the Spanish forming only an insignificant minority. Los Angeles is the centre of the orange-growing industry, and in the city alone are two reservoirs, with a capacity of 850,000 gallons, used solely for irrigation. The chief occupation is the cultivation and export of oranges, grapes, &c., as well as the manufacture of wine. Many invalids resort to Los Angeles in the winter. See *California of the South*, by Lindley and Widney (1888).

Lossiemouth, an Elginshire seaport, at the mouth of the Lossie (31 miles long), 5½ miles NNE. of Elgin. Its harbour was formed in 1837–39, and deepened and improved in 1852 and 1893. Pop. 3986, of whom 2086 were in the adjoining village of Branderburgh (founded 1830).

Lostwithiel (*Los'withiel*), a Cornish mining-town and municipal borough (1885), on the Fowey, 5 miles SSE. of Bodmin. Pop. 1339.

Lot (*Lot'*), a dep. in the south of France, formed out of the old province of Guienne, and comprising the arrondissements of Cahors (the capital), Gourdon, and Figeac, is watered by the Dordogne and the Lot—the latter (anc. *Oltis*) one of the largest tributaries (300 miles) of the Garonne, which rises in Mount Lozère in the Cévennes. Area, 2012 sq. m. Pop. (1872) 281,404; (1901) 226,720.

Lot-et-Garonne (*Lo-tay-Garonn'*), a dep. of SW. France, formed out of the old provinces of Guienne and Gascony. It comprises the arrondissements of Agen, Villeneuve, Marmande, and Nérac, and is watered by the Garonne and its tributaries the Gers and Lot. Area, 2067 sq. m. Pop. (1841) 347,073; (1901) 278,740.

Lothian, the whole territory anciently between the Tweed and the Firth of Forth, which, from 547 a portion of Bernicia or Northumbria, was not finally annexed to Scotland till 1018. The name is now restricted to Haddington, Edinburgh, and Linlithgow shires, which are called respectively East, Mid, and West Lothian.

Lothringen. See ALSACE-LORRAINE.

Loudoun (*Low'don—ow* as in *now*), an Ayrshire parish, 7½ miles E. by S. of Kilmarnock, with the seat of the Earl of Loudoun, and with conical Loudoun Hill (1034 feet), where Bruce routed the English in 1307.

Loughborough (*Luff'borough*) a municipal borough, incorporated in 1888, of Leicestershire, 11 miles NNW. of Leicester. The Decorated parish church dates from the 14th century, but has a Perpendicular tower. There are a grammar-school (1495), a girls' grammar-school (1849), and a free library (1885). Hosiery is the staple manufacture; and bell-founding was introduced in 1840, the great bell of St Paul's being cast here in 1881. Other industries are dyeing, brick-making, and the manufacture of machinery. John Howe was a native, and Chancellor Wedderburn took hence his title Lord Loughborough. Pop. (1851) 10,900; (1901) 25,508. See Dimock-Fletcher's two monographs (1883).

Loughor, a town of Glamorganshire, on the Loughor River, 7 miles WNW. of Swansea. It is one of the Swansea (q.v.) district boroughs. Pop. 2564.

Loughrea', a market-town in County Galway, on a little fresh-water lake, 17 miles SW. of Ballinasloe. It has ruins of a castle and Carmelite monastery, both of about 1300. Pop. 2515.

Loughton (*Low'tun*), an Essex town, 4 miles SSW. of Epping. Pop. of parish, 4880.

Louisburg, a decayed fishing-village near the E. point of Cape Breton Island, Nova Scotia. There are the ruins of the old town, which was the strongest French fortress in North America, until taken by Wolfe in 1758.

Louisiade Archipelago (*Looiziád*), a British group of islands, forming an eastward extension of New Guinea. It embraces Sudest (45 miles long by 4 to 10 miles wide), Rossel, St Aignan's (28 miles long), and a vast number of smaller islands. All are mountainous, rising to 3500 in St Aignan's, and covered with vegetation.

Louisiana (*Looiziah'na*), one of the Gulf states of the American Union, extends 200 miles from N. to S. and 290 from E. to W. Its land area, including the marshes bordering on the Gulf, is 40,790 sq. m.; its inland waters cover 2328 sq. m.; total area, 43,118 sq. m. This area is divided nearly equally between alluvial lands and uplands. The mean elevation above sea-level is 75 feet, the highest point 484 feet. For 25 miles inland from the Gulf, marshes subject to tidal flow cover one-eighth of the state's entire surface; low, sandy pine flats and prairie lands occupy about one-eighteenth each, arable lands one-eighth, the flood-plains near the rivers one-tenth, and bluff lands, pine hills, and uplands more than one-fifth each. Most of the large rivers flow above the level of the surrounding country on ridges formed by their own deposits, and the plains around, protected by dykes (called levees), slope away into dense, wooded swamps. The bottom-lands of the Mississippi are from 20 to 70 miles in breadth, those of the Red, Ouachita, and other streams range from 6 to 20 miles. The uplands embrace all the northern and north-eastern parts of the state, inclining gently towards the south, and crossing these are bluff lands, extending through the alluvial lands to the Gulf, and forming wonderful 'islands' covered with vegetation. Nor is the immense plain surrounding these bluffs ever inundated, but elevated and fertile, traversed by deep 'bayous'—minor and tributary streams. Even in the coast marshes occasionally an island-hill rises, with soil firm and fertile; and at other points cattle graze, whilst thousands of acres yearly are being drained and reclaimed and planted with rice. Besides the Mississippi the chief rivers are the Red, Sabine, Ouachita, and Pearl; there are also several lakes. The forests are dense with trees—pine, cypress, oaks, cotton-wood, magnolia, poplar, beech, &c. Fruits are abundant, oranges and figs the most important. The staple crops are cotton, sugar, rice, and maize. The principal manufactures are shingles and tanks, cotton-seed oil, machinery, tobacco, and clothing and boots and shoes (by machinery), besides the cleaning and polishing of rice and the refining of sugar and molasses. The only mineral of importance is rock-salt, which is found in inexhaustible quantity at Petit Anse on Avery's Island; but hematite iron ore and

sulphur have also been discovered, besides lignite. The principal city is New Orleans (pop. 287,500), the next in size, Shreveport, having only 16,020 inhabitants, and Baton Rouge (the capital) 11,270. The population is very mixed. The negroes in the country districts are somewhat in excess of the whites, of whom many are of French (called Creoles), German, or Irish descent, and some of Spanish and Italian. In most of the southern parishes French is spoken; and Spanish also is still used in a few places. Pop. (1820) 153,407; (1860) 708,002; (1880) 939,946; (1900) 1,381,625. Louisiana was so named by La Salle in 1682 in honour of Louis XIV.; was ceded to Spain in 1762, and retroceded to France in 1800; was sold by Napoleon to the United States for $12,000,000 in 1803; and was admitted as a state in 1812. See the *History of Louisiana* by C. Gayarré (3d ed. 4 vols. 1885).

Louisville (*Loo'i-vil* or *Loo'is-vil*), the largest city of Kentucky, a port of entry and capital of Jefferson county, is situated on the Ohio, 130 miles below Cincinnati. The river here forms a series of rapids, descending 22 feet in 2 miles; except during floods steamboats pass these by a canal. The city is handsomely built, with wide and regular streets, on a plain sloping up from the river. It has a Roman Catholic cathedral, a law school, four medical colleges, colleges of dentistry and of pharmacy, the state institution for the blind, &c. Louisville is the greatest market for tobacco in the world, and has large pork-packing establishments, distilleries, and tanneries, with manufactures of ploughs, furniture, castings, gas and water pipes, machinery, flour, and cement. The city is the terminus of a number of railway lines; the Ohio is crossed here by two railway bridges, one of them nearly a mile long. Louisville was founded in 1778, and in 1780 named in honour of Louis XVI. of France, whose troops were then assisting the Americans. A great part of the town, including the tobacco-market and the city-hall, was destroyed by a cyclone on 27th March 1890. General Zachary Taylor is buried close by. Pop. (1880) 123,758; (1890) 161,005; (1900) 204,731.

Loulé (*Loo'lay*), a town in the S. of Portugal, 10 miles N. by W. of Faro (on the coast). It is surrounded by old Moorish walls. Pop. 24,448.

Lourdes (*Loord*), a place of pilgrimage in the French dep. of Hautes Pyrénées, 12 miles SSW. of Tarbes by rail; pop. 9182. The town nestles at the foot of a high isolated rock rising in a plain which is bounded on the south by the foothills of the Pyrenees. Here, in a niche above a cave, the Blessed Virgin is said to have appeared on 11th February 1858 to a poor girl fourteen years old, called Bernadette Soubirous; the apparition was seventeen times repeated during the succeeding six months. A spring rising from the spot, which was hitherto unknown to exist, was endowed with miraculous powers; and many miracles were reported. A great basilica (1876) now marks the spot, and on a level with its crypt has been added the church of the Rosary (1889) for the accommodation of the pilgrims.

Louth (hard *th*, as in *loth*), a municipal borough of Lincolnshire, on the rivulet Lud, at the foot of the Wolds, 27 miles ENE. of Lincoln, contains a beautiful parish church in the Perpendicular style, built in the 13th and rebuilt in the 15th century, with an octagonal spire (1501) 288 feet in height, 'one of the noblest in England,' and an Edward VI. grammar-school, pupils of which have been Tennyson, Franklin, and Hobart Pasha. Ruins of Louth Park Abbey, built by the Cistercians in 1139, exist 1½ mile E. of the town. Iron-foundries, carpet-factories, breweries, and carriage-works are in operation. Louth is connected with the Humber by a canal, dug in 1761. Pop. (1851) 10,467; (1901) 9518. See Goulding's *Louth Corporation Records* (1892).

Louth (soft *th*, as in *loathe*), a maritime county of Leinster, the smallest in Ireland, is washed for 49 miles on the east, from Carlingford Lough to the Boyne, by the Irish Sea. The average width is 10 miles. Pop. (1841) 128,240; (1901) 65,741. Its area is 202,123 acres, of which 40 per cent. is under grass. The surface is flat, except for a range on the north, which culminates in Carlingford Mountain (1935 feet), overlooking Carlingford Lough. Coarse linens are manufactured. The fisheries are valuable, especially the oyster-fishing in Carlingford Lough. The chief towns are Drogheda, Dundalk, and Ardee. There are two round-towers, at Monasterboice and at Dromiskin. At Mellifont is a beautiful ruined abbey. In Drogheda other ruined abbeys are still visible, as also at Louth and Carlingford. But the most interesting of all the relics of antiquity are the sculptured crosses of Monasterboice, the largest 18 feet high. The county returns two members.

Louvain (*Loo-van'; Ger. Löwen*, Flemish *Leuven*), a city in the Belgian province of Brabant, 19 miles by rail E. of Brussels. In the 14th century it was rich, prosperous, and large (200,000 inhabitants), due to its cloth manufactures and its position as the capital of Brabant (from 994). In 1382 the townsmen revolted against their rulers, and the harsh punishment meted out to them drove large numbers away to England. The town was the seat of a celebrated university (1426–1797), with 6000 students in the 16th century. Reconstituted in 1817, it is still a Roman Catholic university, with about 1600 students, and a library of 250,000 volumes. A severe blow was struck at Louvain's prosperity by the plague in the 16th century. The modern industry is confined chiefly to bell-founding, brewing, and the manufacture of leather, paper, lace, starch, and chemicals. The town-house is a fine Gothic building (1448–69); the church of St Peter has a beautiful flamboyant rood-loft, a wrought-iron chandelier by Quentin Matsys, and some good pictures; in St Gertrude's Church are exquisite carved oak stalls. The Weavers' Hall (1317) was appropriated by the university in 1679. Pop. (1877) 33,917; (1900) 42,308.

Louviers (*Loov-yay'*), a town in the French dep. of Eure, 16 miles S. of Rouen, has a Gothic cathedral (13–15th c.), and celebrated cloth (since 1681) and ticking manufactures. Pop. 9973.

Lovedale, an important educational and mission station in the eastern part of Cape Colony, 40 miles W. of King William's Town. It was founded in 1841, and has been generously supported by the Free Church of Scotland.

Low Archipelago, the most easterly group of Polynesian islands, known also as Paumotu, Tuamotu, Pearl or Dangerous Islands. They are about eighty in number, very flat and thinly peopled (8000 in all), and surrounded by coral atolls. Since 1846 they are under a French protectorate. There are rich pearl-fisheries.

Low Countries. See Holland, Belgium.

Lowell, a manufacturing city of Massachusetts, on the Merrimac River (mostly on the south bank), 25 miles N. by W. of Boston. The site is

uneven and hilly, and the river falls 33 feet, affording great hydraulic power. There are many large cotton and woollen factories; 2,500,000 yards of cotton are produced here in a week. Among the other manufactures are leather, paper, and iron goods, chemicals, carriages, &c. Lowell was incorporated in 1826. The operatives were for years gathered from the rural districts fifty or a hundred miles round, and lived in boarding-houses owned by the corporations, and kept under strict management. Foreign emigration has brought a large resident manufacturing population. Evening and technical schools, reading-rooms, a free library, and lectureships are maintained, and unusual attention is paid to the well-being of the work-people. The painter Whistler was a native. Pop. (1880) 59,485; (1900) 94,970.

Lowestoft (*Loa'stoff*), a municipal borough and seaport on the Suffolk coast, 118 miles NE. of London by rail and 49 NNE. of Ipswich, has of late years rapidly grown in favour as a watering-place, its healthfulness and the picturesqueness of its neighbourhood, combined with its easy means of access to the Broads (q.v.), all tending to its popularity. The older part of the town, which lies to the north, is built on a cliff facing the sea, on its summit being a lighthouse (1874) 123 feet above the sea-level, whilst at its base, on the Ness—the most easterly point of land in England—stands another lighthouse (1866). The modern part of the town, which has a fine esplanade 800 yards long, extends southwards into the parish of Kirkley, and is separated from the old town by the harbour, formed partly by two piers extending seawards 1300 feet, and partly by Lake Lothing, a piece of water stretching inland two miles: adjoining the harbour is a dock (1883) with a depth of water at low tide of 13½ feet, and extensive fish-markets (1865–83), the property of the Great Eastern Railway. On the new South Pier is a splendid pavilion, opened in 1890. Other features of interest in the town include the parish church (of which Whiston, the mathematician, and Potter, the translator of Greek plays, were former vicars), 183 feet in length, and surmounted by a tower and spire 120 feet high, dating from the first half of the 14th century; town-hall (1857), noticeable for its stained-glass windows; hospital (1882); and Bellevue Park (1874), not far from which was found the clay formerly used in making Lowestoft china. The principal incidents in the history of the town have been visitations of the plague in 1349, 1547, 1579, and 1603; its occupation in 1643 by Cromwell; its partial destruction by fire in 1644; and a great naval defeat of the Dutch off the coast on the 3d June 1665. Pop. (1841) 5304; (1901) 29,842. See works by Gillingwater (1790) and Nall (1866).

Lowther, a Westmorland stream, flowing 17 miles to the Eamont (a tributary of the Eden), at Brougham Castle. Lowther Castle (1810), 4 miles S. of Penrith, is the seat of the Earl of Lonsdale.

Lozère (*Lozehr'*), a dep. in the south of France, derives its name from Mont Lozère, one of the summits of the Cévennes. It comprises the arrondissements of Mende (the capital), Florac, and Marvejols. Area, 1996 sq. m.; pop. (1872) 135,190; (1901) 128,866. The dep. forms the south-east extremity of the central uplands of France, and embraces the highest peaks of the Cévennes (Pic de Finiels, 5584 feet).

Lualaba. See CONGO.

Lübeck, a free city of Germany, the former head of the Hanseatic League, and now an important shipping town, stands on the river Trave, 12 miles from the Baltic, and 40 by rail NE. of Hamburg. This city was founded 1143; Henry the Lion, Duke of Saxony, gave it a charter, and built the cathedral. Frederick Barbarossa greatly enlarged its privileges, and Frederick II. made it a free city of the empire. The city became the commercial metropolis of the Baltic and northern Europe, but decayed with the other Hanseatic cities. Full administrative rights were not conferred upon the burghers until 1848; now the constitution, embracing a senate (14 members) and a representative assembly (120 members), is thoroughly democratic. The French held Lübeck almost uninterruptedly from 1806 to 1815. In 1866 it joined the North German Confederation. Lübeck possesses 115 sq. m. of territory, including the port of Travemünde, near the river's mouth. The industries include the manufacture of cigars and vinegar, brewing, brandy-distilling, soap-boiling, and iron-founding. Lübeck is the great centre for trade between Hamburg, Germany, and the Baltic countries. The imports reach an annual value of about 9½ millions, and the exports of 8 millions—mostly transit business. The port is entered annually by some 2300 vessels of 443,000 tons. The Trave was deepened to 15 feet in 1878–82. The churches include St Mary's (1170; rebuilt 1276–1310), with two towers 407 feet high; the cathedral (1173—14th c.), with a tower 394 feet high; St James's, built before 1227, and St Peter's, before 1163. The town-house is the most notable secular building. There are a school of navigation, a library of 98,000 vols., ethnographic, antiquarian, zoological, and art collections, &c. Pop. (1875) 44,799; (1900) 82,089, besides 15,000 outside the city.

Lublin, the capital of a Polish government, on a sub-tributary of the Vistula, 96 miles by rail SE. of Warsaw. It has a 13th-century cathedral, and was plundered by the Mongols in 1240, 1344, and 1477. From the end of the 14th to that of the 16th c. it was the chief commercial town between the Vistula and the Dnieper. There are manufactures of tobacco, beer, candles, soap, &c., and a large trade in corn and wool. The population is over 50,000.—Area of *government*, 6497 sq. m.; pop. 1,165,000.

Lubnaig, LOCH, a Perthshire loch (4 miles × 3 furlongs; 405 feet), 3¾ miles NW. of Callander.

Lucan, a village on the Liffey, 9 miles W. of Dublin. Pop. 874.

Lucania, a province of ancient Italy, south-east of Calabria, and bordering on the Gulf of Tarentum. It corresponds nearly to the present province of Potenza and part of Salerno.

Lucca (*Look'ka*; anc. *Luca*), chief town of an Italian province, is situated in a plain, bounded by picturesque hills and watered by the Serchio, 14 miles by rail NE. of Pisa. 'Lucca the Industrious' has a great trade in olive-oil and silk. The cathedral, begun in 1063, has a cedar crucifix reputed to have been brought hither in 782. There are nearly forty other churches, some dating from the 7th and 8th centuries. A splendid aqueduct (1820) supplies the town with water from the Pisan hills. The municipal buildings (1578) contain valuable paintings. Lucca was a bishopric as early as 347, and in 1726 was made an archbishopric. The environs abound in delightful villas. In a charming valley, 16 miles N., are the mineral baths of Lucca (96° to 136° F.), which have been famous since the 15th century. Pop. 72,970.

Luce Bay, Wigtownshire, measures 18¼ miles

from the Mull of Galloway to Burrow Head, and penetrates 16 miles.

Lucena (*Loo-thay'na*), a town of Spain, 36 miles S. by E. of Cordova. Pop. 21,500.

Lucera (*Loo-tchay'ra*; anc. *Luceria*), a town of southern Italy, 12 miles by rail NW. of Foggia, has a cathedral (1302), and a ruined castle of Frederick II. Pop. 17,067.

Lucerne (usu. *Loo-sern'*; Ger. *Luzern*), the capital of a Swiss canton, 59 miles SE. of Basel, 147 SSE. of Strasburg, and 177 NNW. of Milan by the St Gothard railway. It is beautifully situated where the Reuss issues from the Lake of Lucerne, opposite Mount Pilatus, and is partly surrounded (on the north) with mediæval towers. On a rock in the Reuss is an old tower, said to have been a lighthouse (*lucerna*) in Roman times, whence the name of the town. Outside one of the gates is the Lion of Lucerne, hewn (1821) out of the solid rock after a model by Thorwaldsen, a monument to the Swiss guards who perished at the Tuileries in 1792. Near by is the Glacier Garden, with rocks illustrating the action of ice. Pop. 29,461.—The *canton* has an area of 579 sq. m. and a pop. (1888) of 135,722, mainly Catholic. The highest point is 6998 feet, a peak of Mount Pilatus.

The Lake of Lucerne, called also *Vierwaldstättersee* ('Lake of the Four Forest Cantons'—Uri, Unterwalden, Schwyz, and Lucerne), is one of the most beautiful in Europe. In shape it resembles a cross with a crumpled stem; its shores are mostly steep and rocky. Length from Lucerne to Flüelen, 23 miles; average breadth, 1½ mile; area, 44 sq. m.; greatest depth, 702 feet. The lake is associated with William Tell.

Luckenwalde (*Look'envalda*), a town of Prussia, 31 miles by rail SSW. of Berlin. Pop. 28,400.

Lucknow (*Lákhnao*), capital of the province of Oudh, and the fourth largest city in India, stands on the river Gumti, 42 miles by rail NE. of Cawnpore and 199 NW. of Benares. The appearance of magnificence and splendour which the city presents when seen from the outside is not borne out by close internal inspection, though a vast improvement has been effected since the Mutiny. The chief architectural glory of the place is the Imambara or mausoleum of Asaf-ud-Daulá, the fourth Nawab, who did much to embellish Lucknow. This edifice, built in 1784, stands within the Machi Bhawan fort (built by Asaf's predecessor), and is now converted into a British arsenal. The Rúmi Dorwáza, a grand and massive gateway, leading out of the fort, the magnificent Residency palace, and the country palace of Bibiápur, were all erected by the same prince. The Jama Masjid or chief mosque, and the huge palaces of Chattar Manzil, Kaisar Bagh, Farhat Baksh, four royal tombs, and an observatory (headquarters of the rebels during the Mutiny) are the most noteworthy amongst the remaining public buildings, though the palaces, debased in style and gaudily decorated, are remarkable only for their great size. The educational establishments embrace Canning College, established in 1864; the Martinière College, in which 120 soldiers' sons are educated and clothed; and more than two dozen mission and other schools. The staple native industry is gold and silver brocade, besides muslins and other light fabrics, embroidery, glass, clay-moulding, shawls, jewellery, and paper. There are here extensive railway workshops. Lucknow is a busy commercial town, trading in country products (grain, butter, sugar, molasses, spices, tobacco, oil-seeds), European piece-goods, salt, leather, &c. Pop. (1869) 284,779; (1901) 264,050.

Originally a village called Lakshmanpur, founded by a brother of Rama Chandra, the hero of the epic *Ramayana*, the city first rose into importance as the capital (1732) of the independent state of Oudh. Lucknow was the scene of stirring events during the mutiny of 1857—its defence by Sir Henry Lawrence, its relief by Havelock and Outram, and its final succour by Sir Colin Campbell.

Luçon, a French episcopal city (dep. La Vendée), 71 miles SSE. of Nantes. Pop. 6311.

Lüdenscheid, a town of Westphalia, 19 miles ESE. of Elberfeld-Barmen, is the seat of numerous hardware manufactures. Pop. 25,067.

Luderitzland, a name given to Angra-Pequena (q.v.) and the adjoining territory.

Ludgvan, a Cornish village, 3 miles NE. of Penzance. Pop. of urban district, 2274.

Ludhiana (*Loodiahna*), a town of the Punjab, 8 miles from the south bank of the Sutlej. It was founded in 1480, and is now a thriving cornmart, with manufactures of Cashmere shawls, scarves, cottons, turbans, furniture, and carriages. Pop. 48,334.

Ludlow, a market-town and municipal borough of Shropshire, at the Corve's influx to the Teme, 28 miles S. of Shrewsbury. It is a very old and interesting place, with two noble monuments of antiquity. First, there is the massive Norman keep, 110 feet high, of the castle, where Prince Arthur wedded Catharine of Aragon, and died less than five months afterwards; where, in the banqueting-hall, Milton produced his *Comus*; and where, too, Butler wrote *Hudibras*. Captured by King Stephen, the Lancastrians, and the Roundheads, it was finally dismantled in 1689. Secondly, there is the cruciform collegiate church (restored in 1863–91), Perpendicular in style, with a tower 130 feet high. The grammar-school, founded in 1282, and refounded in 1552, is almost the oldest in the kingdom; and one of seven gates still remains. From Edward IV.'s reign till 1867 Ludlow returned two members, then one till 1885. S. J. Weyman, novelist, was born here. Pop. (1851) 4730; (1901) 4552. See works by T. Wright (1826–69) and O. Baker (2d ed. 1889).

Ludwigsburg (*Lood'vigsboorg'*), a town of Würtemberg, 8 miles N. of Stuttgart. It grew up round a ducal hunting castle (1704), and has a military school and a royal castle, with picture-gallery and splendid gardens. Pop. 20,000. D. F. Strauss and Kerner were natives.

Ludwigscanal. See Danube.

Ludwigshafen (*Lood'vigs-hah'fen*), a town of the Bavarian Palatinate, on the Rhine's left bank, opposite Mannheim. Granted town rights only in 1859, it has grown rapidly owing to its manufactures (soda, aniline dyes, wagons, &c.). Pop. (1864) 3911; (1875) 12,093; (1900) 61,920.

Lugano (*Loogah'no*), a town in the Swiss canton of Ticino, on the NW. shore of the Lake of Lugano, 49 miles by rail N. by W. from Milan. In appearance the place is thoroughly Italian; from Monte Salvatore (2982 feet) a magnificent view may be obtained. Pop. 9129.—The Lake of Lugano, also called Ceresio, lies at the southern foot of the Alps, 889 feet above sea-level. Its length is 14½ miles, average breadth 1¼ mile; area, 19½ sq. m.; maximum depth 915 feet, and average depth 246.

Lugar, an Ayrshire village, with ironworks, on

Lugar Water, 1½ mile ENE. of Cumnock. Pop. 1286.

Lugdunum. See Lyons, Leyden.

Luggie, a stream, besung by David Gray, flows 11 miles W. to the Kelvin at Kirkintilloch.

Lugnaquilla. See Wicklow.

Lugo (*Lucus Augusti* of the Romans), capital of a province of NW. Spain, on the Minho, 72 miles by rail SE. of Corunna. Still walled, it has a cathedral (1129–77), and manufactures of linen and leather. Its warm sulphur baths were known to the Romans. Pop. 19,938.—Area of *province*, 3787 sq. m.; pop. 466,000.

Lugo, a town of Italy, 18 miles by rail W. of Ravenna. Pop. 27,500.

Luku'ga, an intermittent outflow from Lake Tanganyika (q.v.) into the Congo.

Luleå, a town of Sweden, at the mouth of the river Luleå, on the Gulf of Bothnia. It is a great iron-ore exporting port. Pop. 9392.

Lulworth, East and West, two Dorset coast-parishes, 5½ and 8½ miles SW. of Wareham. Lulworth Castle is the seat of the Catholic Welds, and Lulworth Cove is a beautiful inlet.

Lumsden, an Aberdeenshire village, 9¾ miles NW. of Alford. Pop. 485.

Lunawara, a state under British protection in Gujarat province. Area, 388 sq. m.; pop. 75,450. The capital, Lunawara, is 60 miles N. by W. from Baroda. Pop. 9059.

Lund (*Londinum Gothorum*), a city of Gothland, in the extreme south of Sweden, by rail 374 miles SW. of Stockholm and 10 NE. of Malmö. In the 10th century it was a large and powerful city, was made a bishopric in 1048, and an archbishopric in 1104. It became the chief seat of the Danish power in the Scandinavian peninsula, and capital of the Danish kingdom, with a pop. of 200,000. But after the Reformation (1536) the city began to decay, and sank to a mere village in the 17th century. The fine Romanesque cathedral, with its imposing crypt, dates from the 11th century. Lund owes its revival to the founding there of a university in 1668, which now has about 800 students, a library of 150,000 volumes and 3000 MSS., a zoological museum, and a botanic garden. Pop. 17,500.

Lundy (Scand., 'grove island'), a granitic island of Devonshire, in the mouth of the Bristol Channel, 11¾ miles NNW. of Hartland Point, 17 NW. of Clovelly, 24 W. of Ilfracombe, and 30 SSE. of St Gowan's Head in Wales. It measures 3½ miles by 1; has rocky and precipitous shores, with only one landing-place on the south side; and attains an altitude of 525 feet. Here, near the southern end of the island, is a lighthouse, built in 1820. The antiquities include prehistoric kists, remains of round towers and a chapel, and the ruined castle of the Mariscoes (11th to 14th centuries), from whose time on into the 17th century Lundy was a stronghold successively of pirates, buccaneers, privateers, and smugglers. It figures in Kingsley's *Westward Ho!*; was the death-place of 'Judas' Stukely; was garrisoned till 1647 for Charles I.; and in 1834 was purchased for £9870 by the Heaven family. The population is about 180. See Chanter's *Lundy Island* (1877).

Lune, a river of Westmorland and Lancashire, flowing 45 miles SW. and S. to the Irish Sea, 6 head of the ... of Lancaster.

portant shipp... (*Lü'ne-boorg*), a town of Hanover, on ...enau, 31 miles by rail SE. of Ham-burg. The 15th-century church of St Michael contains the tombs of the Lüneburg princes. The five-aisled church of St John dates from the 14th century, is pure Gothic in style, and has a tower 371 feet high. The mediæval town-house is adorned with old pictures and stained glass. A salt-mine, discovered in 906, still has an annual yield of over 21,000 tons. There are also a gypsum-mine, ironworks, chemical manufactories, &c. Lüneburg lampreys are well known in Germany. Pop. 25,665. Lüneburg acquired importance after the founding of the Benedictine monastery in 904, joined the Hanseatic League in the 14th c., and was the capital of an independent duchy. But it lost most of its privileges in the 16th c., and in the 17th suffered much from the Swedes and their enemies. From the Brunswick-Lüneburg princely line, founded in 1235, is descended the British royal family.—South of Lüneburg stretches for 50 miles the Lüneburg Heath, a grazing-ground for sheep.

Lunel, a town in the south of France, 14 miles by rail NE. of Montpellier. Pop. 6494.

Lunéville (*Lu-nay-veel'*), a town in the French dep. of Meurthe-et-Moselle, at the confluence of the Meurthe and the Vezouse, 20 miles by rail SE. of Nancy. It was a residence of the Dukes of Lorraine; their palace is now a cavalry barrack, this town being a great cavalry station. Here was signed the peace of Lunéville, on February 9, 1801, between Germany and France. The industry embraces gloves, hosiery, cottons, &c. Pop. 19,100.

Lunkah, or Lanka (Sansk., 'island'), the ancient name for Ceylon. Lunkah cheroots are made in the Godavari delta.

Lurgan, a town of County Armagh, 20 miles SW. of Belfast by rail. It manufactures cambrics, lawns, damasks, and diapers. Pop. 11,429.

Luristan, a mountainous province in the west of Persia. Area, 15,060 sq. m.; pop. about 300,000.

Lurlei. See Lorelei.

Lusatia (*Lausitz*), a region in Germany, on the borders of Bohemia, now belonging in part to Saxony and in part to Prussia.

Lushai Hills, a hill-country on the borders of Assam and Burma.

Lusignan (*Lü-zin-yan'*), a picturesque town in the French dep. of Vienne, 17 miles SW. of Poitiers. It has a fine 11th-century church, but its castle, associated with the fairy Melusine, was razed by the Catholics in 1574. Pop. 2284.

Lusitania. See Portugal.

Luss, a village on the W. side of Loch Lomond, 12 miles N. of Dumbarton.

Luton, a market-town of Bedfordshire, on the little Lea, among the Chiltern Hills, 31 miles by rail NNW. of London. St Mary's Church, mixed Decorated and Perpendicular in style, is a noble structure, with a flint-work tower 90 feet high. Luton is the chief seat in England of the straw-plait (for hats, bonnets, &c.), an industry which dates from the reign of James I., and employs 20,000 persons here and in the neighbourhood. The Plait-hall (1869) is a fine building; and there are also a town-hall, corn exchange, people's park, &c. Luton was re-incorporated as a municipal borough in 1876. Pop. (1851) 10,648; (1901) 36,404. See F. Davis, *History of Luton* (1855).

Lutterworth, a small town of Leicestershire, on the Swift, 8 miles NNE. of Rugby. The fine old church contains the pulpit and other relics of Wyclif, who was rector from 1374 till his death

on 28th December 1384. He was buried here, but in 1428 his remains were dug up and burned, and the ashes cast into the Swift. 'This brook conveyed his ashes into Avon, Avon into Severn, Severn into the narrow seas, they into the main ocean; and thus the ashes of Wyclif are the emblem of his doctrine, which now is dispersed all the world over.' Pop. of parish, 1800.

Lüttich. See Liége.

Lüttringhausen, a town of Rhenish Prussia, 5 miles SE. of Elberfeld. It manufactures cloth, calico, silk, brandy, &c. Pop. 12,216.

Lützen, a town of 4501 inhabitants, in Prussian Saxony, 9 miles SE. of Merseburg. Two great battles were fought in its vicinity—the first, a brilliant victory of the Swedes, who lost, however, Gustavus Adolphus, 6th November 1632; the second, on 2d May 1813, a victory of Napoleon over the Russians and Prussians.

Luxemburg (Fr. *Luxembourg;* old Ger. *Lützelburg*), since 1815 an independent grand-duchy, wedged in between France, Prussia, and Belgium. It consists of a plateau, furrowed with valleys, and connecting together the uplands of Lorraine, the Forest of Ardennes, and the Eifel; nearly all its streams flow to the Moselle, which for some 20 miles forms its eastern border. The country is well wooded, yields wheat and wine, and is rich in iron ore. Area, 998 sq. m.; pop. (1871) 197,528; (1900) 236,543, nearly all Catholics, and of Low German stock, though French is the language of the educated classes. For commercial purposes Luxemburg is included in the German customs union. The grand-duke—the king of Holland till 1890, and since then the Duke of Nassau—is the head of the House of Orange-Nassau.—The Belgian province of Luxemburg, which down to 1839 formed part of the grand-duchy, constitutes the south-eastern extremity of the kingdom of Belgium. Area, 1706 sq. m.; pop. (1902) 222,500. Chief town, Arlon.—Luxemburg, the capital of the grand-duchy, by rail is 42 miles N. of Metz and 32 SW. of Trèves. Its situation has often been compared to that of Jerusalem: the city stands on a rocky platform, connected with the neighbouring country only on the west, and elsewhere engirt by a steep valley, 200 feet deep, in which nestle the industrial suburbs of Klausen, Pfaffenthal, and Grund. The intermediate gorges are crossed by fine viaducts. The Spaniards, Austrians, French, and Dutch, who successively held possession of the town, increased and strengthened its fortifications, hewn, like those of Gibraltar, in great part out of the solid rock. But they were demolished in accordance with the treaty of London of 1867, and the site of the walls has been laid out as beautiful gardens. There are in the town the ruins of Count Mansfeld's palace, the cathedral (1613), the government house, and the athenæum. There are manufactures of cotton, cloth, and brandy, and a trade in woollen and leather goods. Pop. 21,000.

Luxor. See Thebes.

Luzern. See Lucerne.

Luzon', the largest of the Philippines (q.v.).

Lybster, a fishing-village of Caithness, 13½ miles SW. of Wick. Pop. 610.

Lycaonia, a country anciently in Asia Minor, bounded by Cappadocia, Galatia, Pisidia, Isauria, and Cilicia. Its capital was Iconium.

Lycia, a country on the south coast of Asia Minor, bounded by Caria, Phrygia, Pisidia, and Pamphylia. It is a mountainous region, formed by lofty spurs of the Taurus, which reach 10,000 feet in height; the valleys are very fertile.

Lydd, a borough of Kent, 3½ miles SW. of New Romney, gives name to lyddite. Pop. 3000.

Lydenburg, a mining-village in the Transvaal, 180 miles NW. of Delagoa Bay.

Lydia, anciently a country in the W. of Asia Minor, celebrated for its fruitful soil and its mineral wealth, particularly for the gold of the river Pactolus. Sardis was the capital, and Crœsus its last king.

Lyme Regis, a seaport and watering-place of Dorsetshire, at the mouth of the Lyme rivulet, 5 miles SE. of Axminster and 23 W. of Dorchester. The Cobb breakwater, dating from the 14th century, was reconstructed by government in 1825–26. Chartered by Edward I., and incorporated by Elizabeth, Lyme returned two members till 1832, and then one till 1868. It beat off Prince Maurice (1644), and was Monmouth's landing-place (1685). Natives have been Sir George Somers, Captain Coram, and Miss Mary Anning, the discoverer of the Ichthyosaurus and Plesiosaurus in the Lias rocks here, which are largely quarried. Pop. (1851) 2661; (1901) 2095. See Roberts's *History of Lyme Regis* (1834).

Lymington, a watering-place and municipal borough of Hampshire, at the mouth of the Lymington River in the Solent, 12 miles (by a branch-line 18) SW. of Southampton. The salt-works belong to the past; and yacht-building is now the principal industry. It commands fine prospects of the Isle of Wight, and its vicinity abounds in charming scenery. Till 1867 it returned two members, then till 1885 one. Pop. (1851) 2651; (1901) 4165, the borough having been extended in 1889. See works by Garrow (1825), Grove (1835), and King (1879).

Lynchburg, a city of Virginia, lies in a picturesque mountain-region, on the James River, 124 miles by rail W. by S. of Richmond. It is a thriving place, with the electric light and electric trams, and has manufactories of nails, cotton, iron, farming implements, furniture, &c., besides tobacco, which is the staple of the town's trade. Pop. 21,000.

Lyndhurst, a Hampshire village, the capital of the New Forest, 9 miles SW. of Southampton. Its church (1863) is a brick Early English structure, with conspicuous spire, good stained glass, a monument by Flaxman, and a fresco by Sir Frederick Leighton of the 'Ten Virgins.' Near it is the Verderers' Hall, with Rufus's stirrup. Pop. of parish, 2140.

Lynmouth. See Lynton.

Lynn, or King's Lynn, a seaport, parliamentary and municipal borough of Norfolk, at the mouth of the Great Ouse, 48 miles WNW. of Norwich and 99 N. by E. of London. It still retains traces of the ramparts and a fosse, which once guarded it on the landward side, and abounds in picturesque old timbered houses, ornamented with carved work. Of its four churches the principal are St Margaret's and St Nicholas. Other features of interest are the octagonal Red Mount Chapel; the hexagonal tower of the Grey Friars; a grammar-school, founded in or before Henry VIII.'s reign, at which Eugene Aram was usher; a guildhall, in which is preserved the Red Register of Lynn, one of the earliest paper books in existence; custom-house (1683); hospital (1834–47); museum (1854); library (1883); technical schools (1894); and two extensive docks (1869–84), admitting vessels drawing 21 feet at

spring-tides. Trade is carried on in corn, oil-cake, coals, and timber, and shrimps are caught and sent to London. In Edward I.'s reign Lynn was one of the principal ports of the kingdom; in 1474 the Hanse merchants had a factory or 'steelyard' here; and in 1549 it was a flourishing seat of cloth manufacture. In that year, during Ket's rebellion, one body of the insurgents was encamped here, and in 1643 the town capitulated to the parliamentary force after three weeks' resistance. King John (who in 1204 granted the town its first charter), the dowager-queen Isabella (see CASTLE RISING), Edward III., Henry VI., Edward IV., Henry VII., and Oliver Cromwell all visited Lynn, which was the birthplace of Capgrave the chronicler, and the residence of Dr Charles Burney. Pop. (1801) 10,096; (1901) 20,288. See Richards's *History of Lynn* (2 vols. 1812).

Lynn, a city and port of Massachusetts, on Massachusetts Bay, 10 miles NNE. of Boston. Most of the houses are built of wood; among them are many handsome villas belonging to Boston merchants. The chief industry is the manufacture of ladies' and children's shoes, 10,000,000 pairs sometimes in one year. There are also large tanneries. Though founded in 1629, Lynn became a city only in 1850. A great fire in 1889 destroyed property worth $5,000,000. Pop. (1880) 38,274; (1900) 68,513.

Lynton and **Lynmouth**, two villages of North Devon, on the Bristol Channel, 18 miles NE. of Barnstaple. Lynmouth stands close to the sea, and Lynton half-way up the cliff, 428 feet above. They were 'discovered' in 1883, and have since been developed, now possessing a cliff-railway 1000 feet in vertical ascent, electric light, nine hotels, &c. Shelley stayed at Lynmouth in 1812, and Southey called it 'the finest spot, except Cintra and Arrabida, I ever saw.' Pop. 1700.

Lyonesse. See SCILLY ISLANDS.

Lyonnais, a former province of France, coinciding nearly with the present deps. of Rhone, Loire, Haute-Loire, and Puy-de-Dôme.

Lyons (Fr. *Lyon;* anc. *Lugdunum*), the second city of France, stands at the confluence of the Rhone and the Saône, by rail 315 miles SSE. of Paris and 218 N. by W. of Marseilles. The commercial and fashionable quarters of the city lie on the long narrow tongue of land between the rivers, and are connected with the suburbs beyond by more than twenty bridges. This central part of Lyons contains many narrow streets, with tall gloomy houses; but much has been done to lighten it since 1852 by the making of long straight, wide streets, and the opening up of squares. In this district stand the museum (1667), with valuable Roman antiquities, a library of 120,000 vols. and 1500 MSS., and art collections; the church of St Martin d'Ainay, dating from the 10th century; St Nizier Church, at first the cathedral, a fine 15th-century Flamboyant building; the graceful town-house (1646); the museum of arts and industry; the academy, with five faculties; the hospital, founded in the 6th century, though the present building dates only from 1773; and the arsenal. To the north lies the suburb of La Croix Rousse, where the silk-weavers dwell. Across the Saône, and on its right bank, is the steep, high suburb of Fourvières, the *Forum Vetus* of Trajan, whose summit (410 feet) is now crowned by the church of Notre Dame (the new church dates from 1872–80). Here is the miracle-working image of our Lady of Fourvières that is believed to have preserved the city from the cholera in 1832, 1835, and 1850. From its tower, which is surmounted by a gilded statue of the Virgin, 18 feet high, a view can be had of the distant Alps. On this elevated site too stands the church of St Irenæus, in the crypt of which are preserved what purport to be the bones of 19,000 Christian martyrs who perished in the persecution by Severus. At the foot of the hill next the Saône is the archiepiscopal cathedral of St John, of the 13th and 14th centuries, with magnificent stained-glass windows and a celebrated clock of 1598; the palace of the archbishop, who ranks as primate of France; and the law-courts. On the left bank of the Rhone, which is so low that it has to be protected with embankments, is the handsome new suburb of Les Brotteaux, terminated on the north by the park of the Tête-d'Or, in which are an oriental museum, a zoological collection, and a fine botanical garden. Lyons possesses also a Roman Catholic University with three faculties, a first-class veterinary school, a school of art with 1200 pupils, of great value for the silk manufactures, a school of the industrial arts, a municipal library of 66,000 vols., and a silk-conditioning house. The city is a fortress of the first rank, being defended by a double ring of forts. Pop. (1872) 301,868; (1901) 441,799, or, of the commune, 459,099. The staple industry is the silk; it is computed that there are in all, within the city and its environs, from 75,000 to 85,000 hand-looms and 20,000 power-looms employed in this manufacture. Silk-dyeing and printing give employment to nearly 4000 workmen; 25,000 more are engaged in the various chemical industries (dyes, starch, candles, soap), machinery-making establishments, foundries, brass-works, fancy-wares, gold and silver goods, hats, paper, mathematical instruments, &c. The position of Lyons makes it a great emporium of trade between central and southern Europe. Besides importing silk raw and exporting it manufactured, chiefly to Great Britain and the United States, cotton is imported from America and Egypt, and a large business done in cloth and linen, chestnuts, coal, charcoal, cheese, and wine and spirits. The list of notable persons born in Lyons includes Germanicus and the Roman emperors Claudius, Marcus Aurelius, and Caracalla, Jules Favre, Roland, Say, Suchet, the De Jussieus, Ampère, Mme. Recamier, Bonnet, Delorme, Meissonier, and Jacquard.

The Romans settled a colony here in 43 B.C. and made it the starting-point for their network of highways through Gaul. The introduction of the silk industry must be set down to Francis I.'s credit. The Reformation, entering from Geneva, had a short but violent reign; the emigration of the Huguenots struck a blow at the industrial prosperity of the town from which it took long to recover. In 1789 the city embraced the cause of the Revolution, though royalist feeling was also strong here. In 1792 it refused obedience to the National Convention; in revenge it was besieged, captured, its buildings destroyed, its name changed (till 1794) to Ville-Affranchie, and 6000 of its citizens slain. Trade riots in 1831, 1834, and 1849 assumed very formidable dimensions; and since the war of 1870 Lyons has been a focus of red republicanism.

Lys, or LEVE, rises near Lysbourg, in the French dep. of Pas-de-Calais, and flows 130 miles north-eastward to the Scheldt at Ghent.

Lytham, a Lancashire watering-place, on the N. shore of the Ribble estuary, 14 miles W. of Preston, and 7 SSE. of Blackpool. Pop. 7200.

Maam, a locality in County Galway, in a fine pass near the NW. end of Lough Corrib. To the west are the Maamturk Mountains; 8 miles N. is Maamtrasna (2207 feet high), giving name to a district west of Lough Mask.

Maas. See Meuse.

Maastricht. See Maestricht.

Mablethorpe, a Lincolnshire coast-village, 13 miles by rail (1888) SE. of Louth, with good sands and a submerged forest. Pop. 940.

Macao (*Ma-kâ'o*), a Portuguese settlement on the south coast of China, and on the west side of the Canton River estuary, Hong-kong being 40 miles distant on the opposite side. The settlement occupies a small peninsula projecting from the SE. island of Hiang-shang. The islands Colovane and Taipa also belong to the settlement, whose total area is 4½ sq. m. and pop. 87,030 (less than 5000 Portuguese, the rest mostly Chinese). The principal public buildings are the cathedral and churches. Great part of the revenue is derived from licensed gambling-houses. The Portuguese obtained permission to settle in Macao in 1557, but the Chinese exacted an annual ground-rent until 1886. The anchorage is defective; large vessels cannot approach nearer than six miles. Since the rise of Hong-kong the commerce of Macao has suffered severely. Shortly after it was declared a free port (1845) it became the headquarters of the coolie trade, especially with Peru and Cuba; but in consequence of fearful abuses the British and the Chinese constrained the Portuguese government to abolish the traffic in 1873. The imports include opium, kerosene, piece goods, yarn, and provisions; the exports, tea, oils, silk, and rice. In a grotto here Camoens is traditionally believed to have written his *Lusiad*.

Macassar, the most southern portion of Celebes, contains the chief town and port, Macassar (pop. 20,000), on the west coast.

Maccaluba, a small mud volcano, 138 feet in height, situated 6 miles N. of Girgenti in Sicily.

Macclesfield, an ancient municipal borough and important manufacturing town in the Macclesfield parliamentary division of Cheshire, is situated on the river Bollin, and on the western declivity of a range of low hills, 15 miles SSE. of Manchester and 167 NW. of London. Among its buildings are the fine old church of St Michael, founded by Queen Eleanor in 1278, the town-hall (1823–70), the infirmary (1872), and King Edward's grammar-school (1553), rebuilt in 1866, and reorganised in 1880, with an endowment of £2000 a year, which also supports a modern free school. Macclesfield has a public park of 16 acres (1852), public baths, a free library, a technical school, a school of science and art, &c. The old button trade belongs to the past, and the silk manufacture, established in 1756, is now the staple industry; cotton goods and smallwares are also manufactured, and there are dyeworks and breweries. In the vicinity coal, slate, and stone are obtained. Macclesfield possesses nine charters (the first by Prince Edward, Earl of Chester, in 1261), and returned two members from 1832 till 1880, but was disfranchised in 1885. Pop. (1851) 39,048; (1901) 34,624. See works by Corry (1817) and Earwaker (1877).

Macduff. See Banff.

Macedonia, anciently the name of a country, now part of Turkey, lying NW. of the Ægean Sea, mountainous, with fertile plains. Philip II. became (338 B.C.) master of Greece; his son, Alexander the Great (356–323 B.C.), conquered half the known world. The present population is mainly Bulgarian, with Greeks on the coast and in some districts; the Turks are not numerous. In consequence of the oppression of the Christian population and the failure of Turkey to carry out promised reforms, there have been troubles and threatened revolt since 1875. These became acute in 1903, when many encounters between the antagonistic nationalities took place. In 1905 the Powers made a naval demonstration to enforce upon Turkey the carrying out of financial and other reforms.

Maceio (*Masay'o*), a port of Brazil, the capital of Alagoas state, on a peninsula that shuts in the Lagoa do Norte from the sea. Pop. 12,000.

Macerata (*Matchayrâta*), a cathedral town of Italy, 44 miles S. of Ancona. Pop. 23,000.

Macgillycuddy Reeks, a mountain group in Kerry, west of the Lakes of Killarney; Carran-Tual (3414 feet) is the loftiest peak in Ireland.

Machrihanish, a bay on the west coast of Kintyre, 5 miles across from Campbeltown, famous for its golf links and as the wireless telegraph station (with tower over 400 feet high) for trans-Atlantic messages.

Machynlleth (*Ma-hun'tleth*), one of the Montgomery district of boroughs, on the Dovey, 21 miles NNE. of Aberystwith. Pop. 2040.

M'Keesport, a borough of Pennsylvania, on the Monongahela River, at the mouth of the Youghiogheny, 15 miles SE. of Pittsburgh. It has flour, saw, and rolling mills, tubing factories, glass-works, a distillery, &c. Natural gas is used. Pop. (1880) 8212; (1900) 34,227.

Mackenzie River, in North America, has its origin as the Athabasca (q.v.), in a Rocky Mountain lake in British Columbia, flows over 600 miles to Lake Athabasca, and 240 as the Slave River to Great Slave Lake (q.v.). As the Mackenzie River, it now conveys the waters of the Great Slave Lake to the Arctic Ocean at Mackenzie Bay, after a final course which is reckoned at 1045 miles, making a total river-system of nearly 2000 miles. Its great tributaries, the Liard and the Peace and Athabasca rivers, drain an immense fertile country, with abundance of petroleum, and some coal and lignite. It was discovered by Sir Alexander Mackenzie in 1789. The Mackenzie district has an area of 562,182 sq. m., and the population does not exceed 5250. It is largely forested, and the climate is excessively severe in winter.

Mackinaw, or Mackinac, an island 3 miles long by 2 broad, in the Strait of Mackinaw, which connects Lakes Huron and Michigan.

Mackinley, Mount, the highest mountain in North America, is in Alaska, in lat. 63° 4′ N. and long. 151° W., and is 20,464 feet high.

Mâcon (*Mâ-kon^{g}; Matisco* of Cæsar), the capital of the French dep. of Saône-et-Loire, on the right bank of the Saône, 41 miles by rail N. of Lyons. A dull, modernised place, it has a twelve-arch bridge, with a view of Mont Blanc; a fragment of an old cathedral, demolished at the Revolution; the fine Romanesque church of St Pierre (rebuilt 1866); and a statue of Lamartine, who was born here. It trades largely in wines known as Mâcon, like

but lighter than Burgundy, and manufactures watches, brass, faience, &c. Pop. 18,497.

Macon (*May'kon*), capital of Bibb county, Georgia, on the Ocmulgee, stands among forest-clad hills, at the head of navigation, 103 miles SSE. of Atlanta. It is the seat of Mercer University (Baptist) and a R. C. college, and has foundries, flour and lumber mills, cotton-factories, &c. Pop. 25,300.

Macquarie Land, a grassy island, 20 miles long, in the Antarctic Ocean, in 54° 30′ S. lat. and 158° 50′ E. long. It was discovered in 1811.

Macquarie River, a tributary of the Darling in New South Wales, 750 miles long, named after Governor Macquarie.

Macroom, a market-town on the Sullane, 25 miles W. of Cork. Pop. 3020.

Madagas'car, the third largest island in the world, is situated to the SE. of Africa, and is about four times as large as England and Wales. It is in 12° 2′—25° 35′ S. lat. and 42°—51° 40′ E. long.; length, 978 miles; greatest breadth, 350 miles; area, 230,000 sq. m. It consists of two great divisions—(1) an elevated interior region, almost central, from 3000 to 5000 feet above the sea; and (2) a comparatively level country surrounding the high land, not much exceeding 600 feet in altitude, although there are lofty mountains extending to the SE. corner of the island. The interior highland comprises nearly half the total area; the highest mountain-mass, Ankàratra (9000 feet), is probably an ancient volcano. The lower region of Madagascar is fertile and well wooded, especially on the eastern side of the island, though a large district in the south is barren. From the SE. to the NW. and N. a series of extinct volcanic craters has been traced, and there are many hot springs. There are fine bays and harbours on the NW. coast. All round the island is a nearly unbroken belt of dense forest, 10 to 40 miles across, and most largely developed in the NE. The flora of Madagascar is very rich and varied, and contains large numbers of valuable timber trees. Three-fourths of the species of plants are peculiar to Madagascar, showing that the island is of very great antiquity. The fauna contains several exceptional and ancient forms of life; it is the home of the Lemurs, including the Aye-aye, as also of the chamæleons. The remains of an immense struthious bird (*Æpyornis*) have been discovered, as well as of an extinct hippopotamus. The Malagasy people appear to be mainly derived from the Malayo-Polynesian stock, with some Melanesian, African, and Arab admixture. The Hovas, the most civilised and powerful tribe, inhabit the central province of Imèrina. The Sàkalàvas are found along the entire west coast. Although there are many dialectic differences, the language of the whole country is substantially one, and is evidently nearly allied to those of the Malayan and Melanesian islands. The pop. of Madagascar is probably about 3,000,000. In their heathen state they are very immoral and untruthful, and cruel in war; but they are also courageous, affectionate, and firm in friendship, law-abiding and loyal, courteous and hospitable. The capital, Antanànarivo, has a pop. of about 100,000. The chief ports are Tamatave, on the east coast, and Mojangà, on the north-west. Ambòhimànga in Imèrina, and Fianàrantsòa in Bètsiléo, are important places in the interior.

The principal exports (£165,000 per annum) of Madagascar are cattle, hides, gum-copal, india-rubber, rafia bast, rice, ebony, and other valuable woods; coffee, sugar, and vanilla are also cultivated. The chief imports (£165,000 per annum) are cotton goods, ironmongery, crockery, and rum. The principal trade is from the eastern ports to Mauritius and Réunion, and there is also now an increasing trade from the western side with South Africa. Iron is abundant, copper and tin exist, lead, silver, and gold are mined, sulphur is plentiful. The people excel in weaving, in straw-work, in carpentry, and in the working of gold and silver.

Madagascar was known to the Greeks as *Menuthias;* it is first mentioned by Marco Polo as *Madeigascar* or *Magastar;* but the first European who saw the island appears to have been the Portuguese Fernam Soares in 1506. The Dutch formed short-lived settlements; the French, who made vain but persistent efforts for nearly two centuries to maintain military posts on the east coast, hold the islands of Ste Marie (east coast) and Nòsibé (north-west coast); and in 1890 the English government formally acknowledged the French protectorate of Madagascar, but this has never been agreed to by the Malagasy government. Up to the middle of the 17th century Madagascar was divided into a number of independent chieftaincies; about that time, however, the warlike Sàkalàvas made themselves masters of the western half of the island. But in the early part of the 19th century the Hovas threw off the Sàkalàva yoke, and, with the aid of English arms and discipline, made themselves masters of almost the whole of Madagascar. Radàma I. abolished the export slave-trade, and from 1820 encouraged English missionaries. But under Queen Ranavàlona I. the missionaries and Europeans generally were obliged to leave (1836), and a severe persecution of the native Christians ensued. Madagascar was reopened to Europeans at the accession of her son Radàma II. Queen Ranavàlona II., and her husband, the prime-minister, identified themselves with Christianity in 1868; idols were burnt, and masses of the people put themselves under instruction; and erelong about 1600 Protestant Christian congregations had been formed, with about 280,000 adherents, besides 1300 schools, with 100,000 scholars. The Roman Catholics number some 50,000. In 1883 the French invaded Madagascar, and two years afterwards it became a French protectorate. Another French expedition in 1895 forced Queen Ranavàlona III. to confirm the treaty of 1885. In 1896 the country was declared a French colony; and in 1897 the queen was deposed and exiled. The French régime, peaceful and on the whole prosperous, has not been favourable to Protestant missions, nor to British trade with Madagascar. See works on Madagascar by Ellis (1838, 1858, and 1870), Sibree (1870–96), Oliver (1886), Grandidier (1876–1902), Dawson (1895), Foucart (1899), Killer (1901), and Matthews (1904).

Maddalo'ni, a city of Italy, 17 miles by rail NNE. of Naples. Pop. 20,700.

Madeira (*Mada'ra*), the largest (38 miles by 15) of a small group of islands in the North Atlantic, 390 miles NW. of Morocco, 1164 SW. of the Lizard, and 535 SW. of Lisbon. Madeira (Portuguese, 'timber'), first settled in 1419, is treated as an integral province of Portugal, sending representatives to the Cortes at Lisbon. Pop. (1881) 132,223; (1905) 150,500. Madeira is traversed by a mountain-chain running E. and W., with deep ravines between the lateral ridges, the most notable the 'Grand Curral,' which is more than 2000 feet deep. The islands are of

volcanic origin; there are three summits between 5895 and 6059 feet. Slight earthquakes occur. The south is treeless and arid; the north side is more luxuriant and fertile, with wider areas of cultivated ground; in the north-west are undulating grassy plains. The coasts are steep and precipitous, the only harbour being that of Funchal (q.v.) on the south coast, which is little better than an open roadstead. The clouds, attracted by the mountains, yield plenty of moisture, and the climate is remarkable for its constancy; mean temperature, 61° F.; minimum, 50° F.; while in the hottest days of summer it seldom rises above 80°; 90° is exceptional. The average rainfall is 29 inches; there are few really wet days. The temperate and constant warmth of its climate has made it a favourite resort for invalids affected by pulmonary disease. The fruits and grains of Europe are cultivated on the lower levels; the products include wheat, barley, Indian corn, the potato, oranges, lemons, guavas, mangoes, figs, and bananas. Travellers praise the golden splendour of the wide expanses of gorse and broom, and of the marvellous masses of colour of the flora. There are between 300 and 400 genera of wild flowering plants. Wine, especially that known as Madeira, is the chief export. The vines were nearly exterminated in 1852 and succeeding years by oidium, but were soon replanted; and oidium and the phylloxera have since been kept in check by sulphur. Sugar-canes flourish. The inhabitants are of mixed Portuguese, Moorish, and Negro descent; they are vigorous, lively, and industrious. A great drawback to visitors is the absence of roads. Loads are carried on the head by natives, and hammocks and sledges drawn by bullocks are used. Roman Catholicism is predominant. At Funchal (q.v.) are the governor's palace, town-hall, opera-house, lyceum, cathedral, English church, and Scottish Free Church.

See works by White (2d ed. 1860), Grabham (1869), Piazzi Smyth (1882), Miss Taylor (1882), Yate Johnson (1885), Brown (1890), *Fraser's Magazine* (1875), and *Blackwood* (1888).

Madeira, the great affluent of the Amazon, has its origin in the confluence of the Mamoré and Guaporé, at about 12° S. lat., the Beni joining 110 miles lower down. The river then flows north-east to the Amazon, the distance from its mouth to its first falls being 578 miles; above this point navigation is broken by a series of nineteen falls, rapids, and cataracts.

Mad'eley, a Shropshire town, on the Severn, 6 miles NE. of Much Wenlock, and within the municipal limits of Wenlock, with ironworks and coal and iron pits. Pop. 10,000.

Mad'ison, (1) the capital of Wisconsin, founded in 1836 on an isthmus between Lakes Mendota and Monona, 82 miles W. of Milwaukee. It contains the state capitol, university (founded in 1849, and open to both sexes), and lunatic asylum, and has manufactures of flour, farming implements, machinery, &c. Pop. 19,426.—(2) Capital of Jefferson county, Indiana, on the Ohio River, 86 miles by rail SSE. of Indianapolis. It has flour-mills, boiler and engine works, steamboat-yards, and manufactories of furniture and leather, besides pork-packing establishments. Pop. 7936.

Madras' City (native *Chennapatnam*) is situated on the Coromandel Coast of India in 13° 4′ N. lat. and 80° 17′ E. long., and is the capital of the presidency of the same name. The town, originally a number of separate villages, extends 9 miles along the shore, and covers an area of 27 sq. m. The roadstead, in which till quite recently all ships had to lie, is very much exposed; a pier was erected in 1859-62; a harbour (1876) was seriously damaged in 1881, but greatly facilitates the landing of cargo during rough weather—passengers have no longer to cross the heavy surf in going to or coming from steamers. The port is liable to be visited by cyclones towards the end of May and beginning of June, when the south-west monsoon sets in, and in October, November, and early December, during the prevalence of the north-east monsoon. The climate is hot, moderately dry, and on the whole healthy, the rainfall averaging 49 inches, and the mean temperature 82° F. On the shore, midway between N. and S., is Fort St George (1750), the original settlement. North of the fort lies Black Town, which contains most of the business offices and a crowded native population; south of it lies Triplicane, the chief Mohammedan centre. Inland and to the extreme south lie the houses chiefly occupied by Europeans, most of which stand in large 'compounds' surrounded by trees. Madras cannot compete with Calcutta or Bombay in magnificent public buildings, yet Government House, the Chepauk Palace, the Senate House, St Andrew's Kirk, St George's Cathedral (with Chantrey's monument to Bishop Heber), the Madras Club, the post-office, and the new High Court buildings are worthy of note. Many of the buildings are rendered striking by the free use of polished *chunam* made from shell lime. The Madras University, founded in 1857, is simply an examining body, the teaching being done by affiliated colleges throughout the presidency. In addition to colleges for the study of arts, medicine, and engineering, there are, in or near the city, a School of Art, a College of Agriculture, a branch of the Royal Asiatic Society, and a large museum, containing very valuable collections of Indian coins and of sculptured marbles from the Buddhist 'tope' at Amravati. The chief articles of export are coffee, tea, cotton, grain, hides, indigo, oil-seeds, dye-stuffs, sugar, and horns. Pop. (1871) 397,552; (1901) 509,346, of whom between 4000 and 5000 were Europeans, 12,000 Eurasians, 54,000 Mohammedans, and the rest chiefly Hindus.

Madras Presidency, one of the administrative divisions of India, occupies the southern part of the peninsula. It extends from lat. 20° 18′ on the east coast and lat. 14° on the west coast to Cape Comorin in lat. 8° 4′. The total area, excluding native states, is 141,189 sq. m.; and the pop. in 1901 was 38,209,436. (The native states have an area of 10,000 sq. m., and a pop. of 4,188,000.) Of these about 2½ millions are Mohammedans, and 1,030,000 Christians. The principal mountains belong to the Eastern and Western Ghâts. The former have an average height of 1500 feet, but rise in parts to 3000 or 4000 feet; the latter have a greater average height, with a number of peaks rising from 5000 to 8000 feet, and a few even higher. A central tableland includes the native states of Mysore and the Deccan, rising to a height of from 1000 to 3000 feet. A very notable geographical feature is the Palghât Gap in the Western Ghâts, 25 miles wide, and only 1000 feet above sea-level. Through it passed the old trade-route between the west and east coast, now superseded by a railway, and through it the south-west monsoon blows strongly, bringing rain to a considerable area lying east of it. The Neilgherry (Nilgiri) Hills, on which at Ootacamund is the summer seat of the government, may be looked on as the junction of the Eastern and Western Ghâts. The chief rivers, the Goda-

vari, Kistna, and Kaveri, all rise in the Western Ghâts, and cross the peninsula SE. to the Bay of Bengal. Very extensive irrigation-works have been carried out. Railway communication is extensive; and there are good roads in most parts of the presidency. The climate differs greatly in different parts. Rice is the chief crop. Cotton is grown in the drier parts, and tobacco of excellent quality is produced. Trichinopoly cigars and cheroots are increasingly exported. On the hills tea, coffee, and cinchona are cultivated. The manufacturing industry is represented by cotton, sugar, gunny bags, paper, ice, and tiles. Madras is not rich in minerals; gold is found in many parts; excellent iron abounds; but the want of fuel prevents any great development of the iron industry. Diamonds have been largely found, chiefly in the Karnul district. The forests are now protected by the state, and are of great value, especially the teak forests.

The first English settlement was made at Masulipatam in 1611; in 1616 on the west coast at Calicut and Cranganore; and in 1639 at Madras. Christian missions have made more progress in Madras than in any other part of India, there being over 240 Christians in every 10,000 inhabitants.

Madrid' (Span. pron. *Math-reedh'*), the capital of Spain, is situated in the dep. of Madrid (part of the ancient province of New Castile), in 40° 24′ N. lat. and 3° 25′ W. long., 880 miles by rail from Paris. It is built on a treeless, ill-watered plateau, on the left bank of the Manzanares, 2060 feet above the sea-level. The Manzanares is merely a mountain-torrent falling into the Jarama, a tributary of the Tagus; water is brought from the Guadarrama Mountains by an aqueduct 42 miles in length. The sole recommendation of Madrid as capital is its central position in the Peninsula. Swept during winter by icy winds from the snow-capped mountains on the north, and exposed in summer to a burning sun, it has a climate which, though dry and bright, shows extreme variations of temperature (104° to 14°). The average of the eight warmer months (March to October) is 66° F., and that of the four remaining ones 44°, but the difference at the same time between sun and shade is sometimes as great as 20°. At the beginning of the 19th century the pop. was about 160,000; in 1860 it was 298,000; in 1870, 332,000; and in 1905, 550,000. Madrid in the 10th century was known as *Medina Magerit*, a fortified post of some importance on the frontier of the Moorish kingdom of Toledo. Retaken by the Christians of Castile in 939, it was not finally conquered till 1085. On the high ground where the royal palace now stands was the stronghold that gave the place celebrity. The city received its earliest charter in 1202, and the Cortes were first held in it by Ferdinand VI. (1309). Under Isabel the Catholic it became a place of some importance owing to the more frequent presence of the court. It received such privileges from the Emperor Charles V. that its pop. rose rapidly from 3000 to 6900 households. When in 1561 Madrid was declared capital of Spain by Philip II., it contained about 30,000 inhabitants. With the court came the great nobles, who built palaces, and innumerable friars, who established convents; nevertheless till the middle of the 17th century the city presented a mean appearance. Philip IV. made some improvements, and in his time Madrid, though still unpaved and filthy, was the seat of one of the most brilliant courts of Europe. The greatest benefactor of the city was Charles III., many of whose splendid works still exist. Madrid, during the domination of Napoleon, made a gallant attempt (1808) to shake off the foreign yoke; but although taken by the allied forces under the Duke of Wellington in 1812, it was not finally rid of the French till 1813. Madrid, aided by the suppression of the convents (1836), the introduction of railways (1850), and an abundant supply of good water (1858), has rapidly advanced in importance and prosperity.

The general aspect of the city is clean and gay, whilst the older parts are picturesque; no trace now remains of the mediæval city. The new streets are generally fine, broad, and planted with trees; the houses well built, lofty, and inhabited by several families living in flats. A great feature is the magnificent open spaces, chief of which is the Prado, running north and south through the eastern part of the city, and, with its continuations, three miles long: it contains four handsome fountains with groups of statuary, a fine obelisk to commemorate the gallant struggle of the citizens with the French (May 2, 1808), monuments to Columbus, Isabel the Catholic, &c. The picture-gallery here, founded by Charles III., is one of the finest in Europe, and contains many of the masterpieces of Velasquez, Murillo, Raphael, Tintoretto, Rubens, Teniers, and Van Dyck. Two other parks are the Buen Retiro, the fashionable promenade on the east of the city, and the Casa de Campo on the west. Midway between its extremities the Prado is crossed at right angles by the Calle de Alcala, the finest street in the city, about a mile in length, and leading from outside the fine triumphal arch rebuilt by Charles III. to the Puerta del Sol, the square which is the heart of Madrid; here converge the principal tramway lines, and in it and the streets branching off from it are situated the principal shops and places of business. The finest square is the Plaza Mayor, formerly the scene of bull-fights and *autos-da-fé*; it contains a gigantic equestrian statue of Philip III., its founder. On the west of the city are the new cathedral and the royal palace; the latter, commenced in 1738 to replace the ancient Alcazar, which had been burned down, was finished in 1764 at a cost of £3,000,000. Other fine buildings are the palace of justice, formerly a convent; the houses of parliament; Buena Vista Palace, now the ministry of war; and the new national bank. Besides a flourishing university, founded by Cardinal Ximenes, and two high schools, Madrid contains 120 municipal (besides pauper) schools, with an aggregate of 12,000 pupils. Madrid is well provided with newspapers and public libraries, the chief being the National Library, with more than half a million volumes, and the library of the university. The opera-house is one of the finest in the world; all the theatres must by law be lit by electricity. The bull-ring, situated outside the gates on the east, is a solid structure seating 14,000. Iron-founding, and the manufacture of furniture, carriages, and fancy articles are carried on on a small scale. The manufacture of tobacco employs many hands, chiefly women. The publishing trade is important, and books are well printed and cheap. The old tapestry-factory still turns out beautiful work, as do the potteries at Moncloa.

Madron, a Cornish town, 2 miles NW. of Penzance. Pop. 3755.

Madu'ra, a maritime district of India, in the south of Madras Presidency, is bounded E. by the Gulf of Manaar; it has an area of 8808 sq. m., and a pop. of 2,908,404. For nearly 2300 years

Madura, its chief town (pop. above 102,000), was the capital of the southernmost part of India.

Madura, a barren island of the Dutch East Indies, separated by a narrow strait from the north-east of Java (q.v.). Area, with some eighty smaller islands, 2040 sq. m.; pop. 1,773,948.

Mæander (now *Bojuk Mender*), the ancient name of a river of Asia Minor, rising in Phrygia, and flowing 240 miles WSW. to the Ægean at Miletus. Its windings, proverbial since Cicero's day, are after all nothing remarkable.

Maelström ('grinding stream'), a famous whirlpool or rather current between Moskenäs and Mosken, two of the Lofoden Isles (q.v.). The strait is regularly navigated at high tide and low tide, though in one place the water is always rough; and in high winds is dangerous. Tales (such as Poe's) of ships sucked down into the vortex are mere fables.

Maeshowe, a chambered mound in the Mainland of Orkney, 9 miles WNW. of Kirkwall. It is 36 feet high and 92 in diameter, and probably belongs to the Stone Age.

Maesteg, a town of Glamorganshire, on the Llynvi, 9 miles NW. of Bridgend. Pop. 15,020.

Maestricht (*Mâhs-trihht*), the capital of the Dutch province of Limburg, 19 miles NNE. of Liége by rail, 19 WNW. of Aix-la-Chapelle, and 152 SSE. of Amsterdam. It lies on the left bank of the Meuse or Maas, a stone bridge (1683), 133 yards long, connecting it with the suburb of Wijk. Formerly an important fortress, it is still a garrison town; but the fortifications were dismantled in 1871–78. The town-hall, with spire and carillon (1662), contains many paintings and a library; and in the three-towered church of St Servatius (12–14th century), the cathedral once, is a 'Descent from the Cross,' by Van Dyck. But Maestricht's great sight is the subterranean quarries of the Pietersberg, formerly called *Mons Hunnorum* (330 feet). Their labyrinthine passages, 12 feet wide, and 20 to 50 feet high, number 16,000, and extend over an area of 13 by 6 miles. They are supposed to have been worked first by the Romans, and, amongst other fossils, have yielded two heads of the huge Mosasaurus. The manufactures include glass, earthenware, and carpets. Pop. (1876) 29,083; (1903) 35,320. Maestricht, the Roman *Trajectum ad Mosam*, was six times besieged between 1579 and 1814, and in 1830 withstood the insurgent Belgians.

Mafeking (*Mâ-fe-king'*), in the NE. corner of British Bechuanaland, near the Transvaal frontier, and on the railway (1894) from Capetown to the northward—the future 'Cape to Cairo railway;' famous for its defence by Baden-Powell in the Boer war of 1899–1902.

Mafra, a town of Portugal, 20 miles NW. of Lisbon. Pop. 3020. The palace here (1717–31), now a barrack, contains 866 rooms, and a library of 50,000 vols.

Magadoxo, or MUKDISHU, a port on the east coast of Somaliland, 250 miles NE. of the mouth of the Juba River; pop. 5000.

Mag'dala, anciently a village of Palestine, on the west shore of the Sea of Galilee.

Magdala (*Mag-dâh'la*), a hill-fortress of Abyssinia, 300 miles S. of Annesley Bay on the Red Sea, stood perched on a plateau 9110 feet above sea-level; the stronghold of Theodore, taken and destroyed by the English expedition in 1868 under Napier, created Lord Napier of Magdala.

Magdale'na, the principal river of Colombia, rises in the Central Cordillera, only 8 miles from the source of the Cauca. These streams flow north on either side of the Cordillera, uniting about 130 miles from the sea. The Magdalena, which ends in a large delta, is closed to sea-going vessels by a bar; merchandise is conveyed by a railway (18 miles) from Barranquilla to Puerto Colombia, whence it is navigable for 500 miles.

Mag'dalen Islands, a small group near the centre of the Gulf of St Lawrence, 54 miles NW. of Cape Breton Island. The largest is Coffin's Island. Pop. 5172.

Magdeburg (*Mag-de-boorg*), the capital of Prussian Saxony, and one of the chief fortresses of the German empire, 90 miles by rail SW. of Berlin and 72 N. of Leipzig. It lies in a cheerless country, on the left bank mainly of the Elbe, which, here 280 yards wide, branches into three channels, and forms two islands. On the smaller of these still stands the Citadel (1683–1702); but otherwise the old fortifications have since 1866 been built over or converted into promenades, their place being taken by a cordon of thirteen forts. The cruciform Gothic cathedral, rebuilt between 1207 and 1550, is 400 feet long, and has two western towers 341 feet high. It contains the tombs of the Emperor Otho the Great, of his first wife, the English princess Editha, and of Archbishop Ernest, whose monument (1497) is a masterpiece of Peter Vischer of Nuremberg. In front of the town-hall (1691–1866) is the equestrian statue of Otho (13th century); and of several other monuments the most noteworthy are the Soldiers' Memorial (1877) and a statue of Luther (1886). The industries comprise huge ironworks, distilleries, cotton-mills, &c.; for sugar it is the first market of Germany. Pop. (1875) 122,789; (1900) 229,670, of whom over 15,000 are Catholics, and 2000 Jews. Founded by Charlemagne in 805, and refounded by Editha after its destruction by the Wends in 924, Magdeburg was in 968 made the seat of an archbishopric, and had 40,000 inhabitants in 1524, when, embracing the Reformation, it incurred the combined wrath of emperor and primate. It successfully withstood Maurice of Saxony (1550); but during the Thirty Years' War it suffered fearfully. In 1629 it was vainly besieged for six months by Wallenstein; in May 1631, after an heroic defence (2000 against 25,000), it was taken by Tilly and burned to the ground, the cathedral (reconsecrated for Catholic worship) being almost all that remained after the three days' sack, in which nearly the whole pop. of 36,000 perished by fire or sword or drowning in the river. In 1648 the archbishopric was converted into a secular duchy, and conferred on the House of Brandenburg. In 1803 the French annexed it to the kingdom of Westphalia; but in 1814 it was finally restored to Prussia.

Magee' Island (*g* hard), a low-lying peninsular portion of County Antrim, nearly severed from the mainland by Lough Larne.

Magel'lan (*g* hard), STRAIT OF, separates South America from Tierra del Fuego. It is 375 miles long, and its breadth varies mostly between 12 and 17 miles. Discovered by Magellan in 1520, it was explored by King and Fitzroy in the *Adventure* and *Beagle* (1826–36). The narrower western half is shut in by steep, wooded mountains; the current runs strong through it. See works by Cunningham (1878) and Miller (1884).

Magenta, an Italian town, 18 miles W. of Milan. Pop. 7573. Here, 4th June 1859, the French and Sardinians defeated the Austrians.

Magerö. See North Cape.

Magersfontein, on the frontiers of Griqualand West and the Orange River Colony, where in December 1899 Lord Methuen failed to carry the Boer entrenchments.

Maggiore, Lago (*Madjo'ray*), one of the largest lakes in Italy, is partly in the Swiss canton of Ticino. It is 39 miles long, and ½ mile to 5½ miles broad, lies 646 feet above sea-level, and has a maximum depth of 1250 feet. The river Ticino flows through it. In a south-western expansion of the lake are the Borromean Isles (q.v.).

Maghera (*Mah'era*), a market-town of Londonderry, 44 miles NW. of Belfast. Pop. 879.

Magne'sia, an ancient city of Ionia in Asia Minor, nearly 10 miles NE. of Miletus, in the valley of the Mæander. Here stood a famous temple of Artemis; and here Themistocles died (449 B.C.). It was called Magnesia ad Mæandrum, to distinguish it from Magnesia ad Sipylum, which stood on the Hermus, near Mount Sipylus; this is the modern Manissa (pop. 50,000), 41 miles NE. of Smyrna by rail.

Magus Muir, a place in Fife, 3½ miles WSW. of St Andrews, the scene in 1679 of Archbishop Sharpe's murder.

Mahabaleshwar, the chief sanatorium of Bombay Presidency, on the eastern slope of the Western Ghâts, at a height of 4717 feet, and 74 miles S. of Poona; pop. 3500.

Mahánadí ('the great river'), a river of India, rises in the Central Provinces. After an eastward course of 520 miles, 300 of which are navigable, having divided into several branches near Cuttack, which forms the head of its delta, it falls by several mouths into the Bay of Bengal.

Mahanoy' City, a mining-town of Pennsylvania, 109 miles by rail NW. of Philadelphia, with collieries and manufactories. Pop. 13,286.

Mahé, the only French settlement on the west coast of India, in the Malabar district, 35 miles NNW. of Calicut. Area, 3¾ sq. m.; pop. 9280.

Mahi Kantha Agency, a group of fifty-two native states in Bombay Presidency. Of the total area of 9300 sq. m., nearly half belongs to the state of Edar or Idar. Pop. 381,568.

Mahon. See Port Mahon.

Maida Hill, a NW. suburb of London.

Maidenhead, a municipal borough and market-town of Berkshire, is situate amidst beautiful scenery, 13 miles E. by N. of Reading, and 26 W. of London, on the right bank of the Thames. It was the scene in 1399 of an engagement between the rival forces of Richard II. and Henry IV., and in 1647, at the Greyhound Inn, of the interview of Charles I. with his children. On the opposite, or Bucks, side of the river is Taplow (pop. 1029), whose wooded slopes are crowned by Cliveden (q.v.). Maidenhead has a recreation ground of 12 acres, opened in 1890. Pop. (1851) 3697; (1901) 12,980.

Maidstone, the county town of Kent, on the right bank of the Medway, 34 miles ESE. of London by road (41½ by rail), and 25 W. of Canterbury. At its west entrance, overlooking the river, which is spanned by a three-arch stone bridge, built 1877–79 at a cost of £55,000, stand the picturesque remains of All-Saints' College, originally established in 1260 as a hospital for pilgrims travelling to Canterbury. Close by is All-Saints' Church, a fine example of the Perpendicular style, built towards the end of the 14th century. Schools of art and music occupy a former palace of the archbishops of Canterbury; and other features of interest are a grammar-school, founded 1549, and rebuilt on a new site, 1871; museum and public library, established 1858 in Chillington House; town-hall (1764); county jail (1812–19); hospital (1832–89); cavalry and militia barracks; corn exchange (1835); and a public park on Penenden Heath to the NE. of the town. Lining the river-banks are numerous paper-mills and a large oil-mill, whilst several breweries are in operation, and an important traffic is carried on in hops. Maidstone returned two members till 1885, when the number was reduced to one, and was first incorporated as a municipal borough in 1548. Pop. (1801) 8027; (1831) 15,387; (1901) 33,516. Maidstone was stormed in 1648 by Fairfax. Woollett the engraver, Hazlitt the essayist, and Newman Hall were natives; and Sir Thomas Wyatt the poet lived at Allington Castle, 2 miles distant. See works by J. M. Russell (1881) and the Rev. J. Cave-Browne (1889).

Maimana (*Mī'mana*), a mountainous state tributary since 1874 to Afghanistan, situated on the northern frontier next Russian Turkestan. Area, 4750 sq. m.; pop. of 100,000, mostly warlike Uzbegs and Tajiks. The capital is Maimana (pop. 2500).

Maimansingh, a district of Eastern Bengal, the capital of which is Nasirabad. Area, 6332 sq. m.; pop. 3,917,500.

Maimatchin (*Mī-ma-cheen'*), a Chinese trading-town on the northern boundary of Mongolia, opposite Kiachta (q.v.). Pop. 3000.

Main (Ger. pron. *Mīne*), the largest affluent the Rhine receives from the right, is formed by the union of two branches, the White and the Red Main, 4 miles below Kulmbach, in north-east Bavaria. The river flows westwards by huge zigzags past Bamberg, Schweinfurt, Würzburg, Aschaffenburg, Hanau, Offenbach, and Frankfort, and mingles its yellow waters with the green current of the Rhine opposite Mainz, after a total course of 307 miles (205 navigable). The chief affluents are, on the right, the Saale, and on the left, the Regnitz. The Main flows through a beautiful country, the castled hill-slopes covered with vineyards. Its waters communicate with those of the Danube by the Ludwigs-Kanal and the Altmühl. The Main separates North Germany from South Germany.

Maine, an old French province (capital, Le Mans), with Normandy on the N., Brittany on the W., and Anjou on the S., corresponding to the modern deps. of Sarthe and Mayenne.

Maine, the north-easternmost state of the American Union, is bounded by the Canadian provinces of Quebec and New Brunswick, the Atlantic Ocean (Gulf of Maine), and New Hampshire. Area, 33,040 sq. m. (somewhat larger than Ireland), of which one-tenth is water, there being many large and fine lakes (Moosehead, Chesuncook, Schoodic, Grand, Sebago, &c.) and important rivers (Penobscot, Kennebec, Androscoggin, Saco, St Croix, Aroostook, and Walloostook or St John). Measured in a direct line the coast extends some 270 miles, but counting sinuosities and the island-shores about 2500 miles. The rocky coast-line, broken by the force of the waves and trenched in bygone ages by glaciers, forms almost a hundred harbours. Towards the south-west the shore is sandy, with salt-marshes. In the north-central regions and the west the surface is mountainous. The highest mountain is Katahdin (5385 feet). The soil is mostly stony

and hard, as in New England generally, but some sections are very fertile—e.g. the Aroostook region in the north-east. The northern portion of the state is densely wooded and very sparsely peopled. Granite and lime are largely produced; traces of coal are found; and there are local beds of valuable graphite. Silver, copper, felspar, flagstone, excellent slate (in vast quantities), lead ores, talc, manganese, &c., are all wrought more or less. Mineral waters are shipped in large quantities. The cool climate and the opportunities for fishing and shooting make this state a favourite summer-resort. The winter climate is severe for the latitude. The leading crops are hay, potatoes, apples (of excellent quality), and the ordinary grains and small fruits. The sweet varieties of maize (sugar-corn) are extensively cultivated. The rainfall is copious. The rivers afford an enormous water-power. Timber, building-stone, ice, cattle, wool, and farm products are shipped. Maine has considerable shipbuilding (more than any other state), and the coasting trade is carried on largely. The fishing interests are extensive. The principal manufactures are cotton and woollen goods, leather, boots and shoes, flour, paper, and foundry products, lumbering, shipbuilding, the canning of fruit and lobsters, &c. The chief towns are Portland, Lewiston, Bangor, Biddeford, Auburn, Augusta (the state capital), Bath, Rockland, &c. The Maine Liquor Law, one of the earliest of the stringent Liquor Laws of the United States, was enacted in 1851. The population is mainly of the English Puritan stock of New England. Pop. (1820) 298,335; (1860) 628,279; (1880) 648,936; (1900) 694,466, including many French-speaking Canadian immigrants, and a few Indians. Early Dutch, English, and French attempts at settlement were failures; the Puritan settlements of 1624 and 1630 proved permanent. Western Maine was long part of Massachusetts state (till 1820); and eastern Maine until 1691 formed a part of Acadia or Nova Scotia. Maine became a state in 1820. See G. J. Varney, *Brief History of Maine* (Portland, 1889).

Maine-et-Loire (*Mayn-ay-Lwâr*), a French dep. formed out of the old province of Anjou, and watered by the Maine and Loire, is divided into the arrondissements of Angers (the capital), Beaugé, Cholet, Saumur, and Segré. Area, 2749 sq. m.; pop. (1872) 518,471; (1901) 514,658.

Mainpuri (*Mīne-poo'ree*), a town of the Indian province of Agra, 75 miles E. of Agra. Pop. 20,000.

Mainz (Ger. pron. *Mīntz;* Fr. form *Mayence;* old-fashioned English form *Mentz*), an imperial fortress of the first rank, in the grand-duchy of Hesse, on the left bank of the Rhine, opposite the junction of the Main, 22 miles WSW. of Frankfort. The Rhine is here crossed by a stone bridge (superseding in 1885 the former pontoon bridge) to the village of Kastel, included in the fortifications, and by an iron railway bridge, 140 yards long, to the port of Gustavsberg, at the mouth of the Main. Pop. (1875) 56,421; (1900) 84,251, of whom two-thirds are Roman Catholics; in the 14th century it is said to have reached 90,000. Mainz is one of the most ancient cities in Germany; but its oldest part, *Kästrich*, has been rebuilt in a modern style since its almost total destruction in 1857 by the explosion of a powder-magazine; while a handsome new quarter has sprung up on the north, in the space afforded by the advancing of the fortifications in 1874. The cathedral, originally built in 978–1009, was thrice destroyed by fire, and dates in its present form from the 13–14th century. In 1870–78 it was thoroughly restored, and the present central Romanesque tower, 270 feet high, built. There are also the 18th-century palace of the grand-duke, an arsenal of 1736, and the large red-sandstone electoral palace, with a library of 150,000 vols., and the Romano-German Museum, a matchless antiquarian and historical collection. Mainz is an important centre of the Rhine trade with Holland and Belgium, and also carries on a very large transit trade by railway. Great harbour-works, docks, and storehouses, were opened in 1887 at a cost of £250,000; while the Rhine is skirted by a broad quay, four miles long. Furniture, leather goods, machinery, musical instruments, chemicals, gold and silver ware, hats, soap, &c., are among the manufactures; and brewing, printing, and market-gardening in the environs are also important industries. In 13 B.C. Drusus built here the fort of *Moguntiacum* or *Maguntiacum*. The real importance of the town dates, however, from the Frankish emperors. In the 13th century Mainz was the head of the confederacy of the Rhenish cities, but in 1462 it was added to the domains of the archbishops of Mainz, the premier spiritual electors of the empire. The city was several times in the possession of France, notably in 1801–14. In 1816 it was assigned to Hesse-Darmstadt, but to remain a federal stronghold, garrisoned by Prussian and Austrian troops. After 1866 it was held by Prussian troops, until in 1870 it was declared an imperial German fortress. Mainz was the birthplace of Gutenberg.

Maitland, a town of New South Wales, 93 miles NNE. of Sydney by rail, and 20 NW. of Newcastle. It is divided by the Hunter River into East and West Maitland, which are separate municipalities. The town is the see of a Roman Catholic bishop; and West Maitland has mills, coach-building, tobacco, and boot factories. Good coal abounds in the neighbourhood. Pop. of the two municipalities, 12,000.

Maiwand, 50 miles NW. of Kandahar, where an English army was defeated by Ayub Khan, 27th July 1880.

Majorca (*Ma-yor'ca*), or MALLORCA, the largest of the Balearic Isles (q.v.), lies about 100 miles from the Spanish coast, and 150 N. of Algiers. It is 60 miles long by 40 broad, and 1310 sq. m. in area. In the north there are mountains reaching 3500 to 5000 feet. The hillsides are terraced; olive groves abound everywhere, and vine, almond, orange, fig, and other fruit trees are common. The soil is extraordinarily fertile, and is cultivated with marvellous patience and skill by the inhabitants, who manufacture cloth, cotton goods, ropes, silk, soap, shoes, &c. There are railways (total 48 miles) connecting the capital, Palma (pop. 65,052), with Manacor (19,570), and La Puebla (5680). The marshes of Albufera (5000 acres) were drained by a London company in 1865–71. Raymond Lully was born at Palma; at Valdemosa George Sand resided in 1838; and at Miramar is the beautiful seat of an Austrian archduke. Large quantities of lustred ware (Majolica) were exported in the 15th century; a little is still made. Pop. 253,650.

See Bidwell's *Balearic Isles* (1876); the sumptuous *Balearen in Wort und Bild* (5 vols. 1869–84), by Archduke Ludwig Salvator; and C. W. Wood, *Letters from Majorca* (1889).

Maju'ba Hill, in the extreme north of Natal, was the scene of the defeat of 648 British troops,

with the loss of their leader, Sir George Colley, by a greatly superior force of Transvaal Boers on 27th February 1881.

Mako, a market-town of Hungary, on the Maros, 19 miles ESE. of Szegedin. Pop. 35,663.

Malabar', a district (5585 sq. m.) on the south-west coast of India, in the Presidency of Madras. Pop. 2,852,565, over two-thirds Hindus, and one-fourth Mohammedans. The name is applied to the whole SW. coast of Southern India.

Malac'ca, or MALAY PENINSULA, anciently the GOLDEN CHERSONESE, the long strip of land extending from Indo-China S. and SE. towards Sumatra. The peninsula begins at the head of the Gulf of Siam, and thus includes part of Siam proper and Tenasserim in Burma; but it is usual to limit the name to the portion south of the river Pakshan, the frontier of Tenasserim. In the larger sense Malacca extends from 13° 30′ to 1° 16′ N. lat., and its area is 75,000 sq. m., of which 40,000 belong to Siam, and the remainder to the Straits Settlements and their dependencies, the protected states. The width varies from 44 miles at the isthmus of Kra to 210 at Perak. The interior consists mainly of magnificently-wooded mountain-ranges, disposed parallel to the long axis of the peninsula (Mount Riam is 8000 feet high), while along the coast there are mangrove swamps, half-a-dozen miles deep, backed by low fertile plains reaching to the mountains. A double belt of islands runs along parts of both coasts. The peninsula is the richest tin-yielding region in the world. The tin ore occurs in conjunction with gold and silver; iron and coal exist, the former in great quantity. The climate is pretty uniform all the year round. The low districts are hot and moist, and neither they nor the highlands are healthy for Europeans. Rain falls on 190 days in the year. Pop. 1,200,000 —800,000 in British territory and dependencies. They are mainly Siamese in the north, civilised Malays along the coast and in the south, and uncivilised Malays, mixed with aboriginal Negrito tribes, in the interior. The crops chiefly cultivated are rice, sugar-cane, cotton, tobacco, yams, batata, and cocoa and areca nuts. Politically, Siam extends as far south as 5° 30′ on the west coast, and to 4° on the east coast. The southern portion embraces the British settlements Penang, Malacca, and Singapore, all treated in separate articles, and the protected states (Johore, Perak, &c.). See Miss Bird's *Golden Chersonese* (1883), and Keane's *Malay Peninsula* (1887).

The *Strait of Malacca* separates the Malay Peninsula on the north-east from the island of Sumatra on the south-west, and connects the Indian Ocean with the Chinese Sea. It is 480 miles long, and from 30 to 115 broad.

Malacca, one of the British Straits Settlements, on the SW. coast of the Malay Peninsula, 100 miles from Singapore. It is 42 miles in length, and from 8 to 25 broad. Area, 659 sq. m.; population, 100,000. The coast-lands are flat and swampy; inland there are low hills. Besides rice, the chief products are tapioca, pepper, fruits, &c. Tin is mined. The mean annual rainfall varies from 68 to 91 inches. The town of Malacca (the capital), at the mouth of a small river, has a pop. of 20,000, and contains the church of Our Lady del Monte, the scene of the labours of St Francis Xavier. Malacca was taken by the Portuguese in 1511; became a Dutch possession in 1641, and fell in 1795 into the hands of the British, who restored it to the Dutch in 1818; but they returned it to Britain in 1824.

Maladetta ('accursed'), a great mountain of the Pyrenees, 12 miles SE. of Bagnères de Luchon, containing the highest peak of the whole range, the Pic de Nethou (11,170 feet).

Ma'laga, a Spanish seaport on the Mediterranean, 65 miles NE. of Gibraltar. Sheltered on the north and east by mountains, and with a wonderfully dry, sunny, and equable climate (56° to 82° F.), this place is an admirable health-resort. The only noteworthy buildings are the cathedral (1528–1765; still unfinished) and the Moorish castle (13th c.; on the site of a former Phœnician stronghold). Malaga is one of the most important seaports of Spain, though disease in vines and orange and lemon groves, heavy octroi duties, unscientific methods of agriculture and of extracting olive-oil, have caused depression. The exports include olive-oil, wine, raisins, lead, almonds, lemons, grapes, chick peas, and esparto grass; the imports, cotton, timber, coal, petroleum, sugar, and codfish. The harbour is protected by two large moles. The manufactures comprise cotton and linen goods, machinery, art pottery, flour, soap, &c. Pop. (1900) 130,200. Founded by the Phœnicians, and the *Malaca* of the Romans, the town was an important city under the Moors, down to 1487, when it was captured by Ferdinand and Isabella.—Area of province of Malaga, 2836 sq. m.; pop. 512,000.

Mälar, LAKE, most beautiful of Swedish lakes, is 80 miles in length from E. to W., and has numerous long narrow arms and offsets; area, 650 sq. m. It is studded with over 1200 wooded islands. Its east end is close by Stockholm, where its waters are poured into the Baltic.

Malatia (anc. *Melitene*), a town in the province of Diarbekir in Asia Minor, 8 miles from the Euphrates. Pop. 20,000.

Malay Peninsula. See MALACCA.

Mal'degem, a town of Belgium, 12 miles by rail E. of Bruges. Pop. 8522.

Malden, a village of Surrey, 3 miles SE. of Kingston-upon-Thames. The manor-house and estate here of Bishop Walter de Merton was the original endowment (1264) of Merton College at Oxford. New Malden is 2 miles E. of Kingston, of which it is practically a suburb.

Malden, a town of Massachusetts, 5 miles by rail N. of Boston. It manufactures india-rubber goods, cords and tassels, sand-paper, &c. Pop. (1880) 12,017; (1900) 33,664.

Malden Island, a British possession in the Central Pacific, NW. of the Marquesas. It is a coral island 5 miles long by 4 broad, and has deposits of guano. Pop. 168.

Maldive Islands, a chain of coral atolls in the Indian Ocean, lying SW. of Ceylon, 550 miles in length by 45 in breadth; the seventeen groups embrace several hundred islands, all small, with a total pop. of 30,000. Less than 200 are inhabited. Malé (pop. 2000), the residence of the Sultan, is 1 mile long. The people are closely akin to the Singhalese. They are Mohammedans by religion, and are peaceful, affectionate, and cleanly. Coir, cowries, dried bonito fish, cocoa-nuts and copra, and tortoise-shell are exported. Ibn Batuta lived on the islands in 1343–44. The Portuguese had factories there after 1518. Since 1645 they have been dependent on Ceylon.

Maldon, a municipal borough of Essex, 9 miles E. of Chelmsford and 38 NE. of London (by rail 44), stands on a hill near the confluence of the Chelmer and the Blackwater, in the vicinity of which traces are still extant of a Roman encamp-

ment. It has two fine churches, and a quaint town or moot hall dating from the reign of Henry VI., and manufactures salt; near it are oyster-fisheries. From 1328 to 1867 Maldon returned two members to parliament, and thence to 1885 one. Pop. (1801) 2358; (1901) 5565.

Maldon, a town of Talbot county, Victoria, 80 miles NE. of Melbourne. It is the centre of a good gold district. Pop. 3600.

Maldona'do, a coast dep. in Uruguay; area, 1584 sq. m.; pop. 27,000.—Also a fortified seaport in same department; pop. 2500.

Malines (*Mâ-leen'*), or MECHLIN (Flem. *Mechelen*), a city of Belgium, on the navigable Dyle, 14 miles SSE. of Antwerp. It has fine squares, noble buildings, and wide regular streets, but is devoid of all signs of life and industry. As the see of the primate of Belgium it still retains a certain degree of ecclesiastical importance, and possesses numerous churches, the most noteworthy of which is St Rombold's cathedral, a vast building, covering nearly two acres, its interior adorned with Van Dyck's 'Crucifixion' and many other fine pictures and carvings. It was mostly built in 1437–52, but its clock-tower, 324 feet high, remains unfinished. The churches of St John and of Our Lady contain works by Rubens; the town-hall dates from the 15th century; the Cloth Hall (1340) is now used as a guard-house; noteworthy also are the splendid modern archiepiscopal palace, the Beguinage, the Salm inn (1534), and the monument to Margaret of Austria (1849). The manufacture of pillow-lace, so famous in the 17th century, has been largely transferred to Brussels and elsewhere; but linen and woollen fabrics, beer, needles, &c. are made here. Pop. 57,000.

Mallaig, a hamlet in the NW. corner of Morar, Inverness-shire, where Loch Nevis unites with the Sound of Sleat, the terminus of an extension from Fort William, opened in 1901, of the West Highland Railway.

Malling, WEST, a market-town of Kent, 5½ miles NW. of Maidstone. It has remains of a Benedictine nunnery (1090). Pop. of parish, 2320. See a work by C. H. Fielding (1893).

Mallow, a watering-place of Ireland, beautifully situated on the left bank of the Blackwater, 20 miles by rail N. by W. of Cork. Across the river is the suburb of Ballydaheen. The town is resorted to in summer on account of its tepid mineral waters, and contains a neat spa-house. Close by is the ivied ruin of the Desmonds' castle, destroyed in 1641, and the 18th-century Mallow Castle. Tanning and some small manufactures are carried on. Pop. (1851) 5436; (1901) 3016. Till 1885 Mallow returned one member.

Mallwyd (*Mal'lud*), a Merionethshire village, on the Dyfi, 2 miles SE. of Dinas Mowddwy. It is a great haunt of artists and fishermen.

Malmaison, a château on the Seine's left bank, 10 miles W. of Paris. It has memories of Richelieu, the Empress Josephine, and Maria Christina of Spain, and was restored by Napoleon III. in 1861.

Malmedy (*Mâl-may-dee'*), a town of Rhenish Prussia, on the Warche, 51 miles S. by rail of Aix-la-Chapelle. Here in 1894 the German government established a fortified camp. Pop. 5078.

Malmesbury (*Mâmz'bury*), an old-world market-town of Wiltshire, on a bold eminence between two head-streams of the Avon, 26 miles by rail NNE. of Bath and 17 WNW. of Swindon. It owes its name to Maildulf, an Irish missionary. Aldhelm, his scholar, became about 673 first abbot of the famous abbey here, in which Athelstan was buried, and of which William of Malmesbury (*c.* 1095–1143) was librarian and precentor. To his time belong the building of a short-lived castle, and the rebuilding (also by Bishop Roger of Salisbury) of the abbey church, which, Transition Norman in style, and cruciform in plan, with a central spire, was 350 feet long. Little more than the nave—now the parish church—remains; but this is a most interesting fragment, its finest feature the south porch. At the Dissolution (1539) the mitred Benedictine abbey became a cloth-factory. A beautiful market-cross (*temp.* Henry VII.) is also noteworthy. Hobbes was a native. Malmesbury returned two members till 1832, and then one till 1885. It was incorporated in 1886. Pop. 2864. See works by Moffatt (1805), Sir T. Phillipps (1831), J. E. Jackson (1863), W. de Gray Birch (1874), and Brewer and Martin (2 vols. 1879–81).

Malmö, the third largest town of Sweden, on the Sound, nearly opposite Copenhagen, 17 miles distant. Besides being a busy seaport, it has manufactures of cigars, sugar, beer, and woollens, and some shipbuilding. The exports include grain, flour, butter, eggs, cement, chalk, matches, live-stock, and timber; and the imports, coal, machinery, cotton, grain, textiles, coffee, &c. The old castle in which the Earl of Bothwell was confined is now used as a prison. The town-house is a fine Renaissance building of 1546. Pop. 70,000.

Malpas, a Cheshire market-town, 15 miles SSE. of Chester. Matthew Henry and Bishop Heber were natives. Pop. of parish, 1144.

Malplaquet (*Mâlplâkay'*), a village in the French dep. of Nord, 10 miles S. of Mons in Belgium. Here, on 11th September 1709, Marlborough and Prince Eugene defeated the French under Marshal Villars.

Malström. See MAELSTRÖM.

Malta (Ital. *Mâhl-ta;* usually *Maulta*), a British Mediterranean island, 17½ miles long by 8¼ broad, with an area of 95 sq. m. It stands on the submarine plateau which, stretching across from Sicily to Africa, divides the Mediterranean into two basins. From its central position in the Mediterranean Sea, 58 miles S. of Sicily, and 180 ESE. of Cape Bon in Algeria, and from the enormous strength of its fortifications—Disraeli called it 'the little military hothouse'—Malta is a very important British dependency. It is the headquarters of the British Mediterranean fleet, the principal coaling station in the Mediterranean—between 500,000 and 600,000 tons of coal are imported for use and re-exportation annually—a powerful stronghold (Valetta), a sanatorium for troops employed in the Orient, and an interesting island historically and architecturally. The governorship (area, 117 sq. m.) includes the island of Gozo (q.v.), and several smaller islets. Malta is oval in shape, the north-eastern and eastern shores being broken into several good harbours; the southern coast rises in picturesque cliffs 400 feet high. The culminating point of the island is 758 feet. Malta has a bare, stony appearance, owing to the absence of trees and the fact that the fields and gardens are enclosed in high walls, to shelter the crops against the violent winds. There are no rivers or lakes; but water is easily obtained from springs, and since 1880 there are government water-works. The soil is thin, but remarkably fertile; and its fertility is increased by the skilful cultivation and the diligent toil of the

inhabitants. Large crops of wheat and potatoes are raised, early varieties of the latter being largely exported to England; maize, barley, cotton, clover, oranges, figs, grapes, carob beans, and peaches and other fruits are also grown. Fine honey is produced; in spring the island is gay with flowers. Filigree ornaments and a little cotton are manufactured. During the summer months the thermometer ranges from 75° to 90° F., during the coldest from 50° to 71°. The annual rainfall is 24·23 inches. When the hot sirocco wind blows—not dry as in Africa, but laden with moisture—the climate is enervating; otherwise Malta is fairly healthy. Earthquakes are not infrequent.

In 1881 Malta (132,129) and Gozo (17,653) contained 149,782 inhabitants; in 1904, 197,070, including about 20,000 British and foreign residents, but excluding imperial troops. The language of the people is a corrupt dialect of Arabic, with a strong admixture of Italian and other (but not Phœnician) words. Most educated Maltese speak Italian; but in 1899, on a plebiscite, 75 per cent. of the inhabitants chose English as the school language for their children. The Maltese are a sober, industrious race, though quick-tempered and ignorant, and are devout Roman Catholics. There are two bishops (Malta, Gozo) and 1200 clergy. Canon law is recognised as the civil law of Malta, and a difficulty about mixed marriages was settled only in 1890. Owing to the rapid growth of the population and its density, large numbers are compelled to emigrate; 50,000 of them are scattered all over North Africa and the Levant. Education is provided for in a university (over 100 students), a lyceum (530 pupils), and about 130 government schools (18,000 pupils). Causes of discontent have arisen in the ecclesiastical jealousy of the predominant church, and social jealousy between the impoverished native nobility (for the most part counts and marquises created by the Knights of St John, and fully recognised since 1878) and the upper classes of the British. A constitution based on popular representation was conferred in 1887. Legislation is carried on by six official and fourteen elected members, the governor, with the power of veto, being president. There is also an executive council; the crown retains the right to legislate also through orders in council. There is no direct taxation. The government own two-sevenths of the land (the rest is divided about equally between the ecclesiastical establishments and private owners); from the rents of this and other crown property, and from customs, licenses, &c., the annual revenue of £360,000 to £465,000 is derived. The public debt is £79,000 (1894). There is a railway, 8½ miles long, connecting Valetta (q.v.), the present capital, with the old capital Citta Vecchia, founded in 700 B.C., with the cathedral of St Paul (1697). In the south of the island are megalithic Phœnician temples. The traditional scene of St Paul's shipwreck is on the north side of the Bay of St Paul. The imports in 1903–4 amounted to £7,158,079, and the exports to £6,145,883.

The *Hyperion* or *Ogygia* of Homer is sometimes identified with Malta. The Phœnicians colonised the island in the 11th century B.C., and after 700 found rivals in the Greeks, who were driven out about 480. The Romans finally took possession in 216 B.C., retaining the Greek name *Melita*. During the 5th century A.D. it fell successively under the Vandals and the Goths; in 533 Belisarius recovered it for the Byzantine empire; in the 9th century the Arabs occupied it; in 1282 it was conquered by Pedro of Aragon; and in 1530 given in perpetual sovereignty by Charles V. to the Knights of St John of Jerusalem, who raised stupendous fortifications, and sustained successfully a three months' siege by the Turks in 1565. The island surrendered to the French in 1798, was occupied by the British during the French war, and in 1814 finally became British.

See historical works on Malta by Miège (1840), Eton (1802), Avales (1830), Tullack (1861), Winterberg (1879), Bedford (1894), and Bono (Malta, 1899).

Malton, a town in the North and East Ridings of Yorkshire, on the Derwent, 22 miles NE. of York. It consists of New Malton, Norton, and Old Malton. The *Derventio* probably of the Romans, it has the Norman church of a Gilbertine priory (1150), and a free grammar-school, founded in 1545 by Archbishop Holgate; but no trace remains of a Norman castle. Iron and brass founding, tanning, brewing, &c. are carried on; and Norton is famous for its training stables. Till 1868 Malton returned two members, and then till 1885 one. Population of the urban district, under 5000.

Malvern, GREAT, one of the most fashionable watering-places in England, is situated 9 miles SW. of Worcester, and 129 WNW. of London, on the east side of the Malvern Hills, at the foot of the Worcestershire Beacon (1444 feet). It has a fine cruciform church, with a central tower 124 feet high, rebuilt in the reign of Henry VII., and restored in 1860–1. In the centre of the town are large Assembly Rooms (1884) with winter promenade and gardens, and on the outskirts is Malvern College (1863–65), a handsome Gothic building, with 250 boys. Madame Goldschmidt (Jenny Lind) long resided near Malvern. Pop. (1801) 819; (1881) 7934; (1901) 16,449.

Malwa, a former kingdom of India.

Mamers, a town in the French dep. of Sarthe, 43 miles NNE. of Le Mans. Pop. 4799.

Mammoth Cave, in Kentucky, 85 miles by rail SSW. of Louisville. It is about 10 miles long; but it is said to require upwards of 150 miles of travelling to explore its multitudinous avenues, chambers, grottoes, rivers, and cataracts. The main cave is only 4 miles long, but it is from 40 to 300 feet wide, and rises in height to 125 feet. Lucy's Dome is 300 feet high, the loftiest of the many vertical shafts that pierce through all the levels. Some avenues are covered with a continuous incrustation of the most beautiful crystals; stalactites and stalagmites abound. There are several lakes or rivers connected with Green River outside the cave, rising with the river, but subsiding more slowly, so that they are generally impassable for more than six months in the year. The largest is Echo River, three-fourths of a mile long, and in some places 200 feet wide. The air of the cave is pure and healthful; the temperature remains constant about 54°.

Mam Tor, a Derbyshire height (1709 feet), 1¾ mile NW. of Castleton.

Man, ISLE OF, is situated in the Irish Sea, 16 miles S. of Burrow Head in Wigtownshire, 27 miles SW. of St Bees Head, and 27 E. of Strangford Lough. Its length is 33¼ miles, breadth 12½ miles, and area 145,325 acres (227 sq. m.), of which nearly 100,000 are cultivated. At the south-western extremity is an islet called the Calf of Man, containing 800 acres. A chain of mountains extends from north-east to south-west, culminating in Snaefell (2024 feet). The coast-scenery from

Maughold Head on the east, passing south to Peel on the west, is bold and picturesque, especially in the neighbourhood of the Calf, where Spanish Head, the southern extremity of the island, presents a sea-front of extreme grandeur. The Douglas Head Marine Drive was opened in 1891. Most of the island consists of clay-slate. Through the clay-schist granite has burst in two localities, in the vicinity of which mineral veins have been largely worked. Nearly 5000 tons of lead are extracted annually, some zinc, and smaller quantities of copper and iron. The principal mines are at Laxey on the east coast, and Foxdale near the west. The climate is mild and equable; myrtles, fuchsias, and other exotics flourish throughout the year. The Manx cat is tailless. The fisheries (herring, cod, &c.) afford employment to nearly 4000 men and boys. Fat cattle and wheat are shipped to English markets. Castle Rushen, probably the most perfect building of its date extant, was founded in 947. The ruins of Rushen Abbey (1154) are picturesquely situated at Ballasalla. Peel Castle, with the cathedral of St German, is a very beautiful ruin, dating from the 12th century. There are numerous so-called Druidical remains and Runic monuments; the Runic crosses, of which there are some forty, are especially numerous at Kirk Michael. The circular and artificial Tynwald Hill at St John's, near the centre of the island, is a perfect relic of Scandinavian antiquity. The towns, noticed separately, are Castletown, Douglas, the modern capital, Peel, and Ramsey. The principal line of communication is between Douglas and Liverpool, by means of a swift fleet of steamers. There is a submarine cable between Maughold Head and St Bees Head. In 1873 a railway was opened between Douglas and Peel; in 1874 to Castletown and the south; and in 1879 to Ramsey. Extensive improvements in the way of harbour-works, piers, and promenades have been carried out at Douglas, Ramsey, and Peel. Pop. (1821) 40,081; (1871) 54,042; (1901) 54,758, the smallness of the increase being due to emigration. Visitors number about 130,000 annually.

The Isle of Man was ruled by Welsh kings from the 6th until near the end of the 9th century, and then by Scandinavian kings, until Magnus, king of Norway, ceded his right in it and the Hebrides to Alexander III. of Scotland (1266). On Alexander's death the Manx placed themselves in 1290 under the protection of Edward I. of England; in 1406 the island was granted to Sir John Stanley in perpetuity, to be held of the crown of England. The Stanley family continued to rule it as Kings of Man, until 1651, when the style of Lord was adopted. On the death of James, tenth Earl of Derby, without issue in 1735, James, second Duke of Athol, descended from the seventh Earl of Derby, became Lord of Man. The Isle of Man having long been the seat of an extensive smuggling trade, the sovereignty of it was purchased by the British government, in 1765, for £70,000 and an annuity of £2000 a year, the duke still retaining certain manorial rights, church patronage, &c. The last remaining interest of the Athol family in the island was transferred to the British crown in 1829; the total amount paid for the island being £493,000. The Isle of Man forms a separate bishopric under the title of Sodor and Man, the bishopric of the Sudoreys—Scandinavian for 'Southern Isles'—having for a time been annexed to Man. The see is, for certain purposes, attached to the province of York; the bishop sits in the House of Lords, but does not vote.

The Isle of Man has home rule—its own laws, law-officers, and courts of law. The legislative body is styled the Court of Tynwald, consisting of the Lieutenant-governor and Council—the latter being composed of the bishop, attorney-general, two deemsters (or judges), clerk of the rolls, water bailiff, archdeacon, and vicar-general—and the House of twenty-four Keys, or representatives. A bill is separately considered by both branches, and on being passed by them is transmitted for the royal assent; it does not, however, become law until it is promulgated in the English and Manx languages on the Tynwald Hill. The House of Keys was formerly self-elective; but in 1866 an act was passed establishing a septennial election by the people; and another in 1880 abolished the property qualification for members, granted household suffrage in towns, £4 owner and £6 tenant franchise in the country, and conferred the suffrage on women. The armorial bearings of Man are three legs in armour conjoined at the thighs. The Manx people are of Celtic origin, with a strong dash of the Scandinavian. The language, belonging to the Goidelic group of the Celtic languages, is now but little spoken. Church service in Manx has been discontinued since the middle of the 19th century. There is no literature beyond a few songs and carols. The Prayer-book was translated into Manx in 1765, the Bible in 1772. A dictionary was compiled in 1835. Down to the middle of the 19th century the island was almost exempt from taxation, and consequently looked upon as a cheap place of residence, while its laws afforded protection to English debtors.

See works by the Rev. J. G. Cumming, Joseph Train, Brown, A. W. Moore (place-names, 1890), Hall Caine (1891 and 1894), Spencer Walpole (1893), A. W. Moore (1893 and, on a larger scale, 1900); also *Chronica Regum Mannice*, edited by Munch (Christiania, 1860); and the works published by the Manx Society (19 vols. 1858–68).

Manaar', Gulf of, between Ceylon and the Madras coast, is nearly 200 miles wide at the widest, and is closed on the north by a low reef of rocks and islands called Adam's Bridge. It is famous for its pearl-fisheries.

Manacor', a town of Majorca, in a fertile plain, 30 miles E. of Palma by rail. Pop. 12,000.

Mana'gua, the capital of Nicaragua, lies in a fertile district, on the south shore of Lake Managua, 53 miles by rail SE. of Leon. Pop. 18,000. For the lake, see Leon.

Manáos, capital of the Brazilian province of Amazonas, on the Rio Negro, 12 miles above its confluence with the Amazon. Pop. 12,000.

Manasarowar. See Tibet.

Manassas, formerly Manassas Junction, a village close to Bull Run (q.v.). The Confederates here won two victories.

Manbhum, an eastern district of Chota Nagpore (q.v.). Area, 4147 sq. m.; pop. 1,500,000.

Mancha, La (*Man'tcha*), a district of Spain, the southernmost part of the old kingdom of New Castile, comprising most of the province of Ciudad Real, with parts of Albacete, Toledo, and Cuenca. It is the country of Don Quixote.

Manche (*Mon^{g}sh*; 'sleeve'), a maritime Norman dep. of NW. France, derives its name from La Manche (the English Channel), which washes its rocky coasts. Greatest length, 81 miles; average breadth, 28 miles; area, 2289 sq. m. Pop. (1872) 544,776; (1901) 491,372. The dep. is divided into the six arrondissements of St Lô

(the capital), Coutances, Valognes, Cherbourg, Avranches, and Mortain.

Man'chester (Sax. *Mamcestre*), a municipal, parliamentary, and (since 1888) county borough of Lancashire, is situated on the east bank of the Irwell, 31 miles E. of Liverpool and 187 NNW. of London. Salford is on the opposite bank; and the two boroughs, connected by sixteen bridges (besides railway viaducts), may be considered one city. Manchester is the acknowledged centre of the greatest manufacturing district in the world, and is surrounded by a ring of populous suburban townships, many of which have by degrees been incorporated with it. Pop. (1801) 75,275; (1851) 303,382; (1871) 351,189; (1901) 543,969—or with the county borough of Salford, 764,925. In and around Manchester and Salford two-thirds of the entire cotton manufactures of the United Kingdom are located; and there are some 700 other industries practised in the district, including bleaching, dyeing, with silk-works and manufactories of all kinds of animal and vegetable fibre. Both boroughs were enfranchised by the Reform Bill of 1832, Manchester returning two members and Salford one member to parliament. The Reform Bill of 1867 gave Manchester three and Salford two members, and that of 1885 six and three members respectively.

The Cathedral, or 'Old Church' (1422), is a fine Gothic structure, and between 1845 and 1868 underwent complete restoration; it comprises a stalled choir of great beauty, a retrochoir, lady chapel, lateral chapels, chapter-house, and a tower 139 feet high, with ten bells. Besides many Anglican, Roman Catholic, and dissenting churches, Manchester has 5 Jewish synagogues, 5 German churches, a Greek church, and an Armenian church. The magnificent Gothic town-hall (1868–83), by Waterhouse, is triangular in form, built of brick, faced with freestone and granite, and cost £1,053,000. Its great hall is decorated with twelve remarkable pictures illustrating the history of Manchester, by Madox Brown. The clock-tower, 286 feet high, contains a fine peal of twenty-one bells. In the Royal Infirmary (1755) 32,000 patients are treated annually. The Royal Institution (1825–30), a noble Doric edifice by Barry, contains a gallery of paintings, a school of design, and a lecture theatre. The Royal Exchange (1864–74), an imposing building in the Italian style, has a meeting-hall with the vast area of 5170 square yards. The Free-trade Hall (1856) holds 5000 people, and stands on the scene of the 'Peterloo Massacre.' The Assize Courts (1864), by Waterhouse, are a splendid specimen of Gothic architecture, and cost £100,000. The Literary and Philosophical Society (1789) has a valuable scientific library and a chemical laboratory, and publishes memoirs. There are about seventy other societies and institutions.

The old water-supply was collected on the slopes of Blackstone Edge, distant about 20 miles; but in view of the rapid increase of the population the city council purchased Thirlmere Lake in Cumberland, from which comes, by works 100 miles long and carried out in 1885–94, a further supply of 25,000,000 gallons daily. There are now in Manchester and Salford eleven parks, with eight recreation grounds, covering altogether 300 acres. Manchester was the first borough to take advantage in 1852 of the Free Libraries Act. Manchester in 1890 received the Whitworth Institute, a park, library, and museum from the Whitworth legatees, to be incorporated with the Technical School and School of Art. The Chetham Library, founded by Humphrey Chetham in 1653, contains 30,000 volumes, with many rare and curious books and manuscripts, and was the first free library in England. Mention may be made also of the Athenæum, Royal Exchange, Portico, and Law and Foreign Libraries, &c. Among statues and monuments are those of the Duke of Wellington, Sir R. Peel, Watt, Dalton, Prince Albert, Bishop Fraser, Dr Joule, John Bright, Cobden, Humphrey Chetham, Cromwell, and O. Heywood.

The Grammar-school was founded by Hugh Oldham, Bishop of Exeter, in 1515, had a revenue of £4000 a year in 1825, and in 1868 was reorganised for 350 boys, with scholarships at Brazenose, Oxford, and St John's, Cambridge. There is also a hospital school, founded in 1651 by Humphrey Chetham, for maintaining, educating, and apprenticing forty (now 100) healthy and poor boys. Owens College (1851; chartered as an independent Victoria University, 1903) is due to the liberality of John Owens, who died in 1846, leaving by will £100,000 for the purpose; and in 1870 a further sum of £90,000 was expended on new buildings, &c. The college has professors and lecturers in the Arts, Science, and Law department, and in the Medical department, with departments for women and for evening classes, and excellent library and museum. The students number over 1100 (including about 250 women), besides evening scholars. The Technical School, with which in 1883 was incorporated the Mechanics' Institute, and in 1890 the Manchester Whitworth Institute, gives thorough technical training in theoretical and practical engineering, designing, spinning and weaving, printing, dyeing, and bleaching, metallurgy, chemistry, &c. The sanitary condition of Manchester is not a satisfactory one, and in consequence the death-rate, averaging 24 per 1000, is abnormally high; much has been done to improve matters, but the smoke nuisance remains, and the disease and death dealing river, the Irwell, which flows through a dense population, receiving sewage from more than a million persons and pollution from thousands of public works.

Manchester is mentioned as a Roman station (*Mancunium*), and was called by the Anglo-Saxons *Manigceaster*. In the 13th century there was a fulling-mill, and dyeing yarns or cloth was practised. Camden, in the reign of Queen Elizabeth, writes of it as surpassing neighbouring towns in elegance and populousness, with woollen and cotton manufactures, a church, market, and college. In 1724 Stukely describes it as 'the largest, most rich, populous, and busy village in England. Here are about 2400 families, and their trade, which is incredibly large, consists of fustians, tickings, girth-webbs, and tapes.' The great revolution in the industrial life of England—the development of the factory system—began here about the middle of the 18th century, and was accompanied by the application of many inventions, notably the steam-engine, to the service of man. In 1720 the Irwell was made navigable. In 1762 the Bridgewater Canal put Manchester in communication with the coalfields of Lancashire and the salt-mines of Cheshire, and made an outlet to the sea. In 1830 Manchester had its first perfect railway. To render 'Cottonopolis' an inland seaport, the gigantic work of making a ship-canal from Eastham near the mouth of the Mersey, a distance of 35½ miles, was carried out in 1887–94, at a cost of £15,500,000. A perfect network of railways and canals radiates from Manchester in all direc-

tions. It became a city and the see of a bishop in 1847, and since 1893 its mayor is officially lord-mayor. The Anti-corn-law League had its origin here; and the *Manchester School* was a party of English Radicals, including Cobden, Bright, and Milner Gibson, which identified itself with free-trade principles and resistance to government interference (as with factory labour), supported a policy of *laissez faire*, and in foreign affairs was a peace party, insisting strongly on non-intervention. See works on Manchester by Whitaker (1771), Prentice (1850-53), Reilly (1861), Proctor (1880), Axon (1886), Saintsbury (1887), Crowther (1894), and Perkins (1901).

Manchester, (1) the largest city of New Hampshire, stands mostly on the east bank of the Merrimac River, 16 miles S. of Concord, and 59 NNW. of Boston. Its principal streets are wide and shaded with elms, and it has several public parks. The river here falls 54 feet, affording abundant water-power. The chief industry is the manufacture of cottons and woollens; but locomotives, fire-engines, sewing-machines, wagons, edged tools, boots and shoes, paper, &c. are also manufactured. Manchester is the seat of a R. C. bishop. Pop. (1870) 23,536; (1900) 56,987.—(2) A town of Connecticut, on the Hockanum River, 9 miles by rail ENE. of Hartford, with manufactures of cotton, woollens, silk, paper, &c. Pop. 10,600.—(3) A manufacturing town of Virginia, on the James River, opposite Richmond. Pop. 9746.

Manchuria, or the country of the Manchus, is the north-easternmost division of the Chinese empire, bounded by the river Amur, the Usuri, the Russian Maritime Province, Corea, the Yellow Sea, and Mongolia. It embraces three provinces —Moukden, Heilung-chiang, and Kirin. Total area, 280,000 sq. m.; pop. 21,000,000. The east and centre are largely occupied by the Long White Mountains (8000 feet), whilst the northern province is crossed by the Chingan Mountains. The central parts of the country are watered by the Sungari, which after a course of 850 miles joins the Amur. The hills are rich in timber, pines predominating; in minerals, chiefly gold, silver, coal, and iron; and in fur-bearing and other animals. The rivers swarm with salmon and trout. The climate is temperate in summer (May to September), but very severe in winter. The soil is extremely fertile. Of the population perhaps a million are Manchus, the rest being Chinese immigrants. The principal towns are Moukden, the capital; Kirin; Harbin (or Kharbin), junction of the terminal lines of the Siberian railway; New-chwang (q.v.); besides Port Arthur and Dalny, under Japanese rule. The Russian occupation of northern Manchuria was a main cause of the Russo-Japanese war (1904–5), of which southern Manchuria was the main theatre. The religions dominant are those found in China, though the original creed of the Manchus was Shamanism. In the 17th century a Manchu chief ascended the throne of China, and founded the reigning Chin dynasty. French Catholics have had missions in Manchuria since 1838, and Presbyterians since 1861. See books by Hosie (1901) and Whigham (1904).

Man'dalay, the capital of Upper Burma, stands 2 miles from the left bank of the Irawadi, a little N. of Amarapura, the former capital, and 410 miles by rail (1889) N. of Rangoon. Founded in 1860, it was the capital of independent Burma until its capture by the British in 1885. Silk-weaving is the chief industry; the others are gold and silver work, ivory and wood carving, bell and gong casting, and knife and sword making. In 1886 one-tenth of the city was burned to the ground, and an inundation of the river caused immense damage; in 1892 two-thirds of the city were burned. Pop. 198,815.

Mandogarh, or MANDU', a ruined city of India, formerly capital of the Mohammedan kingdom of Malwa, 15 miles N. of the Nerbudda, and 38 SW. of Indore. The ruins stretch for 8 miles along the crest of the Vindhya Mountains.

Manduria, a town of southern Italy, 22 miles E. by S. of Taranto; pop. 13,120.

Mandvi, the seaport of Cutch, in India, on the north shore of the Gulf of Cutch; pop. 28,155.

Manfredonia, a seaport of Italy, on a bay of the Adriatic, 23 miles by rail NE. of Foggia. Founded by Manfred in 1261 from the ruins of ancient Sipontum, it has an old castle and a cathedral. Pop. 12,200.

Mangalore, a seaport and military station in South Kanara district, Madras. A clean, picturesque town, embosomed in cocoa-nut palm groves, it ships much coffee, has a R. C. cathedral and college, and is also the headquarters in India of the Basel Lutheran Mission. Thrice sacked by the Portuguese in the 16th c., Mangalore was taken by Hyder Ali in 1763. In 1784 its English garrison yielded to Tippoo Sultan after a nine months' siege. British since 1799, it was burned by the Coorg rebels in 1837. Pop. 44,922.

Manhattan Island, the island on which the great part of New York City stands.

Manica (*Manee'ca*), a gold-field long worked by the Portuguese, 130 miles NW. of the port of Beira at the mouth of the Pungwe River, whence a railway was making in 1894. It is now mostly included with Mashonaland (q.v.), in the British South Africa Company's territory. Part is Portuguese.

Manihiki Islands (*Mannyhee'kee*), a group of low, wooded atolls, scattered over the central Pacific, between the Marquesas and Union groups. Total area, 55 sq. m.; pop. 1900. Most of them (Caroline, Malden, Starbuck, Penrhyn, Humphrey, Vostok, Flint, &c.) belong to Britain.

Manila (*Manee'la;* often spelt *Manilla*), chief town of the Philippine Islands, stands on a wide bay on the south-west coast of Luzon, 650 miles SE. of Hong-kong, with which city it has been connected by telegraph since 1881. On the south bank of the little Pasig River stands the sleepy old town (founded in 1571), with the archbishop's palace, churches and monasteries, the cathedral, university, Jesuit observatory, arsenal, and barracks. On the north bank are the modern suburbs, Binondo, &c., the commercial and native quarters, with the palace of the governor-general, &c. There was a great fire in May 1893, and the city is specially liable to visitations of earthquakes, typhoons, and thunder-storms. The heat is great, the mean for the year being 82° F. The total pop. is estimated at nearly 300,000, including some 70,000 Chinese and 7000 Spaniards. Cigars and tobacco, sugar, the so-called Manilla hemp or abaca, and coffee are the chief exports, and cotton goods, rice, wine, silk, and flour the imports. In Manila Bay in 1898 Dewey destroyed the Spanish fleet, and since the American occupation of the Philippine Islands, the city, still the capital, has been cleansed and paved, electric light has been introduced, and harbour improvements carried out.

Manipur, a native state in the north-east of India, occupying some 8000 sq. m. of for the most

part heavily timbered mountain-land between Burma, Assam, Chittagong, and Cachar; pop. about 284,000—mainly Kukis and semi-Hindu hill and forest tribes—collected most thickly in one valley, 650 sq. m., situated 2500 feet above sea-level. Most of the work in the country is performed by women. The men are incorrigibly lazy, but passionately fond of the game of polo.—The *capital*, called Manipur, also Imphail, is a vast group of suburban residences, situated in the midst of a large forest; pop. 67,100. In March 1892 a British force of 470 men, that had been sent to depose the rebellious 'senaputti' or commander-in-chief, was forced to retire, after the chief commissioner and four others had been treacherously murdered. In April General Graham avenged this outrage, and the 'senaputti' was hanged.

Manitoba (originally *Manit'oba;* now usually *Manito'ba*), a province of Canada, bounded by Saskatchewan, Keewatin, Ontario, and on the S. by Minnesota and North Dakota in the United States. Area, 74,000 square miles; population (1886) 108,640; (1901) 254,947 (65,310 Presbyterians, 44,874 Anglicans, 35,622 Catholics, &c.). The chief towns are Winnipeg (42,340), Brandon, and Portage la Prairie. The province is traversed by several rivers, among others the Assiniboine, with its many tributaries, the Souris, Pembina, Red River, &c. The Winnipeg River flows for 60 or 70 miles through the eastern portion of the province into Lake Winnipeg. The principal lakes are Winnipeg, 8500 sq. m.; Manitoba, 1900 sq. m.; and Winnipegosis, 1936 sq. m. The country consists for the most part of a level plain, with occasional undulations. The summer mean temperature is 65° to 70°—nearly the same as that in the state of New York. In winter the thermometer occasionally, but very rarely, sinks to 30°, 40°, and 50° below zero. The atmosphere is bright and dry, and the cold is not so much felt as in many countries with a higher temperature and a more humid atmosphere. Very little snow falls on the prairies, the average depth being about 18 to 24 inches; the native horses graze out of doors all the winter. The soil is of remarkable depth and fertility, and in favourable seasons the crops are large. Vegetables and roots are unusually prolific and of great size. Wheat-growing was for some few years the staple industry; but the farmers are now engaged more in mixed farming, including dairy-farming and the raising of cattle and sheep. In minerals the province is not very rich, but coal is found in southern Manitoba. Big game is still found in the less accessible parts of the province—moose, bear, and some kinds of deer. Small game is plentiful—principally prairie chicken and wild duck. A considerable fishing industry is carried on in the rivers and lakes. The government is administered by a lieutenant-governor, appointed by the governor-in-council. He is assisted by an Executive Council and a Legislative Assembly of 40 members elected by the people. There is only one House of Parliament in Manitoba. The province is represented by four members in the Dominion Senate, and by seven in the House of Commons. Keewatin (q.v.) is under the Lieutenant-governor.

Manitoba is in communication by rail with the Atlantic seaboard and the Pacific, and with all parts of Canada and the United States. The construction of the Canadian Pacific Railway—completed in 1885—has naturally been of immense advantage to the province. A railway is projected from Winnipeg to Hudson Bay. Until 1868 what is now known as Manitoba formed a portion of the territory under the control of the Hudson Bay Company, and hither in 1812 the Earl of Selkirk brought a party of Highland settlers. In 1868 the company gave up their rights, on certain conditions—among others a money payment of £300,000 and a considerable grant of land. The province was constituted by an Act of 1870. The Riel rebellion in 1869–70 arose out of a feeling of some of the inhabitants that their rights had not been considered in the transfer. See books on Manitoba by Bryce (1882), Christie (1885), Macoun (1883), and Legge (1893).

Manitou, a summer-resort at the base of Pike's Peak, Colorado, 6296 feet above sea-level. It is the Saratoga of the west, with soda springs and several large summer hotels. Pop. 1300.

Manitoulin Islands, a chain of wooded islands in Lake Huron, separating it from Georgian Bay. The chief are Grand Manitoulin (80 by 28 miles), Cockburn Isle, and Drummond Isle; the last belongs to Michigan, the rest to Ontario.

Manitowoc', capital of Manitowoc county, Wisconsin, at the mouth of the Manitowoc River, on Lake Michigan, 77 miles by rail N. of Milwaukee. It has a good harbour, and carries on shipbuilding, lumber-sawing, and the manufacture of furniture, machinery, &c. Pop. 11,800.

Manka'to, capital of Blue Earth county, Minnesota, on the right bank of the Minnesota River, 86 miles SW. of St Paul. It has a state normal school, R. C. college, &c. Pop. 10,600.

Mannheim (*Mann'hīme*), once capital of the Rhenish Palatinate, and now the chief trading-town in Baden, on the right bank of the Rhine, here joined by the Neckar, 53 miles S. of Frankfort. The town is remarkable for its cleanliness and regularity. The palace (1720–29) is one of the largest in Germany, covering 15 acres, with a façade 580 yards long, and 1500 windows. The Schillerplatz is adorned with colossal statues of Schiller, Dalberg, and the actor and dramatist Iffland (1759–1814). There are manufactures of iron, cigars, carpets, india-rubber, &c. Pop. (1875) 46,453; (1900) 141,131, of whom about 50,000 were Catholics. Mannheim was a mere village till 1606, when a castle was built by the elector-palatine, around which a town grew up, peopled chiefly by Protestant refugees from the Low Countries. It was totally destroyed by the French in 1689, rebuilt and strongly fortified, and in 1795 severely bombarded by the Austrians.

Manningtree, an Essex town, on the tidal Stour, 8¾ miles NE. of Colchester. Pop. 900.

Manorbier, a ruined castle on the Pembrokeshire coast, 5 miles ESE. of Pembroke. It was the birthplace of Giraldus Cambrensis.

Manorhamilton, a market-town of Leitrim, 23½ miles E. of Sligo. Pop. 870.

Manor Water, a Peeblesshire stream, running 10½ miles N. by E. to the Tweed, 1¾ mile WSW. of Peebles. Manor parish was the home of the 'Black Dwarf.'

Manresa, a town of Spain, on the Cardoner, 41 miles by rail NW. of Barcelona. It has a fine church (1020–15th century), the cave of Ignatius Loyola, and manufactures of cotton, broadcloths, brandy, &c. In 1811 it was fired by Marshal Macdonald. Pop. 23,835.

Mans, Le (*Mon*^{g}), a picturesque city of France, the capital formerly of the province of Maine, and now of the dep. of Sarthe, on the left bank of the river Sarthe, 132 miles SW. of Paris by rail. The cathedral, 390 feet long, has a Romanesque nave of the 11th and 12th centuries, and a match-

less Pointed-Gothic choir of the 13th century, 104 feet high, with splendid stained glass. In the right transept is the monument of Berengaria, Cœur-de-Lion's queen. Le Mans does a large trade in poultry and clover-seed, and manufactures candles, woollens, lace, soap, &c. Pop. (1872) 42,654; (1901) 56,700. The *Cenomanum* of the Romans, and the birthplace of Henry II. of England, Le Mans witnessed in 1793 the dispersion of 10,000 Vendéans; and in 1871 the defeat, after a stubborn resistance, of 100,000 Frenchmen under Chanzy by Prince Frederick-Charles. A statue of Chanzy was erected in 1885, and one of the naturalist Belon in 1887.

Mansfield, a municipal borough (incorporated 1891) of Nottinghamshire, in Sherwood Forest, 17 miles N. of Nottingham. Its grammar-school (1561) has been rebuilt at a cost of £10,000; and there are a memorial cross (1850) to Lord George Bentinck, a town-hall (1836), an interesting parish church, &c. Mansfield stands in the centre of a mining district, and manufactures lace-thread and iron. Pop. (1851) 10,012; (1901) 21,445. See Harred's *History of Mansfield* (1801).

Mansfield, capital of Richland county, Ohio, 179 miles by rail NE. of Cincinnati. It has iron-foundries and manufactories of flour, agricultural implements, stoves, tiles, &c. Pop. 18,473.

Mansourah, a town of Lower Egypt, on the Damietta branch of the Nile, 30 miles SW. of Damietta by rail. Pop. 36,942. The place was founded in 1220, and here St Louis of France was imprisoned in 1250.

Mantchuria. See MANCHURIA.

Mantes (*Mont'*), a town in the French dep. of Seine-et-Oise, on the Seine's left bank, 36 miles by rail WNW. of Paris. It has a striking tower (1344) and a beautiful church, a reduced copy of Notre Dame at Paris. The Celtic *Medunta*, Mantes in 1083 was sacked by William the Conqueror, who here received the injury that caused his death; and here too Henry IV. was converted from Protestantism. Pop. 7832.

Mantine'a, an ancient city of Arcadia, in the Peloponnesus, on the river Ophis. Here Epaminondas fell in the moment of a great victory over the Spartans, 362 B.C.

Mantua (Ital. *Man'tova*), a strongly fortified city of northern Italy, formerly capital of a duchy, 38 miles by rail N. of Modena and 25 S. by W. of Verona. It occupies two islands formed by the Mincio, and, standing in the midst of a marshy district, is one of the four fortresses of the Quadrilateral. Chief amongst the buildings are the ducal palace, dating from 1302; the Palazzo Te, outside the city walls on the south, the greatest monument to the skill of Giulio Romano as architect, painter, and sculptor; the cathedral of San Pietro; and the church of San Andrea, one of the finest Renaissance churches in Italy, containing the tomb of Mantegna. There are an academy of arts and sciences, a library with 80,000 vols. and 1000 MSS., a museum of antiquities, an observatory, &c. Virgil was born at Pietole (anc. *Andes*), now a suburb of Mantua. The industries include weaving, tanning, and saltpetre-refining. Mantua, an Etruscan town, was successively held by Romans, Ostrogoths, and Lombards, and from 1328 till 1708 was governed by the Gonzaga family. The last duke dying childless, his duchy was confiscated by Austria, who retained it till 1866. Pop. 30,000 (some 4000 Jews).

Manytch. See ASIA, p. 52.

Manzanares. See MADRID.

Manzanilla, (1) a port of Mexico, on a fine bay opening to the Pacific, 31 miles by rail WSW. of Colima. Pop. 4000.—(2) A port on the south coast of Cuba. Pop. 15,000.

Mapledurham, (1) Hampshire, 2 miles SW. of Petersfield, the seat of Gibbon the historian.—(2) Oxfordshire, on the Thames, 3½ miles NW. of Reading, a fine Tudor mansion (1523).

Mar, an ancient district of Scotland, between the Dee and the Don, comprising nearly the south half of Aberdeenshire, and subdivided into Braemar, Midmar, and Cromar.

Maracaybo (*Marakī'bo*), a fortified city of Venezuela, on the west shore of the strait which connects the lake and gulf of Maracaybo. It is a handsome town, with many gardens and squares, a college, theatre, German club-house, &c. The trade is chiefly in the hands of Germans, Danes, and North Americans. The staple exports are coffee, boxwood, lignum vitæ, cedar, and other woods, hides and skins. Pop. 44,284.—The Gulf of Maracaybo is a wide inlet of the Caribbean Sea, connected with the fresh-water Lake of Maracaybo, which is shut in by lofty mountains, and though deep is difficult of entrance by reason of a bar.

Maragha, a town of western Persia, 55 miles S. of Tabriz. Pop. 15,260.

Marajó, a low, fertile island (17,860 sq. m.) between the Amazon and Para estuaries.

Maranham', or MARANHÃO, a maritime state of Brazil, bounded N. by the Atlantic. Area, 177,566 sq. m.; population, 431,000.—The chief city is Maranham, or San Luiz de Maranham, on an island between the mouths of the Mearim and Itapicurú. It has a cathedral, a technical school, sugar and cotton factories, and docks that admit ships drawing 14 feet. The exports are cotton, sugar, hides, gum, balsam, cotton-seed, india-rubber, &c. Pop. 40,000.

Marañon. See AMAZON.

Marash, a town of Asiatic Turkey, 80 miles NE. of Alexandretta, its port. It is a market for Kurt carpets and embroideries. Hittite antiquities have been discovered. Pop. about 50,000.

Mar'athon, a village on the east coast of ancient Attica, 22 miles NE. of Athens. It stood in a plain 6 miles long and from 3 to 1½ miles broad, between the sea and the mountains, and saw the great defeat of the Persian hordes of Darius by the Greeks under Miltiades (490 B.C.).

Marazi'on, or MARKET-JEW, a Cornish watering-place, on Mounts Bay, 3½ miles E. by N. of Penzance. Pop. of parish, 1342.

Marblehead, a seaport of Massachusetts, 18 miles NE. of Boston. Pop. 9202.

Marburg (*Mar'boorg*), a quaint old town in the Prussian province of Hesse-Nassau, on the Lahn, 59 miles by rail N. of Frankfort. It is built on a terraced hill, whose summit is crowned by a stately castle, dating from 1065, in which was held in 1529 a conference between the Wittenberg and the Swiss reformers. The fine Gothic church with two towers 243 feet high, was built in 1235–83 by the Teutonic Knights over the splendid shrine of St Elizabeth. The university occupies new Gothic buildings of 1879. It was founded in 1527 for the Reformed Church; and among its earliest students were Patrick Hamilton and William Tyndale. It has 800 to 1000 students. Pop. 18,000.—(2) A town of Austria-Hungary, on the Drave, 30 miles NE. of Gratz. It is the seat of a bishop, and has notable schools and manufactories. Pop. 24,500.

March, a market-town of Cambridgeshire, on the Nen, 14 miles E. of Peterborough and 16 NW. of Ely. Pop. 7570.

March (*Marhh;* Slav. *Morava*), the principal river of Moravia, rises on the boundary with Prussian Silesia, and flows 214 miles south to the Danube, 6 miles above Presburg.

Marchena (*Marchay'na*), a town of Spain, 47 miles by rail E. by S. of Seville, with a ducal palace and sulphur-baths. Pop. 14,154.

Marcianisi (*Marchanee'zee*), a town of Italy, 18 miles by rail N. of Naples. Pop. 11,083.

Mardin, a town of Asiatic Turkey, 60 miles SE. of Diarbekir. Pop. 15,000.

Maree', Loch, a beautiful lake of Ross-shire, 40 miles W. of Dingwall. Lying 32 feet above sea-level, it is 12½ miles long, 3 furlongs to 2¼ miles broad, 360 feet deep, and 11 sq. m. in area. It is overhung by mountains 3000 feet high; sends off the Ewe, 3 miles long, to the sea; and contains twenty-seven islets, one with remains of an ancient chapel and a graveyard. Queen Victoria stayed here in 1877.

Marem'ma (corrupted from *Marittima*, 'seaboard'), a marshy region of Italy, extending along the Tuscan sea-coast from the Cecina to Orbitello, and about 1900 sq. m. in area.

Maren'go, a village of northern Italy, in a marshy district near the Bormida, 3 miles SE. of Alessandria. Here, on 14th June 1800, Napoleon defeated the Austrians.

Mareo'tis, or Mareia, Lake, the modern *El Mariût*, a salt lake or marsh of Egypt, extends southward from Alexandria, and is separated from the Mediterranean by a narrow isthmus of sand. In the 15th and 16th centuries it was a navigable lake; in 1798 the French found it a dry sandy plain; but in 1801 the English army cut the dikes of the canal that separated it from the Lake of Aboukir, to cut off the French water-supply, and Mareotis became once more a marsh. The like happened again in 1803, in 1807, and in 1882, when the sea was introduced directly through a cutting 15 feet wide and half a mile long.

Margarita (*Margaree'ta*), an island in the Caribbean Sea, belonging to Venezuela. Area, 380 sq. m.; pop. 40,000. Discovered by Columbus in 1498, Margarita was long famous for its pearl-fisheries, but now its chief export is salted fish.

Margate, a seaport and municipal borough in the Isle of Thanet, Kent, 3 miles W. of the North Foreland and 74 E. by S. of London, is the favourite seaside resort of London holiday-makers, who, during the season, by rail and by steamer, pour into the town in their thousands. Possessed of many natural advantages in its bracing air, good bathing, and excellent firm sands, Margate offers besides all the customary attractions of a watering-place, with its pier (900 feet long), jetty (over ¼ mile long), theatre, assembly-rooms, baths, zoological gardens, &c. It contains also two interesting churches—one exhibiting traces of Norman and Early English work, and the other with a tower of 135 feet, forming a conspicuous landmark; the Royal Sea-bathing Infirmary (1792; enlarged 1882); a town-hall (1820); and an extensive deaf and dumb asylum (1875–86). Queen Victoria visited the town in 1835, where too Turner the painter was at school. Pop. (1801) 4766; (1901) 23,057.

Margaux (*Mar-go'*), a village 15 miles by rail NNW. of Bordeaux, near the Gironde's left bank. Its château (a handsome Italian villa) and celebrated vineyards are ½ mile distant. Pop. 1819.

Marghilan, capital of Ferghana (q.v.).

Marianna, an episcopal city of Brazil, 3 miles E. of Ouro Preto. Pop. 5000.

Marianne Islands. See Ladrones.

Maria-Theresiopel. See Szabadka.

Mariazell (*Maree'atzell'*), the most famous place of pilgrimage in Austria, in the extreme north of Styria, 25 miles N. of Bruck and 60 SW. of Vienna. The image of the Virgin (brought here in 1157) is enshrined in a magnificent church, rebuilt in 1644. Pop. 1165.

Marie Galante (*Maree' Galon't*), a wooded coral French island, in the West Indies, discovered by Columbus in 1493, lies 17 miles SE. of Guadeloupe. Area, 58 sq. m. Sugar, coffee, cocoa, and cotton are exported. Pop. 15,000. Chief town, Grandbourg or Marigot, on the SW. coast.

Marienbad (*Maree'enbad*), one of the most frequented of the Bohemian spas, 47 miles by rail NW. of Pilsen, and 2057 feet above sea-level. Its saline springs (48°–54° F.) had long been used, both internally and as baths, by the people of the vicinity, but it is only since 1807–8 that it has become a great health-resort. The waters are largely exported. Marienbad is surrounded by wooded heights, has a pop. of 5000, and is visited every season by over 14,000 patients.

Marienberg, a mining-town of Saxony, 38 miles SW. of Dresden. Pop. 7139.

Marienburg (*Maree'enboorg'*), a Prussian town, on the Nogat, 30 miles by rail SSE. of Danzig. From 1309 till 1457 it was the headquarters of the Teutonic Order, and thereafter till 1772 belonged to Poland. The Gothic castle (1274) was restored in 1817–42. Pop. 10,736.

Marienwerder (*Maree'enver'der*), a town of West Prussia, 3 miles E. of the Vistula and 55 by rail S. of Danzig. It was founded in 1233 by the Teutonic Knights, and has an old castle and a minster (1384). Pop. 9679.

Marietta, capital of Washington county, Ohio, on the Ohio River, 105 miles SE. of Columbus. Founded in 1788, it is the seat of a college (1835), trades in the neighbouring petroleum, and has remains of the earth-builders. Pop. 13,350.

Marinette, a town of Wisconsin, on Green Bay, at the mouth of the Menominee River, 177 miles by rail N. of Milwaukee, with a busy trade in lumber, &c. Pop. 18,000.

Marino (*Maree'no*), a town on the Alban Hills, 21 miles SE. of Rome, has an old castle of the Colonnas, and a cathedral. Pop. 6071.

Marion, (1) capital of Grant county, Indiana, on Mississinewa River, 157 miles by rail SE. of Chicago, with foundries, lumber-mills, &c. Pop. 17,500.—(2) Capital of Marion county, Ohio, 46 miles by rail N. of Columbus, with manufactures of machinery, farm implements, &c. Pop. 11,900.

Mariposa, a central county of California, with the Sierra Nevada on its north-east border. It contains the Yosemite Valley, besides a grove of giant sequoias.

Marisco Castle. See Lundy.

Maritime Province (*Primorskaya*), part of eastern Siberia, extending along the Pacific from Corea to the Arctic Ocean, and including Kamchatka and north Saghalien; with a length of 2300 miles, and the enormous area of 730,000 sq. m. (nearly four times the size of Germany).

Maritza (anc. *Hebrus*), a river of European Turkey, rises in the Balkans, and flows 270 miles E. by S. and S. by W. past Philippopolis and Adrianople to the Gulf of Enos in the Ægean.

Maritzburg. See PIETERMARITZBURG.

Mariu'pol, the seaport for the south Russian coalfield, on the Sea of Azov, 65 miles W. of Taganrog. It was founded in 1779 by Greek emigrants from the Crimea. Pop. 18,980.

Market-Bosworth. See BOSWORTH.

Market-Deeping, a Lincolnshire town, on the Welland, 7½ miles SSE. of Bourn. Pop. 980.

Market-Drayton, or DRAYTON-IN-HALES, a town of Shropshire, on the Tern, 18 miles NE. of Shrewsbury. It has a grammar-school (1554) and a church dating from the 12th century, up whose spire Clive clambered as a boy. At Bloreheath, 3 miles to the east, the Yorkists won a victory in 1459. Pop. of parish, 5089. See works by Lee (1861) and Marshall (1884).

Market-Harborough, a market-town of Leicestershire, on the river Welland and the Union Canal, 16 miles SE. of Leicester, 18 N. of Northampton, and 84 NNW. of London. It has traces of a Roman camp; a fine Perpendicular church, built by John of Gaunt as an atonement for his intrigue with Catharine Swynford, with a broach spire 154 feet high; a corn exchange (1858); and a grammar-school (1614; restored 1869). Charles I. slept here before Naseby. Situated in a rich grazing country, it is a famous hunting-centre, and gives title to one of Whyte-Melville's novels. Pop. (1851) 2325; (1901) 7735. See works by John H. Hill (1875) and J. E. Stocks (1890).

Markethill, a town of Armagh, 13 miles NW. of Newry. Pop. 750.

Market-Jew. See MARAZION.

Market-Rasen, a market-town on the Rasen, 15 miles NE. of Lincoln. Pop. 3000.

Market-Weighton, a town of Yorkshire, 19 miles ESE. of York. Pop. of parish, 1767.

Markinch, a town of Fife, 11½ miles SSW. of Cupar. Pop. 1497.

Markirch (*Mar-kirhh;* Fr. *Ste-Marie-aux-Mines*), a town of Upper Alsace, on the Leber, 40 miles SW. of Strasburg by rail, with important cotton and woollen mills. Pop. 11,421.

Marlborough (*Mol'bro*), an interesting market-town of Wiltshire, pleasantly situated in the valley of the Kennet, near Savernake Forest, 75 miles W. of London and 11 SSE. of Swindon. Its broad High Street contains some picturesque houses, and at the east end is St Mary's Church with the town-hall (1790); at the west St Peter's with the college. Near the latter is a British mound, on which early in the 12th century Bishop Roger of Salisbury built a castle. This afterwards became a royal residence; and here in 1267 Henry III. held the parliament which enacted the 'Statutes of Marleberge' for restoring good government after the Barons' wars. An ancient municipal borough, Marlborough, till 1867, returned two members, and till 1885 one. Pop. (1851) 3460; (1901) 3046.—Marlborough College was incorporated in 1845, and obtained an additional charter in 1853; the number of pupils is between 500 and 600, about 70, sons of clergymen, being on the foundation. The nucleus of the college buildings was formerly a famous coaching-house; and their special glory is the new Early Decorated chapel, with apsidal chancel, completed in 1886, at a cost of £30,000. William Morris was a Marlborough boy. See works by Waylen (1854), Hulme (1881), Bradley (1893), and Lockwood (1893).

Marlborough, a provincial district of New Zealand, in the north-east corner of the South Island, 130 miles long by 30 broad; area, 3,051,920 acres, of which 200,000 are agricultural land and 1,300,000 pastoral. Amongst the minerals are gold, antimony, copper, and coal. Pop. 12,767.

Marlborough, a Massachusetts town, 38 miles by rail W. of Boston, with boot-factories, machine-works, &c. Pop. 13,805.

Marlow, GREAT, a town of Bucks, on the Thames, 29 miles W. of London by rail, has manufactures of lace and paper, an iron suspension bridge, a house where Shelley lived in 1817, and a grammar-school. It returned two members till 1867, and one till 1885. Pop. of parish, 4530.

Mar'mora, SEA OF (anc. *Propontis*), separating European from Asiatic Turkey, and communicating with the Ægean by the Dardanelles, with the Black Sea by the Bosphorus. It is 175 miles long, 50 broad, 4499 sq. m. in area, and 4250 feet in maximum depth. The Gulf of Ismid extends 30 miles eastwards into Asia. The largest of the islands is Marmora or Marmara (area, 50 sq. m.), famous for its marble and alabaster.

Marne (*Marn*), a river of France, rises in the plateau of Langres, and flows 326 miles NW. and W. past Châlons and Épernay to the Seine at Charenton, a few miles above Paris. It is navigable for 126 miles up to St Dizier.

Marne, a dep. of NE. France formed out of the old province of Champagne, is traversed by the river Marne, and to a less extent by the Seine and Aisne. Area, 3159 sq. m.; population, 432,000. Its arrondissements are Châlons-sur-Marne (the capital), Épernay, Rheims, Sainte-Ménéhould, and Vitry-le-François.

Marne, HAUTE, a dep. of NE. France, formed chiefly out of the old province of Champagne, and embracing the upper basins of the Marne and Meuse. Area, 2402 sq. m.; population, 225,000. There are three arrondissements, Chaumont (the capital), Langres, and Vassy.

Marnoch, a Banffshire parish, 8½ miles NNE. of Huntly. It figures in Disruption annals.

Marocco. See MOROCCO.

Maros-Vasarhely, capital of the Szekler districts in Transylvania, on the Maros, a tributary of the Theiss, 28 miles SE. of Klausenburg. It has a castle. Pop. 19,883.

Marple, a Cheshire town, 4 miles SE. of Stockport. Bradshaw the regicide was a native. Pop. 5600.

Marquesas Islands (*Markay'sas*), or MENDANAS, a volcanic group in Polynesia, since 1842 a French protectorate, N. of Tuamotu or Low Archipelago, between 8° and 11° S. lat. and 138° and 141° W. long. The name strictly applies to four or five islands discovered by Mendaña in 1595, but usually includes now the Washington group of seven islands, to the north-west. Total area, 492 sq. m. In Cook's time (1774) there were 100,000 inhabitants, but in 1838 they had decreased to 20,000, and now to 5000.

Marquette, capital of Marquette county, Michigan, on the S. shore of Lake Superior, 430 miles by rail N. of Chicago. It has a R. C. cathedral, foundries, blast-furnaces, sawmills, machine-shops, and a slate-quarry. Pop. 9993.

Marsala (*Marsá'la;* anc. *Lilybæum*), a seaport on the westernmost point of Sicily, 102 miles by rail and 55 as the crow flies SW. of Palermo. It has a citadel, a cathedral, and a large trade in wine, the well-known sherry-like Marsala. It got its present name from the Saracens, who occupied it in the 9th c., but were expelled by

the Normans in the 11th. The harbour, filled up in 1567 to prevent a Turkish attack, was reconstructed during the 19th c. Garibaldi landed here in 1860. Pop. 50,750.

Marsden, a town of Yorkshire, on the Colne, 7 miles SW. of Huddersfield. It has woollen, cotton, and silk factories. Pop. 4855.

Marseilles (usu. *Marsayles'*; Fr. *Marseille*), the third city of France, and the chief town of the dep. Bouches-du-Rhône, is situated on the south coast, about 27 miles E. of the mouth of the Rhone, and 536 by rail SSE. of Paris. It is the principal commercial port of France, if not of the entire Mediterranean. Wheat, oil-seeds, coal, wine, spirits, beer, sugar, maize, oats, barley, coffee, oils, pepper, flour, and tallow are the chief imports; whilst the exports comprise clay tiles, wheat, oil-cakes, flour, sugar, oil, wine and spirits, soap, and candles. Marseilles is the headquarters of the Messageries Maritimes and other great French companies. The old harbour, a natural basin of nearly 70 acres, runs into the heart of the city; to the W. of it new docks, quays, and warehouses extend fully a mile along the shore, and cover a hundred acres; between these and a breakwater is an outer roadstead; and there are also dry-docks, slips, &c. Soap, vegetable oils, oil-cake, soda, sugar, macaroni, iron, lead, zinc, tiles, and leather are manufactured. The city of Marseilles is built on the slopes that overlook the old harbour, and at the foot, and has of late years extended to the south-east. Its buildings include the cathedral, built in the form of a Byzantine basilica (1852-93); the pilgrimage church (1214; rebuilt 1864), with an image of the Virgin greatly venerated by sailors; the church of St Victor (1200), with crypt and catacombs of the 11th century; the health office of the port, with fine paintings by Vernet, David, Gérard, and Guérin; the museum of antiquities, in the Château Borély; the Longchamp palace, a very fine Renaissance building (1870), with picture-gallery and natural history museum; the public library, with 95,000 volumes and 1530 MSS. There are also a botanical and a zoological garden, a marine and an astronomical observatory, a faculty of sciences, and schools of medicine, fine arts, Oriental languages, music, commerce, hydrography. Pop. (1861) 260,910; (1886) 376,143; (1901) 474,326, including a colony of 90,000 Italians.

Marseilles was founded by Phoceans from Asia Minor about 600 B.C., and down to 300 A.D. was a centre of Greek civilisation. The Greeks called it *Massalia*, the Romans *Massilia*. It supported Pompey against Cæsar, but was taken by the latter in 49 B.C., after an obstinate defence. During subsequent ages it fell into the hands of the Saracens (9th c.), Charles of Anjou (13th c.), Alphonso V. of Aragon (1423), and Henry III. of France (1575). In 1112 it had become a republic; but in 1660 it was deprived by Louis XIV. of the privileges it had enjoyed as a free port almost from its foundation. The years 1720-21 are memorable for the devastations of the plague, when nearly half the population of 100,000 perished. Marseilles was the scene of stirring events in 1792-93, and sent large bands of cut-throats to Paris; in 1871 it proclaimed the commune. In August 1885 there were 1250 deaths from cholera; but the insanitary condition of the place has, it is hoped, been remedied by the great drainage works inaugurated in 1891. Marseilles was the birthplace of Pytheas, Petronius, Thiers, and the sculptor Puget.

Marshall, capital of Harrison county, Texas, 40 miles W. of Shreveport. It has railway machine-shops, foundries, &c. Pop. 7907.

Marshall Islands, a group in the western Pacific, annexed by Germany in 1885. Bisected by 10° N. lat., and having the Caroline group to the west, it consists of two parallel chains of low coral-reefs—one, the Ratak group, consisting of thirteen islands (48 sq. m.); the other, the Ralik group, eleven islands (107 sq. m.). Copra is the only export. Pop. 13,600.

Marshalltown, capital of Marshall county, Iowa, near the Iowa River, 50 miles NE. of Des Moines. Pop. 11,550.

Marshfield, a Gloucestershire town, on the Cotswolds, 11½ miles E. of Bristol. Pop. 1250.

Marshfield, in Wisconsin, is 185 miles NW. of Milwaukee. Pop. 5500.

Marsivan', a town of Asia Minor, 23 miles NW. of Amasia. Pop. 15,000.

Marske-by-the-Sea, a Yorkshire watering-place, 3 miles SE. of Redcar. Near it are iron-stone mines. Pop. of parish, 3090.

Mars-la-Tour. See VIONVILLE.

Marston Moor, in the West Riding of Yorkshire, 7 miles W. of York, the scene of a great parliamentary victory, 2d July 1644.

Martaban', a town in Burma, on the right bank of the Salween, opposite to Maulmain. The capital of Pegu down to 1324, it was taken by the Siamese 250 years later, and by the British in 1824 and in 1852. Pop. 1781. The Bay of Martaban receives the Irawadi and Salween.

Martha's Vineyard, an island on the south coast of Massachusetts, 21 miles long by 6 broad. It is a summer health-resort.

Martigny (*Marteen'yee*), or MARTINACH (anc. *Octodurus*), three united hamlets in the Swiss canton of Valais, on the Simplon railway, 24 miles SE. of the Lake of Geneva. Pop. 4417.

Martigues (*Marteeg'*), the 'Provençal Venice,' a town in the French dep. of Bouches-du-Rhône, is situated on several islands, united by bridges, at the entrance to the Étang de Berre, 20 miles NW. of Marseilles. Pop. 6340.

Martina (*Martee'na*), a town of S. Italy, between Taranto and Monopoli. Pop. 24,454.

Martinique (*Martineek'*; native *Madiana*), one of the Lesser Antilles, in the West India Islands. It is 43 miles long by 12 to 20 broad. Area, 380 sq. m.; pop. (1889) 175,863; (1902) 185,000. The island was discovered by the Spaniards in 1493, colonised by the French in 1635, and except for three short intervals (1761-63, 1794-1802, 1809-14), when it was held by the British, it has been a French colony ever since. A mountain-knot in the north (4430 feet) and another in the south are connected by a low ridge, all being densely covered with trees. An eruption of Mont Pelée in 1902 entirely destroyed the town of Saint Pierre, the chief commercial place, with about 33,000 people. Fort de France (18,000) is the capital. The climate is moist and hot (annual mean 79° F.), and yellow fever is not unfrequent. The soil is very productive. About one-half of the land in cultivation is occupied with sugar-cane. The exports include sugar, molasses, and rum; the imports, textiles, flour, fish, rice, and cotton. Slavery was abolished in 1848; labour is largely performed by coolies (27,000). Railways connect the principal towns.

Martinsburg, capital of Berkeley county,

West Virginia, in the Shenandoah Valley, 114 miles by rail W. of Baltimore. It has a large distillery, mills, railway shops, &c. Pop. 7726.

Martin's Ferry, a town of Ohio, on the Ohio River, 89 miles by rail SW. of Pittsburgh, has iron-works, glass-works, &c. Pop. 8250.

Martos, a town of Spain, 16 miles SW. of Jaen, on a castle-crowned hill. Pop. 16,627.

Marugama, a seaport on the NW. coast of the island of Shikoku, Japan. Pop. 25,000.

Márwár. See JODHPUR.

Maryborough, the capital of Queen's County, 51 miles SW. of Dublin. Pop. 2900.

Maryborough, (1) a port of Queensland, on the Mary River, 25 miles from its mouth and 180 N. of Brisbane. Gold from Gympie (61 miles by rail), copper, sugar, and timber are the chief exports. Pop. 10,360.—(2) An important gold-mining town of Victoria, 90 miles NW. of Melbourne. Pop. 5700.

Maryhill, a north-west suburb of Glasgow.

Maryland, one of the United States, on the Atlantic, separated from Pennsylvania and Delaware by 'Mason and Dixon's Line,' and from Virginia by the Potomac River. It contains 12,210 sq. m.—very nearly the size of Holland—of which about one-fifth is water. The length from east to west is 196 miles, and the breadth 128 miles. The surface elevation varies greatly, from sea-level to an altitude of 3500 feet. In the west it is mountainous (see BLUE RIDGE); in the middle hilly and rolling; in the east and south-east low and undulating. The mean summer temperature is 75°, the mean winter temperature 34°. The annual rainfall varies from 38 inches in the mountains to 46 near the Atlantic. The minerals include fine bituminous coal; over 200 kinds of marble; copper, chrome, large beds of clay, and soapstone. The soil is well adapted to cultivation. The forest-trees are principally pine, chestnut, and oak. The staple fruit-tree is the peach, which covers many thousands of acres. Tobacco is the principal crop in the peninsula between the Chesapeake and the Potomac. Tomatoes, melons, small fruits, and all kinds of vegetables are cultivated on the eastern shore. Deer, wild ducks (especially the famous canvas-back), wild geese, swans, and turkeys are found, as well as woodcock, grouse, and quail (locally called partridge). The Chesapeake Bay divides Maryland into two unequal portions, the Eastern and the Western Shore. With its estuaries it gives the state a coast-line of more than 500 miles. Shad and herring are caught in large numbers, and the average annual supply of oysters reaches 20 millions of bushels, giving employment to more than 40,000 persons. Besides railways, Maryland has two canals (from Cumberland to Washington, 184½ miles, and between the Chesapeake and Delaware Bays, 12½ miles). Maryland returns six members to congress. The Legislature is styled the General Assembly, and consists of two houses. The seat of government is at Annapolis. Baltimore is the chief port and commercial centre. Other towns are Cumberland, Hagerstown, Frederick, Westminster, on the western shore; Salisbury, Easton, and Cambridge, on the eastern. Pop. (1830) 447,030; (1860) 687,049; (1880) 934,943; (1900) 1,188,044. Included in Charles I.'s grant to Lord Baltimore (1632), Maryland was named in honour of Henrietta Maria. It was among the first of the colonies to take an active part in the War of Independence. Divided in sentiment in the civil war of 1861-65, it yet remained within the Union. See Scharf's *History of Maryland* (2 vols. Balt. 1879).

Marylebone, a NW. parliamentary borough of London, returning two members. Pop. 132,295.

Maryport, a seaport of Cumberland, at the mouth of the Ellen, 28 miles SW. of Carlisle by railway (1837). The town gets its name from the fact that Mary, Queen of Scots, landed here in her flight from Scotland, though it was called Ellenfoot down to 1750, when its harbour was constructed. A new dock was opened in 1884; and there are shipbuilding-yards, iron-foundries and iron-furnaces, sawmills, flour-mills, tanneries, breweries, &c. Pop. (1851) 5698; (1901) 11,897.

Marysville, capital of Yuba county, California, on the Yuba River, at the head of navigation, 52 miles by rail N. of Sacramento. It is a great resort of gold-miners, and contains flour-mills, a foundry, woollen-factory, &c. Pop. 3300.

Masampho (*Ma-san-po*), a Corean port on the south coast, near the mouth of the Nak-tong River. Pop. 25,000.

Masaya (*Mazï'a*), a town of Nicaragua, near the volcano of Masaya. Pop. 18,000.

Mascara', a town of Algeria, 50 miles SE. of Oran, 1800 feet above sea-level. Pop. 21,400.

Mascarenes, the collective name given (from the discoverer) to the islands of Réunion, Mauritius, and Rodriguez.

Mashhad. See MESHHED.

Mashonaland, or MASHUNALAND, the region lying NE. of Matabeleland, between 16° 30′—19° 10′ S. lat. and 30°—32° E. long. It embraces the plateau (4000-4600 feet) whose backbone is the Umvukwe Mountains, and in which rise some of the chief feeders of the Zambesi, Limpopo, Sabi, and Mazoe. It has rich soil, grass all the year round, and an abundance of running streams. A constant cold south-east wind tempers the heat, and renders the air strong and bracing, though some of the valleys breed fever. A peaceful and industrious people (392,000 in number), of Bantu race, the Mashonas and their kinsmen the Makalakas long lived in fear of their fierce neighbours, the Matabele. They are the best husbandmen in South Africa, and before being dispossessed of their country owned large herds of cattle. They now grow rice, Kaffir corn, maize, ground-nuts, sweet potatoes, tobacco, and cotton; this last they weave into blankets. They are also good iron-workers. Iron, copper, and gold (in quartz and river sand) exist in immense quantities. There are very ancient ruins and old gold-mines, especially at Zimbabye (q.v.). Mashonaland was put under British protection in 1888, and now, with Matabeleland, forms Southern Rhodesia (q.v.). See Selous' *Travels in South-East Africa* (1893), and other books cited at MATABELELAND.

Mask, LOUGH, an isleted lake of Galway and Mayo, measures 12 miles by 2 to 4.

Massa, or MASSA DI CARRARA, a city of N. Italy, 20 miles by rail SE. of Spezia. It has a cathedral and a ducal palace. Pop. 26,400.

Massachus'etts, one of the New England states of the American Union, is bounded E. by Massachusetts Bay, from which the state derives its familiar name of the Bay State. It is irregular in outline, its greatest length being about 182 and its average breadth 47½ miles; and it has an area of about 8315 sq. m.—larger than Wales. The surface is uneven, varying from low plains, near the Atlantic sea-coast, containing numerous small lakes, to a rolling country in the interior, be-

coming mountainous towards the western boundary. The highest of the peaks, most of them wooded to the summit, is Greylock (3505 feet). The soil is in many portions, particularly in the east, rocky and sterile; along the river-valleys, however, and in certain other sections it is fertile. The woodland in the state covers over 2100 sq. m. The rivers, while not important for navigation, are the source of valuable water-power which has been utilised in manufacturing; and in its annual output the state leads all others, except New York and Pennsylvania. The chief manufactures are textiles, boots and shoes, food preparations, building materials, clothing, iron and other metallic goods, leather, wooden wares, rubber goods, paper and wood-pulp, besides cotton, woollen, and worsted goods. There are 2150 miles of railway in the state. The 'commonwealth of Massachusetts' contains fourteen counties and returns 14 members to congress. The state senate consists of 40, the House of Representatives of 240 members. There are in the state two technical institutes and twelve colleges and universities, the latter including Harvard, Williams College, Amherst College, and Boston University and College. The leading cities are Boston, Worcester, Springfield, Holyoke, Fall River, Lowell, Lawrence, Lynn, Haverhill, Brockton, Salem, New Bedford, Taunton, Gloucester, Cambridge, the seat of Harvard University. Pop. (1800) 422,845; (1850) 994,514; (1880) 1,783,085; (1900) 2,805,000.

The coast is supposed to have been visited by Northmen about 1000 A.D., but the first permanent settlement was made at Plymouth, near Cape Cod, by the Pilgrim Fathers, December 22, 1620. In 1628 a company of Puritans settled at Salem upon the coast farther north, and, together with settlements at Boston, Lynn, and elsewhere, became the Massachusetts Bay Company. The two colonies were united in 1692. After the War of Independence, begun in Massachusetts in 1776 with the battles of Lexington and Bunker Hill, the colony became one of the original thirteen states of the Union. See J. S. Barry's *History of Massachusetts* (3 vols. 1855–57).

Massafra, a town of Italy, 11 miles by rail NW. of Taranto. Pop. 9463.

Massillon, a city of Ohio, on the Tuscarawas River, 66 miles S. of Cleveland, with manufactures of iron, glass, and paper. Pop. 21,092.

Massow'ah, or MASSAUA, a town built on a coral island off the west coast of the Red Sea, in 15° 36′ N. lat., 39° 28′ E. long. It was seized by Turkey in 1557, but in 1866 given by her to Egypt, and in 1885 was occupied by Italy. The island is 1¼ mile in circumference, and is connected with the mainland by a causeway; and is the terminus of a military railway into the interior. Pop. about 8000, of whom 600 are Europeans (exclusive of the garrison). Fishing for pearls and mother-of-pearl is the principal industry. The imports include cottons, chemical products, animals, grain and flour, groceries, spirits, hides, and timber. Massowah is very hot (mean of the year, 85·8° F.) and unhealthy.

Masulipatam', a seaport in Madras presidency, 215 miles N. of Madras city. Vessels anchor 5 miles from shore. Here the English established an agency in 1611. In 1864 a storm wave destroyed 30,000 lives. Pop. 39,809.

Masuri. See MUSSOOREE.

Matabe'leland, a country stretching northwards from the Transvaal towards the Zambesi, and having Khama's territory on the south-west, and Mashonaland (q.v.) to the north-east. It measures about 180 miles from north to south and 150 from east to west, and embraces the watershed between the river-systems of the Zambesi and the Limpopo. When in the first quarter of the 19th century the despotic Chaka ruled over the Zulus, a section of the nation under a rival chief, Mosilikatze, rebelled and moved off towards the north. After remaining for a while in what is now the Transvaal, they settled in 1840 in their present country, almost exterminating the Mashona and Makalaka native tribes. The Matabele, who preserved the warlike habits of the Zulu race, number in all some 255,000 persons, of whom 15,000 are fighting men. Quartz reefs rich in gold exist in various parts of the country, and mines have been worked at Tati and elsewhere. The British South Africa Company in 1893 broke the power of Lobengula, son of Mosilikatze, whose kraal was Bulawayo, still the capital, and now connected by rail with Capetown. Since 1896 the natives have had a share in the government. The district is now the southern part of Rhodesia. See works by Baines (1877), Montagu Kerr (1886), Oates (1889), Colquhoun (1894), Selous (1893), and Norris (1895).

Matadi, in the Congo State, is at the head of the navigation of the Congo, 100 miles from its mouth, and the starting-point of the railway. Pop. 8000.

Matamo'ros, (1) a river-port of Mexico, opposite Brownsville, Texas, on the Rio Grande's S. bank, 40 miles from its mouth in the Gulf of Mexico. Pop. 13,740.—(2) A town, with coal-mines, in the Mexican state Puebla. Pop. 13,000.

Matanzas, a fortified seaport on the north coast of Cuba, 55 miles by rail E. of Havana, with distilleries, iron-foundries, and a large trade in sugar, molasses, rum, and cigars. Pop. 36,500.

Matapan', CAPE, the southernmost point, bold and precipitous, of the Morea in Greece.

Mata'ro, a seaport of Spain, 17 miles by rail NE. of Barcelona. Pop. 18,727.

Matera, an Italian cathedral city, 37 miles NW. of Taranto. Pop. 17,700.

Mathura. See MUTTRA.

Matlock, a Derbyshire parish, 17 miles N. by W. of Derby, containing Matlock Bath, Matlock Bridge, Matlock town, and Matlock Bank, which extend 2 miles along the romantic valley of the Derwent. Matlock Bath has hot springs of 68° F., charged with carbonic acid. At Matlock Bank are several hydropathics, one dating from 1851. Pop. (1901) of Matlock urban district, 5979.

Matoppo Hills, the mountainous region in which the Matabele tableland (itself reaching 4500 feet above the sea) culminates, the watershed between the Limpopo and the Zambesi. Bulawayo (q.v.) is on their slopes; and amongst them Cecil Rhodes was buried.

Mat'sumai, or FUKUYAMA, a Japanese port in Yesso, now superseded by Hakodate (q.v.). In feudal days it was the seat of 'the lords of Matsumai.' Pop. 15,000.

Matsuyama, a Japanese town of 40,000 inhabitants, 5 miles from its port of Mitsu, on the west coast of Shikoku.

Matterhorn (French *Mont Cervin;* Italian *Monte Silvio*), a peak (14,705 feet) of the Alps between the Swiss canton of Valais and Piedmont. It was first scaled by Lord Francis Douglas, the Rev. C. Hudson, Hadow, and Whymper, with three guides, on 14th July 1865, when the three

first named and one of the guides fell over a precipice and were killed. See Whymper, *Ascent of the Matterhorn* (1880).

Matto Grosso ('dense forest'), an inland state of Brazil, bordering on Bolivia. Area, 532,550 sq. m. (next in size to Amazonas); pop. 95,000. The capital is Cuyabá (q.v.).

Mattoon, a town of Illinois, 172 miles by rail S. by W. of Chicago. Pop. 9833.

Maturin, a town of Venezuela, 25 miles above its port, Colorado, by rail. Pop. 10,351.

Maubeuge (*Mo-buzh'*), a fortified town in the French dep. of Nord, 4 miles from the Belgian frontier and 23 ESE. of Valenciennes. Pop. (1881) 5360; (1901) 19,370.

Mauch Chunk (*Mawk Chunk*), a mining-town of Pennsylvania, capital of Carbon county, among picturesque hills on the Lehigh River, 90 miles NNW. of Philadelphia. There is a switchback railway, 9 miles long, to Summit Hill—a place famous for its 'burning mines,' which have been on fire since 1858. Pop. 4100.

Mauchline, a town of Ayrshire, 12 miles ENE. of Ayr. It has long been noted for its wooden snuff-boxes and similar nicknacks. There is a monument (1830) to five martyred Covenanters; and 1 mile N. is Mossgiel, Burns's farm from 1784 till 1788, whilst in the village itself are 'Poosie Nancy's,' the scene of his *Jolly Beggars*, and Mauchline kirk, whose predecessor was the scene of his *Holy Fair*. Pop. 1754. See works by W. Jolly (1881) and the Rev. Dr Edgar (1886).

Maulmain, or Moulmein, a town in Tenasserim province, Burma, near the Salween's mouth. It is backed by a fine range of hills, on whose heights flash the gilded spires of innumerable pagodas. Pop. (1856) 43,683; (1901) 58,450. The exports include teak-wood and rice; the imports piece-goods, hardware, and provisions.

Mauna Loa. See Hawaii.

Mauritania, or Mauretania, was anciently the most north-western part of Africa, corresponding to Morocco and western Algeria.

Mauritius, or Isle of France, an island in the Indian Ocean, belonging to Great Britain since 1810, and situated 550 miles E. of Madagascar. It is of volcanic origin and elliptical in shape. A girdle of reefs, broken only by passages opposite the mouths of the small streams, renders it somewhat difficult of approach. The contour rises rapidly into a tableland, that shoots up into ridges; Rivière Noire (2711) is the culminating point of the island. Lavas, basalts, and volcanic lakes abound. Its picturesque beauty forms the appropriate background of Bernardin St Pierre's *Paul and Virginia*, and is well described in Besant and Rice's novel, *My Little Girl*. But during the 19th century the forests were cut down to make room for sugar-cane plantations; and this has made the rainfall insufficient and uncertain. The extinct fauna embraced the interesting dodo, the rail called Aphanapteryx, and a short-winged heron. Fossil tortoises of great size have been discovered. Terrific cyclones are common; one in 1892 did tremendous damage to Port Louis and other places. At Port Louis the annual mean is 78° F.; in the uplands the climate resembles that of the south of France. In 1854 the cholera carried off 17,000 people, and thirteen years later 30,000 perished of a malignant fever. The upper classes, very intelligent, cultured, and well educated, are mostly descended from the old French colonists. There is a large number of half-castes, and a considerable body of Negroes, Malagasy, Singhalese, Malays, Chinese, &c. But the greater part of the population consists of Indian coolies, who have been imported nearly every year since 1842 to work the sugar-fields. Pop. (1881) 359,874; (1903) 374,644, of whom 207,000 were Hindus, 113,238 Roman Catholics, 41,200 Mohammedans, and 6650 Protestants. The chief towns are Port Louis (q.v.), the capital, on the north-west coast; Curepipe (pop. 7880); and Mahébourg (4490) on the south coast. There are 105 miles of railway. The one great crop of the island is sugar; and the other exports include rum, cocoa-nut oil, vanilla, and aloe fibres (Mauritius hemp). The crown colony of Mauritius, with its dependencies the Seychelles Islands, Rodriguez, Diego Garcia, and several minor islands, is administered by a governor, aided by an executive council. The island, then uninhabited, was discovered by Mascarenhas (see Mascarenes) in 1507. The Portuguese held it till 1598; the Dutch, who named it after their Prince Maurice, from 1598 till 1710. It was the French governor Mahé de Labourdonnais (1735–46) who introduced the sugar-cane, and laid the foundation of its prosperity as a colony, during the French occupation (1715–1810). Theodore Hook was treasurer in 1812–18. See works by Grant (1801), Flemyng (1862), Ryan (1864), Boyle (1867), J. G. Baker (1877), G. Clark (1881), Épinay (French, 1890), Decotter (French, 1891), and Keller (1901).

Maxstoke, an Edwardian castle of Warwickshire, 3 miles SE. of Coleshill.

Maxwelltown. See Dumfries.

May, Isle of, a Fife islet in the Firth of Forth, 5½ miles SSE. of Crail. It is 146 acres in area, rises 150 feet, was the seat of a priory, and has a lighthouse, whose flashing electric light is visible 22 nautical miles. Pop. 17.

Maybole, a town of Ayrshire, 3¾ miles inland, and 9 by rail (1856) S. by W. of Ayr. In feudal times the capital of Carrick, and a burgh of barony since 1516, it is an old-world place, which once boasted twenty-eight baronial mansions, several of which still remain; besides which, it has a new town-hall (1887) and a fine Roman Catholic church (1879). Shoemaking is the staple industry. The abbey of Crossraguel (q.v.) is in the vicinity. Pop. 5900.

Mayence. See Mainz.

Mayenne (*Ma-yenn'*; Lat. *Meduana*), a French dep. formed out of the provinces of Maine and Anjou, now containing the arrondissements of Laval, Château-Gontier, and Mayenne, has an area of 1996 sq. m. and a pop. of (1872) 350,637; (1901) 313,303.—The *river* Mayenne, flowing 127 miles S., joins the Sarthe at Angers to form the Maine, a tributary of the Loire.—The *town* of Mayenne, on the river Mayenne, 78 miles by rail S. by W. of Caen, has a picturesque ruined castle (taken by the English in 1424), and manufactures calico and linen. Pop. 8360.

Mayfield, a Staffordshire village, on the Dove, 2 miles SW. of Ashborne. Here Moore wrote *Lalla Rookh*.

Maynooth', a village of County Kildare, Ireland, 15 miles NW. of Dublin by rail; pop. (1891) 948. It has the ruined castle of the Geraldines, and is the seat of the Roman Catholic college, established (1795) by the Irish parliament during Pitt's ministry, to meet a necessity created by the destruction, through the French Revolution, of the places of education in France, upon which the Irish Catholic clergy had been driven to rely. The original endowment, an annual vote of £8928,

was continued, although not without controversy and keen opposition on the part of zealous Protestants, by the imperial parliament after the act of union. In 1846 Sir Robert Peel carried a bill for a permanent endowment of £26,000 a year, to which was added a grant of £30,000 for building purposes; in 1869 the endowment was withdrawn, a capital sum of £364,000 being granted in its stead. The building erected under the original endowment is a plain quadrangle. The new college is a very striking Gothic quadrangle by Pugin, containing professors' and students' apartments, lecture-halls, and a singularly fine library and refectory. The chapel was (with the exception of a tower and spire 275 feet high) completed at a cost of £50,000, and dedicated in 1890. Designed by the late J. J. M'Carthy in the Decorated Gothic style, it consists of a great nave, choir, and sanctuary, ending in a five-sided apse, from which radiate five chapels. A great part of the college buildings was burned in November 1878, but has since been restored.

Mayo, a maritime county of the Irish province of Connaught, is bounded by the Atlantic, Sligo, Roscommon, and Galway. Area, 1,360,731 acres, of which nearly 26 per cent. is bog and 18 per cent. barren; pop. (1841) 388,887; (1901) 199,166, of whom 213,602 were Catholics. The eastern half of the county is more or less a plain, the western half mountainous, the highest points being Muilrea (2688 feet), Nephin (2530), and Croagh Patrick (2370). Ironstone abounds, but is not worked; there are several valuable slate-quarries. The chief towns are Castlebar, Westport, Ballina, and Ballinrobe. The coast-line is about 250 miles, and is indented by Killala, Blacksod, and Clew Bays, Killary Harbour, and Broad Haven. Off Mayo, too, lie the islands Achil (35,283 acres), Clare (3959), &c. Loughs Mask and Corrib lie on the southern border, and Loughs Conn, Castlebar, Cullen, Carragh, Corramore within the county. A valuable salmon-fishery exists in the river Moy, and Lough Mask is the home of the 'gillaroo' trout. Four members are returned. The antiquities are chiefly ecclesiastical—four round towers, and at Cong a splendid ruined abbey of the 12th c.

Mayotte, one of the Comoro Isles (q.v.).

Maysville, capital of Mason county, Kentucky, on the Ohio River, 69 miles by rail NE. of Lexington. Pop. 7358.

Mazamet (*Mazamay'*), a French town, 43 miles ESE. of Toulouse. Pop. 13,588.

Mazanderan', a province of northern Persia, fringing the Caspian Sea for 200 miles, consists of a belt of low marshy coast-land, 10 to 20 miles wide, backed by the well-wooded northern slopes of the Elburz. Area, 10,400 sq. m.; pop. 300,000. The chief town is Sari, though Balfrush is the seat of the trade with Russia.

Mazarron, or ALMAZARRON, a seaport of Spain, 27 miles WSW. of Cartagena. Pop. 24,398.

Mazatlan', a Mexican seaport, at the entrance of the river Mazatlan into the Gulf of California, 230 miles SE. of Sinaloa. It has a cathedral, cotton factory, foundries, &c. Pop. 13,395.

Mazza'ra, a walled cathedral coast-town of Sicily, 32 miles by rail S. of Trapani. Pop. 13,074.

Mazzarino (*Mazzaree'no*), a town of Sicily, 15 miles SE. of Caltanisetta. Pop. 22,964.

Meadville, capital of Crawford county, Pennsylvania, on French Creek, 113 miles by rail N. of Pittsburgh. It manufactures woollens, paper, glass, machinery, oil, &c., and is the seat of Alleghany College (Methodist, founded 1815), and of a Unitarian theological school. Pop. 10,300.

Mealfour'vonie. See NESS, LOCH.

Meanee. See MEEANEE.

Mearns. See KINCARDINESHIRE.

Meath, a maritime county of Leinster, Ireland, bounded E. for 10 miles by the Irish Sea, and by the counties of Dublin and Louth. Area, 906 sq. m., or 579,861 acres, of which 34,300 are waste, bog, &c. Pop. (1841) 183,116; (1861) 110,373; (1901) 67,497, of whom 71,690 were Catholics. The soil is a rich loam; but close upon 67 per cent. of it is devoted to pasture. The surface is mostly undulating. The chief rivers are the Boyne and Blackwater. The principal towns are Trim, Navan, and Kells. John's Castle at Trim is one of the most extensive monuments of English rule in Ireland. There are a round tower and sculptured crosses at Kells, and a round tower at Donoughmore. Monastic ruins survive at Bective, Clonard, and Duleek. Meath returns two members.

Meaux (*Mo*), a town in the French dep. of Seine-et-Marne, on a height above the river Marne, 28 miles NE. of Paris. In its noble Gothic cathedral (12–16th century, but still unfinished) is the grave of Bossuet, who was bishop for twenty-three years. Meaux trades largely with Paris in corn, flour, cream-cheeses, &c. It was besieged by the serfs of La Jacquerie (1358), and captured from the League (1594). Pop. 12,704.

Mecca is one of the oldest cities of Arabia and the capital of the Hedjáz, and as the birthplace of Mohammed a holy city and focus of pilgrimage for Islam. It is situated in 21° 30′ N. lat. and 40° 8′ E. long., 50 miles E. of Jiddah, its port on the Red Sea, in a narrow barren valley, surrounded by bare hills penetrated by two passes. The streets are broad and airy, but unpaved and filthy; the houses, climbing the hills on either side, are of stone, and well built. There are charitable lodgings for the poorer pilgrims, and also public baths and a hospital. Drainage there is none, though there is plenty of water. The pop., which is notorious for its vice and corruption of every sort, is probably under 60,000, but is annually reinforced by at least as many pilgrims. The Great Mosque stands in the broadest part of the valley, and consists of a large quadrangle, capable of holding 35,000 persons, surrounded by arcades or cloisters, with pillars of marble and granite, and entered by nineteen gates surmounted by seven minarets. In the centre is the Káaba (i.e. 'cube'), the temple of Mecca ages before the time of Mohammed, who invented the legend that the Káaba was built by Abraham. It has been twice rebuilt in historical times, but the old form (which is not quite square), has been preserved; it measures about 18 paces by 14, and 35 or 40 feet high. The celebrated fetish, or Black Stone, is apparently a meteorite, about a span long, built into the south-east corner at the proper height for kissing. Hard by, and also within the court, is the well of Zemzem, the tepid water of which may once have been mineral, but the largest item in whose present analysis consists of sewage matter. In 1893 European scientists traced the recent destructive visitations of cholera to this same sacred well; and the Powers alarmed the Sublime Porte by demanding that it should be cleansed or shut up. Mohammed reconquered Mecca from the Koreish in 627, five years after his Flight or Hegira therefrom. It long remained under the rule of the caliphs,

who spent large sums in its adornment. In 930 it was sacked by the Karmathians. Mecca afterwards fell under the influence of whatever dynasty—Fatimite, Ayyûbite, or Mameluke—happened to rule in Egypt; and thus finally it came into the possession of the Ottoman sultans, whose power, however, is nominal, whilst the real governor is the sherif, or reputed head of the descendents of the Prophet.

See Snouck Hurgronje, *Mekka* (German, 1888); W. Robertson Smith in *Ency. Brit.* (1883); Sir Richard Burton's *Pilgrimage* (1855; new ed. 1894); Burckhardt's *Travels in Arabia* (1829).

Mechlin. See MALINES.

Mecklenburg (*u* as *oo*), the name of two grand-duchies of Germany, distinguished respectively as MECKLENBURG-SCHWERIN and MECKLENBURG-STRELITZ, and bounded by the Baltic, Pomerania, Brandenburg, Sleswick-Holstein, and Lübeck. The former is a compact territory, abutting on the Baltic for 65 miles, its area being 5197 sq. m. (much less than Yorkshire). Mecklenburg-Strelitz (1144 sq. m.) consists of two detached portions, the grand-duchy of Strelitz, lying SE. of Mecklenburg-Schwerin, and the principality of Ratzeburg, wedged in between Schwerin and Lübeck. The region indicated forms part of the great North German plain, but is crossed by a low north-westward ridge. Along the line of this ridge there are more than 500 lakes. Except for some sandy tracts and turfy moors the soil is fertile; agriculture is the chief occupation. The chief ports are Wismar and Rostock (Warnemünde). Pop of Schwerin (1875) 553,754; (1900) 607,770; of Strelitz (1875) 95,673; (1900) 102,602. The rural population are almost entirely Germanised Slavs, the nobility and the townsfolk for the most part of Saxon stock. The popular dialect is Platt-Deutsch or Low German; the religious confession Lutheran. Society in Mecklenburg is still organised on a feudal basis; serfdom was abolished only in 1824. At the head of each grand-duchy stands a grand-duke; but both grand-duchies are represented in one and the same national assembly, which meets every autumn at Sternberg and Malchin alternately. The principality of Ratzeburg and the towns of Wismar and Neustrelitz have each an independent administration.

Medellin, (1) a Spanish town (pop. 1477), the birthplace of Cortes, on the Guadiana, 66 miles by rail E. of Badajoz.—(2) The second city of Colombia, capital of the dep. of Antioquia, lies in a lovely mountain-valley, 4850 feet above the sea, and 150 miles NW. of Bogotá. It has a cathedral, college, and manufactures of pottery, porcelain, and jewellery. Pop. 50,000.

Medford, a Massachusetts town, on the Mystic River, 5 miles by rail NNW. of Boston. It manufactures rum, buttons, &c., and has a Universalist college (1852). Pop. 19,078.

Media, in ancient times, the NW. part of Iran or Persia, bounded by the Caspian Sea and Parthia on the E. It corresponded to the modern Persian provinces of Azerbijan, Ghilan, and Irak-Ajemi, and E. Kurdistan.

Medina, EL- (*Medee'na;* Arabic for 'The City;' more fully, *Medinat en-Nebi,* 'City of the Prophet,'), the second capital of the Hedjâz in western Arabia, is the holiest city of the Mohammedan world after Mecca, because it was there that Mohammed took refuge after his Hegira or Flight from Mecca in 622, and there that he lived till his death. Situated 250 miles N. of Mecca, and 132 N. by E. of the port of Yanbu' on the Red Sea, it forms an irregular oval within a walled enclosure, 35 to 40 feet high, flanked by thirty towers, and enclosing the castle of the Turkish garrison. The Prophet's Mosque El-Haram, supposed to be erected on the spot where Mohammed died, and to enclose his tomb, is smaller than that of Mecca, being a parallelogram, 420 feet long and 340 broad, with a spacious central arcaded area. The present building is, however, only the last of many reconstructions. The Mausoleum, or Hujrah, in which the Prophet's body is supposed to lie undecayed, is an irregular doorless chamber in the south-east corner, and is surmounted by a crescented 'Green Dome,' springing from a series of globes. That his coffin rests suspended in the air is of course an idle Christian fable. Pop. 26,000.

Medina, a river of the Isle of Wight, flowing 12 miles N. to the Solent at Cowes.

Medina Sidonia (*Medee'na*), a city of Spain, 25 miles SSE. of Cadiz, stands on an isolated hill, and has a ruined castle, the ancestral seat of the dukes of Medina Sidonia. Pop. 11,699.

Medinet-el-Fayyum. See FAYYÛM.

Mediterranean Sea, so named from its lying between the continents of Europe, Asia, and Africa, is the largest enclosed sea in the world, and is connected with the open ocean only by the narrow Strait of Gibraltar, 9 miles wide. Since 1869, however, it has been artificially connected with the Red Sea and Indian Ocean by means of the Suez Canal. The Mediterranean is 2200 miles long from the Strait of Gibraltar eastward to the Syrian coast; its width varies from 500 or 600 miles in some places to less than 100 miles between Sicily and Cape Bon, where it is divided by relatively shallow banks into two distinct hydrographic basins, the eastern one being the larger. It is connected with the Black Sea by the Dardanelles, Sea of Marmora, and Bosphorus. The African and Syrian coasts are comparatively even and unindented; the shores of Europe and Asia Minor are cut up into numerous gulfs and bays, the largest of which is the Adriatic Sea. Various parts of the Mediterranean have been known by special names, such as the Tyrrhenian and Iberian Seas in the western, and the Levant, Ægean, and Ionian Seas in the eastern basin. The principal islands in the western part are Sardinia and Corsica, the Balearic and Lipari Islands. The continental islands of Sicily and Malta are situated on the banks dividing the two basins. In the eastern regions there are the large islands of Cyprus and Crete, with the Ionian Islands and the islands of the Archipelago. The Mediterranean is frequently subject to earthquakes, and Vesuvius, Stromboli, and Etna are among its active volcanoes. The countries bordering the Mediterranean have been the cradle of civilisation, and still this inland sea is commercially the most important waterway of the world.

The area of the Mediterranean is estimated at about 900,000 sq. m., or, including the Black Sea and Sea of Azov, at 1,053,000 sq. m. The area of land draining into the Mediterranean is estimated at 2,969,350 sq. m., or nearly 3,000,000 sq. m. The principal rivers flowing into the Mediterranean are the Rhone, Po, Danube, Dnieper, Don, and the Nile. On the ridge between Sicily and Africa which separates the Mediterranean into two basins, there is a depth of 200 fathoms; 2040 fathoms is the greatest depth recorded in the western, and 2187 fathoms the greatest in the eastern basin; the mean depth

of the whole sea is 768 fathoms. The Mediterranean is usually called a tideless sea. At Algiers there is a rise of 3½ inches at springs, and half that amount at neaps; at other places the rise and fall is about 18 inches, and in the Gulf of Gabes the range reaches 5 feet. There is an extensive red coral fishery and tunny fishery on some parts of the coasts. The Mediterranean region appears to have been covered by the sea from early geological times, and during Tertiary times must have had much wider communication with the open ocean. See Murray's *Mediterranean Handbook* (3d ed. 2 vols. 1890).

Medmenham (*Med'nam*), a village of Bucks, near the Thames, 3 miles SW. of Marlow. Here stood a Cistercian abbey (1204); and here, soon after 1750, Sir Francis Dashwood, afterwards Lord le Despencer (1708–81), founded his mock brotherhood of 'Franciscans.'

Médoc', a French district on the left bank of the Gironde estuary, famed for the quantity and excellence of the wine it yields, some of the most famous growths of Bordeaux.

Medway, a river of Kent, rising in three headstreams in Sussex and Surrey, and flowing 70 miles north-eastward (including 12 miles of estuary), past Tunbridge, Maidstone, Rochester, Chatham, and Sheerness, until it joins the estuary of the Thames. It is tidal and navigable to Maidstone, but large vessels do not ascend above Rochester bridge. In 1667 the Dutch sailed up the Medway.

Meeanee, or MIANI, a village in Sind, India, on the Indus, 6 miles N. of Hyderabad, was the scene of Sir Charles Napier's victory with 2800 men over a Baluch army, 22,000 strong, on February 17, 1843.

Meerane (*May-rā'nuh*), a prosperous manufacturing town of Saxony, 43 miles by rail S. of Leipzig. From a small country town, it has increased rapidly through its woollen manufactures and export trade with England, France, and America. Pop. (1849) 7345; (1900) 23,850.

Meerut, or MERATH, a town in the North-west Provinces of India, 40 miles NE. of Delhi, about half-way between the Ganges and the Jumna. Its most important edifice is the English church, with a fine spire. Here in 1857 the great mutiny broke out. Pop. (1881) 99,565; (1901) 118,130, inclusive of the cantonment.

Meg'aris, a mountainous district of Greece, between Attica and the Isthmus of Corinth.

Meghna. See GANGES.

Megid'do (*g* hard), an ancient city of Palestine, in the plain of Esdraelon. In the battle there Josiah was slain in 609 B.C.

Mehadia (*Mehah'dia*), a town (pop. 2500) of SE. Hungary, 20 miles N. of Orsova by rail; 3 miles east of it, in a romantic mountain-valley, is the Herkulesbad, or waters of Hercules, eighteen warm springs, of which nine, richly impregnated with various salts, have since Roman times been used for the cure of rheumatism, neuralgia, gout, hypochondria, and skin affections.—MEHADIA, or MAHDIAH, is also the name of an African seaport and health-resort, 115 miles SE. of the town of Tunis; pop. 3500.

Meigle (*Mee'gle*), a Perthshire parish, 21 miles NE. of Perth, with remarkable sculptured stones.

Meinam. See SIAM.

Meiningen (*Mī'ning-en*), the capital of the German duchy of Saxe-Meiningen, lies in a narrow valley on the Werra, 43 miles by rail NW. of Coburg. The ducal castle (1682) contains a library, picture-gallery, coin-collection, &c. The town has been largely rebuilt since the fire of 1874. It was an appendage of Würzburg 1008–1542, and in 1583 came to the Saxon ducal family. Pop. (1875) 9521; (1900) 14,483.

Meissen (*Mī'sen*), a town of Saxony, on the left bank of the Elbe, 14 miles by rail NW. of Dresden. Its chief building is the cathedral (c. 1266–1479), one of the finest Gothic churches in Germany, surmounted by an exquisite spire (263 feet) of open work. The castle was built in 1471–83, and in 1710 was converted into the porcelain factory presided over by Böttger, a statue of whom was erected in 1891. In 1863 the castle was restored, and its walls adorned with frescoes by modern painters, the porcelain factory having been removed in 1860 to other premises; 800 men are employed. Other manufactures are iron, machinery, jute, and cigars. Here is the celebrated school of St Afra (founded 1543), where Gellert and Lessing were educated. Meissen was founded in 928, and was burned down by the Swedes in 1637. Pop. 35,474.

Meklong, a town of Siam, near where the Meklong enters the Gulf of Siam. Pop. 10,000.

Mekong, or MEKHONG, the greatest river of the Siam peninsula, the boundary in great part since 1893 of Siam and Indo-China, is usually identified with the Lan-tsan, which rises in the neighbourhood of Chiamdo in Tibet. It pursues a generally southerly direction to the China Sea, which it enters by several mouths in Cochin-China, a country formed by its deltaic deposits. It has a total length of 2800 miles, but is navigable only to 14° N. lat. owing to rapids.

Melanesia. See POLYNESIA.

Melbourn, a parish 7 miles SE. of Derby. It has noted market-gardens.

Melbourne (*Mel'burn*), the metropolis of the Australian colony of Victoria, and the most important city of Australasia, stands at the northern extremity of Port Phillip Bay, and is bisected by the river Yarra; it is in 37° 49′ S. lat. and 144° 58′ E. long., and is 11,940 miles from London (*viâ* Brindisi and the Suez Canal). Since 1888 there is a ship-canal from a point near the mouth of the river to the Melbourne quays. Port Phillip Bay, the maritime approach, is a spacious landlocked inlet covering 800 sq. m. The entrance, known as 'The Heads,' is very narrow, and strong fortifications have been carried out since 1875. Williamstown and Port Melbourne, on the shores of the bay, are thriving ports. Melbourne is a chessboard city, its streets intersecting at right angles; the principal thoroughfares are of greater width (99 feet) than is desirable in such a warm climate. Collins Street is architecturally imposing, being lined on either side by tall, massive, and ornate buildings, chiefly banks, offices, warehouses, and hotels. In Bourke Street most of the theatres, music-halls, and retail shops are situated. Melbourne has a flourishing university, founded in 1853, with three affiliated colleges—Trinity (Episcopalian), Queen's (Wesleyan), and Ormond (Presbyterian). The last—a very fine structure—was built at the expense of the Hon. Francis Ormond, to whom Melbourne is indebted also for its working-men's college. The Wilson Hall is also a noteworthy adjunct of the university. The Exhibition building and the General Post-office are two of the most striking public buildings. The Houses of Parliament, erected in 1855–91 at a cost of nearly a million of money, form a magnificent pile of buildings. The Trades Hall (1857) stands on the northern boundary of

the city proper. Melbourne possesses a public library of over 250,000 vols., and associated with it are a national art gallery and a technological museum. The town-hall has an immense assembly-room, and an organ of colossal size. Crowning the summit of the western hill of Melbourne are the law-courts, forming an extensive square, and topped by a lofty and graceful dome. Close by is the Melbourne branch of the Royal Mint (1872). Other notable public institutions are the Melbourne and Alfred hospitals, the Benevolent Asylum, the Immigrants' Home, the Orphan Asylums, the Custom-house, the Treasury, and the Public Offices, the last-named a vast and labyrinthine pile in which most of the government departments are housed. St Patrick's R. C. cathedral, a towering Gothic structure, is the most conspicuous ecclesiastical edifice in Melbourne. The Anglican cathedral of St Paul was consecrated in 1891. The Scots Church, the architectural gem of Collins Street, has a graceful soaring spire of 211 feet. In 1841 the pop. was 11,000; in 1851, the year of the gold discoveries, it was less than 25,000; in 1861, 191,000; in 1871, with suburbs, 206,780; in 1881, 282,907; in 1901, 494,129 (of whom 68,379 were in the 'city'). Foundries, flour-mills, boot and clothing factories, &c. are numerous in the suburbs. The Royal Park, the Carlton, Fitzroy, Botanical, and Flagstaff Gardens are the principal recreation reserves. The abundant water-supply (1857) comes from the Yan-Yean reservoir in the Plenty Valley. Tramways were introduced in 1886. The sanitary condition is not so good as might have been expected.

Melbourne was first occupied by white men in 1835, and known as Doutta-Galla from the neighbouring tribe of blacks. In 1837 it was christened after the reigning premier, Lord Melbourne, in 1842 it was incorporated, and in 1851 it was advanced to the dignity of a capital when the Port Phillip province was separated from New South Wales and erected into the colony of Victoria. Then too the Victorian goldfields were opened up. The International Exhibition held in Melbourne in 1888 cost the colony a quarter of a million. A great conflict between labour and capital took place in 1890, and Melbourne like the rest of Australia suffered severely in the commercial crises of 1893. See *Victoria and its Metropolis* (Melbourne, 2 vols. 1889).

Melcombe Regis. See Weymouth.

Melegnano (*Melenyáh'no*), formerly Marignano, a town of northern Italy, by rail 12 miles SE. of Milan. Pop. 5438. Here in 1513 the French defeated the Swiss, and in 1859 the Austrians.

Mel'fi, an ancient town of S. Italy, 30 miles N. of Potenza. The once magnificent cathedral (1155) was almost entirely destroyed by an earthquake in 1851. Pop. 14,765.

Mel'ford, Long, a picturesque village of Suffolk, 13 miles S. of Bury St Edmunds by rail. It has a very fine Perpendicular church 260 feet long. Pop. of parish, 3253. See two works by Sir W. Parker (1873) and E. L. Conder (1888).

Melfort, Loch, an Argyllshire sea-loch, opposite Luing Island.

Melilla, a fortified convict settlement belonging to Spain, on the N. coast of Morocco, on the E. side of the mountainous promontory of Tres Forcas, which in 1893–94 nearly led to a war between Spain and Morocco. Pop. 9000.

Melksham, a Wiltshire market-town on the Avon, 9¾ miles E. by S. of Bath. Pop. 2473.

Mellifont Abbey, a ruin 4 miles NW. of Drogheda, was the first Cistercian foundation in Ireland, founded by St Malachy in 1142. Its remains were excavated during 1884–85. See *Mellifont Abbey*, by K. F. B. (1886).

Melo, a town of Cerro Largo in Uruguay, on the Tacuari. Pop. 5000.

Melos (*Mel'los;* Ital. *Milo*), a Greek volcanic island, the most south-westerly of the Cyclades, 13 miles long by 8 broad, with 4200 inhabitants. Amongst the ruins of the ancient city of Melos was found the priceless Venus de Milo, now one of the chief treasures of the Louvre.

Melrose, a pleasant little town of Roxburghshire, on the south bank of the Tweed, and at the north base of the triple Eildons (q.v.), 37 miles SSE. of Edinburgh by rail. At Old Melrose, 2½ miles farther east, was founded about 635 the Columban monastery, of which St Cuthbert became a monk. It was burned by Kenneth MacAlpine in 839, and had been quite deserted for upwards of fifty years, when in 1136 the great Cistercian abbey of Melrose itself was founded by David I. Twice burned by the English, this was slowly rebuilt on a scale of increased magnificence between 1322 and 1505, only forty years after which date two fresh English invasions commenced the destruction that was speedily completed by the Reformers. The abbey was beyond doubt the most beautiful structure of which Scotland could boast in the middle ages. What now remains is the ruined conventual church, 215 feet long by 116 across the transepts, with some fragments of the cloister, which seems to have been a square of 150 feet. The carvings and traceries are scarcely surpassed by any in England. The second abbot, St Waltheof, the royal founder's stepson; Alexander II. and Johanna, his queen; the heart of Robert Bruce; the good Sir James, the Knight of Liddesdale, the hero of Otterburn, and others of the Douglas line; the 'wondrous Michael Scott;' and Sir David Brewster—all these are buried here; else the annals of Melrose have little to record. A burgh of barony since 1609, the town possesses a market-cross (1642), a suspension foot-bridge over the Tweed (1826), a hydropathic (1871), and half-a-dozen hotels. Pop. 2432.

Melrose, a town of Massachusetts, 7 miles by rail N. of Boston, with manufactures of boots, &c. Pop. 13,000.

Melton, a Suffolk village, on the Deben, 1¼ mile NE. of Woodbridge. Near it is a large lunatic asylum. Pop. of parish, 1510.

Melton-Mowbray, a town of Leicestershire, in the centre of a great hunting district, is seated on the river Eye near its junction with the Wreak, 15 miles NE. of Leicester, and 104 NNW. of London. It has a fine cruciform church, mainly Early English, and is famous for its manufactures of pork pies and Stilton cheese. Near the town in February 1644 the royalists defeated the parliamentarians; and amongst its natives have been Archbishop de Melton, who lies buried in the church, and 'Orator' Henley. Pop. (1801) 1766; (1901) 7454.

Melun (*Melun'*), the capital of the French dep. of Seine-et-Marne, on the Seine, near the Forest of Fontainebleau, 28 miles SE. of Paris. It manufactures leather, pottery, &c. Melun, the *Melodunum* of Cæsar, was after a six months' siege held by the English (1420–30). Pop. 10,723.

Melville, a polar island, crossed by 75° N. lat. and 110° W. long., and separated on the west by Fitzwilliam Strait from Prince Patrick Island.

Greatest length, 200 miles; greatest breadth, 130 miles. In 1819 Parry passed the winter here with his crews.—Melville Sound, 250 miles long by 200 broad, extends south-east of the island, and communicates with the Arctic Ocean on the west by Banks Strait, and with Baffin Bay on the east by Barrow Strait and Lancaster Sound.—Melville Peninsula projects from the N. American mainland at its north-eastern corner.—Another Melville Island lies across the entrance to Van Diemen Gulf off the shore of the northern territory of South Australia; area, 143 sq. m.

Memel (*May'mel*), a fortified Prussian seaport, lies at the northern extremity of the Kurisches Haff, at its opening into the Baltic, 70 miles NNE. of Danzig. Founded in 1252, and almost totally destroyed by fire in 1854, it has a large harbour, exports timber, flax and linseed, coal, manure, grain, and herrings, and has manufactories of brandy, soap and chemicals, saw-mills, iron-foundries, breweries, and shipbuilding-yards. Pop. 20,748. For the river Memel, see Niemen.

Memmingen (*Mem'ming-en*), an old town of Bavaria, 33 miles SSE. of Ulm. Here Moreau defeated the Austrians, May 1800. Pop. 10,900.

Memphis, a city and port of entry of Tennessee, stands on a high bluff on the east bank of the Mississippi River, 826 miles above New Orleans, and 230 miles by rail WSW. of Nashville. The river to this point is navigable for the largest sea-going vessels, and eight lines of railway terminate here; the trade of Memphis is accordingly very large. The river is spanned here by a steel cantilever bridge of five spans, with a total length of 1886 feet, and a height above high water of 75 feet, which was opened in May 1892. Memphis is a handsome town, with wide, regular streets, and great warehouses bordering the esplanade that extends along the bluff. The public buildings include a custom-house, cotton exchange, a large hospital, a Roman Catholic college, &c. Memphis is one of the first cotton marts in the United States, and has foundries, machine-shops, oil, lumber, and flour mills, steam-gins, &c. The city was visited by fearful epidemics of yellow fever in 1878 and 1879, since when its drainage and sewerage have been thoroughly reconstructed. Pop. (1850) 8841; (1870) 40,226; (1890) 64,495; (1900) 102,320.

Menado. See Celebes.

Menai Strait, a channel between Carnarvonshire and Anglesey, running 14 miles east-north-east from its southern extremity to Bangor, where it widens out into Beaumaris Bay. Its width varies from about 200 yards to 2 miles, whilst the scenery on both sides is very picturesque. The navigation is hazardous, but for the sake of expedition vessels under 100 tons, and occasionally some of larger size, pass through the strait. At its entrance the tides sometimes rise 30 feet; ordinary neap-tides, however, do not rise more than from 12 to 15½ feet. Communication with Anglesey was formerly solely maintained by ferry-boats, but since 1825 access has been afforded by Telford's suspension bridge, 1710 feet long, and 100 feet above the water-level, and since 1850 by Stephenson's Britannia Tubular Bridge.

Menam. See Siam.

Mende, capital of the French dep. of Lozère, on the Lot, 66 miles NW. of Nîmes, with a cathedral, and cloth manufactures. Pop. 6000.

Mendip Hills, a range in Somersetshire, extending 23 miles SE. from Weston-super-Mare to Shepton Mallet, and 3 to 6 miles broad. The highest point is Black Down (1067 feet). The limestone of the Mendips is pierced by numerous caverns, some of which have yielded prehistoric remains; and lead-mining, now unimportant, has been carried on from pre-Roman days, calamine-mining being a later industry. See Compton, *A Mendip Valley* (1892).

Mendo'za, a western dep. of the Argentine Republic. Area, 62,000 sq. m.; pop. 117,200. The Andes occupy the western portion: Aconcagua (22,427 feet), the highest peak in America, is on the north-west frontier. The rest of the province is pampa land, fertile where it can be irrigated by the Mendoza and other streams, but elsewhere almost worthless.—The capital, Mendoza, 655 miles by rail W. by N. of Buenos Ayres, and 2320 feet above sea-level, is on the trans-continental railway, carried hither in 1884. An earthquake in 1861 destroyed Mendoza (founded 1559) and 13,000 of its 14,600 inhabitants; many of the ruins are still visible in the larger city raised on its site. Pop. 20,000.

Menin (*Menan'*), a town of Belgium, 7 miles SW. of Courtrai, on the left bank of the Lys, which separates it from France. Pop. 19,513.

Menom'inee, capital of Menominee county, Michigan, at the mouth of Menominee River, on Green Bay, 179 miles by rail N. of Milwaukee, with a large trade in lumber, &c. Pop. (1880) 3288; (1900) 12,820.

Menstrie, a Clackmannanshire village, 4½ miles NE. of Stirling.

Mentana (*Mentah'na*), a village 12 miles NE. of Rome, where in 1867 the Garibaldians were defeated by the papal and French troops.

Menteith, Lake of, a beautiful sheet of water in south-west Perthshire, 17 miles W. by N. of Stirling. Lying 55 feet above sea-level, it has an utmost length and breadth of 1½ and 1 mile, and a depth in places of 80 feet. It sends off Goodie Water 9 miles ESE. to the Forth, and contains three islets—Inchmahome, Inchtalla, and Dog Isle. Inchmahome has remains of an Augustinian priory (1238), the refuge in 1547–48 of the child-queen Mary Stuart; whilst on Inchtalla is the ruined tower (1427) of the Earls of Menteith. See works by Dun (1866) and Sir W. Fraser (2 vols. 1880).

Mento'ne (Fr. *Menton*), a town in the French dep. of Alpes Maritimes, is pleasantly situated on the Mediterranean, 1½ mile from the Italian frontier and 14 miles by rail NE. of Nice. Owing to its southern exposure, and the fact that spurs of the Alps shelter it on the north and west, it enjoys a beautiful climate—average for the year 61°—and so has become a favourite winter health-resort. The vegetation is luxuriant, and lemons are largely grown. It stands on a promontory that divides its bay into two portions; the native town clings to the mountain side, whilst the hotels and villas extend along the water's edge. The harbour is protected by a sea-wall (1889). The place belonged to Monaco (q.v.) from the 14th c. until 1848. Great damage was done by an earthquake in February 1887. Pop. 10,000.

Mentz. See Mainz.

Menza'leh, Lake, a coast lagoon of Egypt, extending east from the Damietta branch of the Nile, is separated from the Mediterranean by a narrow strip of land, with several openings. It has an average depth of only 3 feet, and is 460 sq. m. in extent, studded with islands, the most interesting of them, Tennees (anc. *Tennesus*),

with Roman remains of baths, tombs, &c. The Suez Canal traverses the E. portion.

Meppel, a Dutch town, 18 miles N. by E. of Zwolle. Pop. 10,160.

Me'quinez. See MIKNAS.

Meran, a town in the Tyrol, at the south side of the Alps, 100 miles by rail S. by W. of Innsbruck, is a celebrated winter-resort, especially for sufferers from chest diseases. Pop. 9334.

Mercedes (*Mer-say'des*), in Argentina, (1) a city 61 miles by rail W. of Buenos Ayres (pop. 9000); and (2) a town 55 miles by rail ESE. of San Luis City (pop. 6000); (3) the capital (4000) of Soriano province, in Uruguay.

Merchiston, a south-west suburb of Edinburgh.

Mercia, the great Anglian kingdom of central England. The name refers to the 'march' or frontier that had to be defended against the Welsh.

Mere, a Wiltshire town, 21 miles S. by E. of Bath. Pop. of parish, 2749.

Mergui, a seaport of Burma, on an island in the Tenasserim River, 2 miles from its mouth. Pop. 8633.—The MERGUI ARCHIPELAGO is a group of mountainous, sparsely inhabited islands in the Bay of Bengal, lying off Burma.

Mer'ida (anc. *Augusta Emerita*), a decayed town of Spain, on the Guadiana's right bank, 36 miles by rail E. of Badajoz. Its Roman remains include Trajan's bridge of 81 arches, 2575 feet long; the ruins of half-a-dozen temples, an aqueduct, a circus, the Arch of Santiago, 44 feet high, &c. There is also an old Moorish palace. Merida was built in 23 B.C., and flourished as the capital of Lusitania. Pop. 9159.

Merida, (1) capital of the Mexican state of Yucatan, 25 miles S. of the Gulf of Mexico, and 95 miles NE. of Campeachy. Founded by the Spaniards in 1542, it has a cathedral, a university, &c. Pop. 37,000.—(2) A town of Venezuela, lies 5290 feet above sea-level, and 70 miles S. of the lake of Maracaybo. Founded in 1558, it was destroyed by an earthquake in 1812, and again in 1894. It has a cathedral, a university, and woollen and cotton manufactures. Pop. 11,750.

Meriden, a city of Connecticut, 19 miles by rail N. by E. of New Haven, with manufactures of metal wares, cutlery, firearms, woollens, &c. Pop. (1880) 15,540; (1900) 24,296.

Meridian, capital of Lauderdale county, Mississippi, 135 miles by rail N. by W. of Mobile, has manufactures of iron, cotton, blinds, furniture, &c. Pop. 15,000.

Merion'eth, a triangular county of North Wales, with a maximum length and breadth of 45 miles by 30, a seaboard on Cardigan Bay of 38 miles, and an area of 602 sq. m., or 385,219 acres, is bounded by the counties of Carnarvon, Denbigh, and Montgomery. Pop. (1801) 27,506; (1881) 52,038; (1901) 49,149. The surface is rugged and mountainous, interspersed with picturesque valleys, lakes, and waterfalls. Aran Mowddy (2970 feet), Cader Idris (q.v., 2914), and Aran Benllyn (2902) are the highest peaks; Bala is the largest lake; whilst of rivers the principal are the Dee, Dovey, and Mawddach. The soil generally is poor, and large tracts are unfit for profitable cultivation. Sheep are bred, and flannels and woollens manufactured, but the principal wealth of the county arises from its mineral products. Slate and limestone are largely quarried, much manganese ore is produced, and gold has been mined in the vicinity of Dolgelly and Bala. Merioneth is divided into five hundreds, and thirty-three civil parishes, partly in the diocese of Bangor, and partly in that of St Asaph. It returns one member. The principal towns are Dolgelly, Bala, Barmouth, Corwen, Festiniog, Harlech, and Towyn.

Meroë. See ETHIOPIA.

Merom, WATERS OF. See JORDAN.

Merrimac, a river rising among the White Mountains of New Hampshire, flowing south into Massachusetts, and falling into the Atlantic near Newburyport, after a course of 150 miles. It has numerous falls, affording immense water-power. It is navigable to Haverhill.

Merse. See BERWICKSHIRE.

Merseburg (*Mer'seh-boorg*), a town of Prussian Saxony, on the Saale, 8 miles S. of Halle. Its Domkirche is a four-towered pile, with Romanesque choir (1042), transept (*c.* 1274), and 16th-century nave—the whole restored in 1884-86. The organ (1666) has 4000 pipes. The picturesque 15th-century castle was once the bishop's palace, and afterwards (1656–1738) the residence of the dukes of Sachsen-Merseburg. Beer, iron, paper, &c. are manufactured. Pop. 19,828.

Mersey, an important river of England, separates, in its lower course, the counties of Chester and Lancaster, and has its origin in the junction of the Etherow and Goyt, on the borders of Derbyshire. It flows in a west-south-west direction, and is joined on the right by the Irwell 6 miles below Manchester, from which point it was made navigable to Liverpool for large vessels in the year 1720. Besides the Irwell the chief affluents are the Bollin and the Weaver from Cheshire. At its junction with the Weaver the Mersey expands into an estuary which forms the Liverpool channel, and which is 16 miles long and 1 to 3 miles broad (1¼ opposite Liverpool). In this estuary on the Cheshire side is the entrance to the Manchester (q.v.) Ship-canal. The estuary is much obstructed by sandbanks, but excellent pilotage, combined with the admirable construction of the sea-walls, renders the navigation comparatively secure. Entire length, with the estuary, 70 miles. A railway Mersey tunnel between Liverpool and Birkenhead was opened on January 20, 1886. The alluvial meadows along the Mersey are famous for their fertility; and by embanking the river, many thousands of acres of most valuable land have been reclaimed.

Merthyr-Tydvil or **Tydfil** (so called from the martyrdom here of a Welsh princess of that name), a parliamentary borough and market-town of South Wales, on the confines of the counties of Glamorgan and Brecknock, 24 miles N. by W. of Cardiff, its port, and 178 W. of London. Pop. (1801) 7705; (1871) 51,949; (1901) 69,228. Surrounded by lofty and bleak hills, the town stands on the banks of the Taff, and is partly built on slag foundations, the refuse of mines in the vicinity. Its streets are narrow and irregular, but since the formation of a Local Board of Health in 1850, great improvements have been effected in the widening of thoroughfares, the supply of pure water, and the construction of effective sewage-works. The industries depend on the numerous collieries and iron and steel works in the vicinity; Merthyr being the centre of the Glamorganshire coalfield. With Aberdare it is noted for the excellence of its steam coal, and the quantity of iron and steel annually turned out from the great works of Dowlais, Cyfarthfa, and Plymouth is enormous. In 1816, and again in 1831, the town was the scene of severe riots,

the latter disturbance being only quelled by the military with a loss of twenty-three lives. The parl. borough (1867), which embraces Aberdare and two other outlying districts, and in 1901 had a pop. of 122,545, returns two members.

Merton, Lower, a Surrey parish, on the Wandle, 10 miles SW. of London by rail. Only a fragment remains of the Augustinian priory (1115) where the parliament met which passed, in 1235, the Statute of Merton. Here were educated Thomas Becket and Walter de Merton, Bishop of Rochester and Chancellor, who in 1264 founded Merton College, Oxford. Pop. 4360.

Merv, an oasis of Turkestan, lying between Bokhara and the north-eastern corner of Persia, 512 miles by rail (1886) from the Caspian and 118 from the Oxus. The oasis consists of a district 60 miles long by 40 broad, watered by the river Murghab, and is inhabited by from 150,000 to 200,000 Tekke Turkomans. There is an old citadel, and adjoining it a new Russian fort garrisoned by nearly 3000 men; on the opposite bank of the Murghab a new Russian town is growing up. The oasis, in which Alexander the Great built a town, was held successively by the Parthians and the Arabs, who made Merv capital of Khorassan. It was the seat of a Nestorian archbishop in the 5th century, and of a Greek archbishop in the 14th. Under the Seljuk Turks Merv enjoyed its greatest splendour, and it decayed after being sacked by the Mongols in 1221. In 1856 the Turkomans made themselves masters of the oasis; but they in turn submitted to the Russians in 1883. Merv occupies an important strategic position at the intersection of the routes Bokhara-Meshhed and Khiva-Herat. See works by Marvin (1880), O'Donovan (1882), and Lansdell (1883–85).

Mesagna (*Mezan'ya*), a town in southern Italy, 12 miles SW. of Brindisi. Pop. 9601.

Meshhed ('place of martyrdom'), the principal city of north-east Persia, the capital of Khorassan, on a tributary of the Hari-Rud, 460 miles E. by N. of Teheran and 200 NW. of Herat. Above the walls shine the gilded dome and minarets of one of the most splendid mosques of the East, that of Imam Riza. Meshhed is the sacred city of the Shiites, and is held in as much veneration by them as Mecca is by the Sunnite Moslems; it is visited yearly by almost 100,000 pilgrims. The people make excellent felt-rugs, carpets, swords, turquoise jewellery, velvet, and cotton and silk goods. The Transcaspian Railway has given Russia the predominance in trade. Owing to its elevated situation (3055 feet), the city has a cold climate in winter. Close by are the ruins of Tus, the old capital of Khorassan, where Firdausi, Haroun-al-Raschid and the Imam Riza were buried. Pop. 50,000.

Meskoutin, or Hammam Meskoutin ('the Accursed Baths'), a place in Algeria, 48 miles (77 by rail) E. by N. of Constantine, with remarkable hot baths (203° F.), known to the Romans as *Aquæ Tibilitinæ*. They and the adjoining ferruginous and sulphureous springs (170°) are still used medicinally.

Mesolonghi. See Missolonghi.

Mesopotamia ('between the rivers'), the district between the rivers Tigris and Euphrates, extending from the foot of the Armenian mountains south-eastwards to near Bagdad. It has an area of about 55,000 sq. m. The soil of the great plain is sandy, but, when well watered or, as it was in ancient times, well irrigated, it develops extraordinary fertility. Yet since the Turks (Seljuks) made themselves masters of the region (1515) it has fallen more and more a prey to barrenness and neglect. Held successively by the Assyrians, Babylonians, Persians, Greeks, Romans, Arabs, and Turks, it has been the battleground of these mighty empires; and amongst its historic cities may be mentioned Harran, Serug (Seruj), Apamea, Edessa, Nisibis, Nicephorium (Rakka), Hit (Is), Mardin, Mosul (Nineveh), Amid (Diarbekr), and Thapsacus. In summer excessive heat (up to 122° F.) prevails; in winter the thermometer may go down to 14° F.

Messenia, the western of the three peninsulas that project southwards from the Peloponnesus, now a nomarchy of the kingdom of Greece.

Messina (*Messee'na*), the second city of Sicily, stands on the western shore of the Strait of Messina, 110 miles E. by N. of Palermo, and 195 SSE. of Naples. It occupies a narrow strip of coast between the hills and the deep, safe harbour, whose opposite or eastern side is formed by a sickle-shaped tongue of rock, that only leaves a narrow entrance on the north. Although a very ancient city, Messina possesses few antique buildings, the greater part of it having been laid out regularly after the earthquake of 1783. The archiepiscopal cathedral was begun by Count Roger the Norman in 1098. The citadel was built by Charles II. of Spain in 1680, the Gonzaga Castle in 1540, and another castle in 1547–57. There are here a university, founded in 1549, with 45 teachers and 330 students, a college of the fine arts, &c. The industry is confined chiefly to muslin, linen, and silk goods, the working of coral, and the preparation of fruit essences. The imports include wheat, cottons, flour, hides, coals, dried fish, woollens, iron, &c.; the exports, fruits, wine, essences, olive-oil, &c. Pop. of the commune, 150,000.

Founded in 732 B.C. by the people of Cumæ, the place was first called Zancle (i.e. 'sickle')—a name changed in 495 to Messana (Messene). Held successively by Carthaginians, Mamertines, Romans, and Saracens, Messina was the scene in 1282 of the Sicilian Vespers' massacre, and from then to 1713 belonged to Spain. It revolted in 1671, but was reduced to submission in 1678. In 1743 the plague, and in 1783 an earthquake, wrought the ruin of the city. It was, moreover, bombarded by the Neapolitans in 1848, and in 1861 it was the last place in Sicily to yield to the Sardinian (Italian) troops.

The Strait of Messina (Lat. *Mamertinum fretum*, or *Fretum Siculum*), separating Italy from Sicily, is 24 miles long, and 2½ to 14 miles wide.

Metaurus (modern *Metauro* or *Metro*), a river of central Italy, entering the Adriatic near Fano. On its banks the Romans defeated the Carthaginian Hasdrubal in 207 B.C.

Methil, a coal-shipping port with a good harbour, on the south coast of Fife, 1 mile SW. of Leven. Docks were constructed in 1875 and 1893–94.

Met'kovich, in Dalmatia, the port of Mostar, 111 miles by rail SSW. of Sarajevo. Pop. 1342.

Mettray, a village of France, 5 miles N. of Tours by rail, noted for its great agricultural and industrial reformatory dating from 1839.

Metz (Fr. pron. *Mess*), the strongest fortress of German Lorraine, was before 1871 the principal bulwark of the north-eastern frontier of France, and capital of the dep. of Moselle. It stands on the river Moselle at the influx of the Seille, 216

miles E. of Paris; and its strength consists in its cordon of forts. The cathedral, a Gothic edifice (14th to 16th century), is remarkable for its vast size and its architectural lightness, and has a beautiful spire of open work, 363 feet high. Apart from tanning and the making of saddles and shoes, there are few industries, though there are several ironworks in the vicinity. Pop. (1869) 48,325; (1875) 37,925; (1900) 58,462, including the garrison. Metz, known to the Romans as *Divodurum*, was afterwards called Mettis (corrupted from Mediomatrici, the name of the people). Under the Franks it was the capital of Austrasia, and in 870 passed to the empire. In 1552 it was treacherously taken possession of by the French; and, although Charles V. besieged the place in 1552-53, they kept it till it was formally ceded to them in 1648. The fortifications were completely reconstructed by Vauban in 1674, and often strengthened. In August 1870 Bazaine was forced to retire with 179,000 men into Metz, which after a long siege (27th October) surrendered to the Germans; by the treaty of Frankfort it was annexed to Germany.

Meudon (*Meh-don'*), a village 5 miles W. of Paris. The château, rebuilt by Mansard for the Dauphin in 1695, and fitted up for Marie Louise by Napoleon in 1812, was reduced to ruin during the bombardment of Paris in 1871. The Forest is a favourite holiday-resort. A chapel, dedicated to Notre Dame des Flammes, commemorates the terrible railway accident of May 1842, in which over 100 persons were burned alive. Rabelais was curé of Meudon. Pop. 9950.

Meulebeké (*Meh'le-bay'kay*), a Belgian town, 24 miles SW. of Ghent. Pop. 9063.

Meurthe-et-Moselle (*Murt-ay-mozell'*), a dep. of NE. France, formed, after 1871, out of what remained of the former deps. of Moselle and Meurthe. It has four arrondissements—Briey, Lunéville, Nancy (the capital), and Toul. Area, 2020 sq. m.; pop. (1872) 365,137; (1901) 484,722.

Meuse (Fr. pron. nearly *Mehz;* Dutch *Maas*), a river of France and Belgium, rises in the French dep. of Haute-Marne, and flows 500 miles N., then E., again N., and W. past Verdun, Sédan, Namur, Liége, and Maestricht, until it joins the Waal, one of the mouths of the Rhine, from the left opposite Gorkum. The united streams take the name of the Maas, which soon divides again. The southern branch passes through the Biesbosch and Hollandsche Diep, and, again dividing, reaches the sea in two wide estuaries, Haringvliet and De Krammer. The northern branch, called the Merwede as far as Dordrecht and to the west of that town the Old Maas, likewise reaches the sea in two channels, the Old and the New Maas. On this last stands Rotterdam (q.v.). The river is navigable from Verdun. Its principal affluents are the Sambre and Ourthe on the right.

Meuse, a dep. in NE. France, touching Belgium. Area, 2404 sq. m.; pop. (1872) 284,725; (1901) 283,480. Its arrondissements are Bar-le-Duc (the capital), Commercy, Montmédy, Verdun.

Mevagissey (*g* hard), a Cornish fishing-town, 5½ miles S. of St Austell. Pop. of parish, 2200.

Mexborough, a town of Yorkshire, 5¾ miles NE. of Rotherham, with ironworks and potteries. Pop. 10,630.

Mexico (or *Mejico;* Spanish pron. *Meh'hē-co*, from a native word), a federal republic of North America, embracing twenty-seven states, a federal district, and two territories. It extends between the United States and Guatemala, with an extreme length of nearly 2000 miles; its breadth varies between 1000 and (in the Isthmus of Tehuantepec) 130 miles. It has a coast-line of almost 6000 miles, but with scarcely a safe harbour beyond the noble haven of Acapulco: on the Atlantic side, with its sandbanks and lagoons, there are only open roadsteads, or river-mouths closed to ocean vessels by bars and shallows; harbour-works, however, have been constructed at Vera Cruz and Tampico. From the SE. and NW. extremities of the republic there extend the peninsulas of Yucatan and Lower California, enclosing the Gulfs of Campeche and California respectively. In area (751,300 sq. m.) Mexico almost equals Great Britain and Ireland, France, Germany, and Austria-Hungary together. Of the entire pop.—13,604,923 in 1900—the whites are estimated to form 19 per cent., the Indians 38, and the half-castes (*mestizos*) 43 per cent.

For the most part Mexico consists of an immense tableland, which commences in the United States, and rises to over 8100 feet at Marquez, 76 miles N. by W. of Mexico City: at El Paso, on the northern frontier, the elevation is only 3717 feet. The most important range is the Sierra Madre (over 10,000 feet, and extending from Tehuantepec into the United States); parallel with this run the sierras of the east coast and of Lower California. The surface of the country is also much broken up by short cross-ridges and detached peaks, the principal being the Cordillera de Anahuac (q.v.), culminating in Toluca (19,340 feet), the highest point on the North American continent, and Popocatepetl (17,523). Orizaba is 18,205 feet high. Most of the Mexican volcanoes are extinct or quiescent, and violent earthquakes are of rare occurrence. On the Atlantic side the plateau descends abruptly to the narrow strip (about 60 miles) of gently sloping coast-land; towards the Pacific, where the coast-lands vary in width from 40 to 70 miles, the descent is more gradual. Of the lakes the largest is Chapala (q.v.). The rivers of Mexico are of little use for navigation. South of the Rio Grande del Norte, on the Texan frontier, they are mostly impetuous mountain-torrents. In the plateau region the climate is almost that of perpetual spring; but agriculture is dependent on irrigation, and an immense desert tract extends between Chihuahua and Zacatecas. On the coast-lands wood and water are abundant, and the soil fertile, but the climate is such that white men cannot work as labourers there. Northern Mexico is the original home of the 'cattle-ranche' business. The coast-belt and the terraces up to 3000 feet constitute the *tierras calientes*, where the temperature ranges from 60° to 110° F., and in the south magnificent tropical vegetation and yellow fever reign. The cold lands, or *tierras frias*, embrace all the country above about 8000 feet. South of about 28° N. there are only the wet and the dry season, the former from June to October. Farther north there are four seasons. The vegetation of Mexico has the same wide range as the climate. In the lowlands dye-woods and valuable timbers abound in the virgin forests, as well as medicinal plants, india-rubber, palms, &c.; and oranges and bananas, many varieties of cactus, agave, sisal, olives, sugar, coffee, cocoa, rice, indigo, cotton, and tobacco, besides the omnipresent maize, all thrive. The vine flourishes in some districts. In Lower California archil is collected. But agriculture in Mexico is steadily developing. Silver-mining has been an important industry ever since the conquest. Gold is also produced. Copper is largely mined

in some sections. Other minerals are iron, copper, lead, sulphur, zinc, quicksilver, platinum, cinnabar, asphalt and petroleum, besides salt, marble, alabaster, gypsum, and rock-salt in great quantities. There are also said to be large deposits of coal. The manufacturing industries have in recent years, owing to good government and the help of foreign capital, developed rapidly; the chief manufacture is coarse cotton cloth. In 1903 there were 155 factories with 36,000 looms, consuming 60,000,000 lb. of raw cotton per annum. There are also 2000 distilleries and over 700 tobacco-factories; paper and sugar mills; with manufactures of candles, glass, and henequen fibre. In 1890–1904 the imports advanced from 65,000,000 to 78,308,450 dols., and the exports from 148,659,000 to 196,690,500 dols. (=24d.). Of the exports the precious metals represented more than half; henequen, coffee, hides, animals, and tobacco came next. Nearly two-thirds of the total trade is with the United States, and one-eighth with Great Britain. Great Britain imports from Mexico mainly mahogany, logwood, and silver ore, and exports thither cottons, woollens, and linens, iron, machinery, and coal.

The Mexican constitution is closely modelled upon that of the United States. The president, who is assisted by six secretaries of state, is elected for four years; the senators and representatives receive a salary of 3000 dols. a year; and the several states have elective governors and legislators. Since Diaz was first appointed president in 1876, the progress in stability, order, and prosperity has been marvellous. Federal revenue has increased from $19,088,158 to $81,061,078 in 1904, and the state and municipal revenues in like proportion. The interest on the public debt ($25,829,000) has been regularly paid, and a large reserve fund exists. Instead of one bank there are thirty-two, with a joint capital of over $100,000,000; and foreign capital to the amount of over $1,352,600,000 is invested in the country. The assessed value of property has increased from $283,297,317 to $1,171,089,076. Railways have increased from 567 to 16,285 kilometres, seven great lines crossing the country connecting all the Atlantic and Pacific ports. The harbours have been greatly improved, roads have been made, and electric tramways introduced. Imports have increased by four times, and the exports by eight times. Twenty-four agricultural colonies have been established in the country, and the export of agricultural produce has increased nearly eleven times. The irrigation of the great central tableland of Mexico is being actively considered. The value of cattle and horses has increased from $14,800,000 to over $120,500,000; the mineral industries have greatly increased. Education is compulsory, and the pupils at the public schools have increased from 192,837 to 764,353.

Under 20 per cent. of the population are pure-blooded whites; 43 per cent. are of mixed blood, *mestizos*, who are the farmers and rancheros, the muleteers and servants. Whites and *mestizos* speak Spanish. Indians, speaking 150 dialects (in three main groups, Otomí, Maya-Quiche, and Nashua), may be 38 per cent. of the population. From them chiefly are drawn the peons, or agricultural labourers. The Indians not employed on the estates usually live in communities resembling the old village communities of Europe. The houses in Mexico are mostly of *adobe* (sun-dried bricks), one story high. The great mass of the people are Roman Catholics, but there is no established church. In 1867 the church property was confiscated; convents and religious houses were suppressed.

The oldest inhabitants, the Toltecs, had by the 8th or 9th century A.D. attained a comparatively high civilisation. About the 11th or 12th century the kindred but fiercer Aztecs became dominant, and grafted on the institutions of the Toltecs gloomy religious beliefs and bloody rites. Cortes and his Spaniards landed at Vera Cruz in 1519; and the conquest of the empire was as creditable to the audacity and bravery of the Europeans as it was dishonourable to their humanity. Mexico was long the richest province of Spanish America, and was systematically and mercilessly exploited for the benefit of Spain. Discontent on the part of the inhabitants, Spanish as well as of mixed blood, broke into open rebellion in 1810, and the capital was surrendered by the last of the viceroys in 1821. Iturbide proclaimed himself emperor next year; and after various convulsions and rebellions the federal republic was established in 1823. For the next fifty years the history of Mexico is a mere record of chronic disorder and civil war. In 1845 Texas was incorporated with the United States; and after the war of 1848, Mexico ceded half a million square miles to the United States. The emperor Napoleon III. declared war against the president, Juarez, in 1862; the Austrian emperor of Mexico, Maximilian, imposed by the French, was executed in 1867, and the republic re-established. Under Diaz, the whole energy of the government has been given to the development of railways, mines, and other industries.

See works by Prescott (1843), Lester (1878), Castro (1882), Bancroft, Wells, Ballou (1890), Miss Hale, Butler, Lummis (1898), Mrs Tweedie (1901), and Mallen (Mexico, 1904).

Mexico, capital of the republic, is situated 7347 feet above the sea, at the lowest level of the great lacustrine basin (1400 sq. m.) of the Anahuac plateau. The largest of the six lakes that occupy this hill-girt valley, Lake Tezcuco, amid whose waters, Venice-like, the city first rose, has now retired 2½ miles to the north-west. All the main streets converge on the Plaza Mayor, where the site of the old temple of Huitzilopochtli is occupied by the imposing cathedral (1573–1657). Facing the cathedral is the Municipal Palace, and on the sides of the *plaza* are the National Palace, the national Monte de Piedad, the post-office, and the national museum. Other noteworthy buildings are the picture-gallery and library, the school of mines, the mint, the former palace of the Inquisition (now a medical college), a sumptuous new legislative palace, and a national pantheon for the ashes of the great men of Mexico. There are also schools of law and engineering, an academy of fine arts. The principal streets are broad, clean, and well paved and lighted, with houses of stone gaily painted in bright colours. There are monuments to Columbus (1877), the last of the Aztec emperors, and others. There is a fine *alameda*, and tree-lined avenues stretch far into the country. Since 1607 many attempts have been made to drain the valley of Mexico, but till recently, in vain; typhoid fever is common; and it is only the extreme dryness of the atmosphere that renders the site habitable at all. New works, on a very large scale, to drain the valley, were begun in 1890 and finished in 1898, at a total cost of over $16,000,000. The trade of Mexico is chiefly a transit trade, although it has a few manufactures, slowly developing, as cigars, gold and silver work, paper, pottery,

religious pictures, hats, saddlery, &c. The railway connections are extensive. Pop. 344,721.

Mexico, Gulf of, a basin of the Atlantic Ocean, is closed in by the United States and Mexico, and its outlet on the east is narrowed by the jutting peninsulas of Yucatan and Florida, which approach within 500 miles of each other. Right in the middle of this entrance is planted the island of Cuba, dividing the strait into two—the Strait of Florida and that of Yucatan. The extreme length from SW. to NE. is over 1100 miles; the area of the gulf, 716,200 sq. m. The shores are very shallow, more than 400,000 sq. m. being less than 100 fathoms deep; but 58,000 sq. m. exceed 2000 fathoms in depth. The best of the few good harbours are those of New Orleans, Pensacola, and Havana. The principal rivers the gulf receives are the Mississippi and the Rio Grande del Norte. See Gulf Stream.

Mezières (*Mezee-ehr'*), the capital of the French dep. of Ardennes, on a bend of the Meuse, opposite Charleville (q.v.), 155 miles by rail NE. of Paris. In 1521 it was successfully defended by Bayard (statue, 1893), with 2000 men, against 40,000 Spaniards; in 1815 held out for two months against the Allies; and in 1870–71 capitulated after a frightful bombardment. In its Flamboyant church, restored in 1884, Charles IX. was married (1570). Pop. 6551.

Mezö-Tur, a town of Hungary, 40 miles by rail SE. of Budapest. Pop. 25,757.

Mfumbiro, a mountain (10,000 feet) of Central Africa, situated in 1° 30′ S. lat. and 30° 30′ E. long., and west of Victoria Nyanza, just within the British East Africa Company's boundary.

Mhow, or Mhau, a British cantonment in Indore state, Central India, 13 miles by rail SW. of Indore city. It is 1919 feet above the sea. Pop. 36,773, mostly Hindus.

Miako. See Kyoto.

Michigan (*Mish'e-gan;* Chippewa *Mitchi Sawgyegan,* 'Great Lake'), the third in size of the five great fresh-water lakes of North America, and the only one lying wholly in the United States, between Michigan and Wisconsin. It is 335 miles long, and 50 to 88 broad; the mean depth is 325 feet, the maximum 870. It has the same elevation as Lake Huron (with which it is connected by the Strait of Mackinaw)—581$\frac{3}{10}$ feet above sea-level; this is 20$\frac{1}{2}$ feet lower than Lake Superior, and 8$\frac{4}{10}$ feet above Lake Erie. Its surface area is 22,450 sq. m. There is a neap-tide of 1$\frac{1}{2}$ inch, and a spring-tide of about 3 inches. The shores of Lake Michigan are for the most part low. Its principal harbours are those of Chicago, Milwaukee, and Racine.

Michigan, one of the northern states of the American Union, the seventeenth in area and ninth in population, has an area of 58,915 sq. m., or more than that of England and Wales; 1114 sq. m. are occupied by 5173 small lakes. It is sometimes called the Peninsular State, being divided into two great peninsulas by Lake Michigan. The upper, lying between the north end of Lake Michigan and Lake Superior, is mostly rugged, broken, rocky, and comparatively barren, though teeming with mineral wealth. In the north-west, near Lake Superior, is the highest land in the state, among the hills known as the Porcupine Mountains (1830 feet). The lower peninsula lies between Lake Michigan and Lakes Huron and Erie. No part of it is more than 1780 feet above sea-level; and the mean height is only 160 feet above the environing lakes. The upper peninsula is 318 miles by 164; the lower 277 by 177. The greatest length of the state from Montreal River in the north-west to Maumee Bay on Lake Erie is about 500 miles. The state touches Ohio, Indiana, Illinois, and Wisconsin, being elsewhere bounded by the lakes and their outlets. The mean annual temperature is 46·1° F. (summer, 68·5°; winter, 23·8°); the annual rainfall is 35·8 inches. Both peninsulas, with occasional exceptions of swamps or small prairies, were originally covered with dense forests, the products of which have proved exceedingly valuable. The centre of the lower peninsula is a coal-bearing area of about 5000 sq. m., carrying, however, comparatively little workable coal. In the Michigan salt group are the rich brine wells of the Saginaw valley; in the Marshall or Waverley are the Huron grindstones. Michigan is exceptionally rich in iron and copper; the great Calumet and Hecla copper-mines are on the Keweenaw Peninsula, running into Lake Superior. Gypsum appears in immense deposits at Grand Rapids, in the lower peninsula. Building-stones abound in both peninsulas, and in the upper there are also statuary and other marbles, and such ornamental stones as agates, jasper, chalcedony, and chlorastolites. Glass sand is found in the extreme south-east; and lime, bricks, and tiles are made in many parts. Of the numerous mineral springs, nineteen have become popular resorts, and the waters of four have a commercial value. Lumbering is the second great industrial interest of the state, the forests of northern Michigan being mostly pine. Other leading manufactories are grist-mills, foundries and machine-shops, iron and steel works, and those of agricultural implements and of furniture. But agriculture remains the chief industry, employing about half the population. The most important crops are wheat, maize, oats, and barley; and in the 'fruit belt,' a narrow strip of about 200 miles in length on the west shore of Lake Michigan, peaches, plums, grapes, &c., are grown in great quantity. Much wool is produced. The commerce of the state is very great, and is promoted by three ship-canals.

The Michigan country was probably visited by Jean Nicolet in 1634, at the Sault de Ste Marie, where the first permanent white settlement was made by Father Marquette in 1668 for a Jesuit mission. Detroit was founded in 1701 by a French colony. The country passed to the English in 1760, and to the United States in 1796; it was again occupied by Great Britain in 1812, but was recovered by the Americans the next year. It was organised as Michigan territory in 1805, and admitted as a state in 1837. Pop. (1800) 551; (1840) 212,267; (1900) 2,420,982. Detroit has remained the chief city from the beginning, other cities being Grand Rapids, Bay City, Jackson, Muskegon, Kalamazoo, Port Huron, Lansing (the capital), Battle Creek, West Bay City, Manistee, Ishpeming, Menominee, Flint, Ann Arbor, Adrian, &c. See J. M. Cooley, *Michigan* (Boston, 1885).

Michigan City, a town of Indiana, on Lake Michigan, 38 miles by water (57 by rail) ESE. of Chicago. It has a good harbour, contains a college, a state prison, and railway-shops, and manufactures cars, refrigerators, furniture, boots, &c. Pop. (1860) 3320; (1900) 14,850.

Micronesia. See Polynesia.

Middelburg, capital of the Dutch province of Zealand, in the island of Walcheren, and 4$\frac{1}{2}$ miles by rail NE. of Flushing. In former times it was one of the leading mercantile cities of the United

Provinces; but its commercial importance has greatly declined, though it has cotton-factories. Thomas Cromwell was a merchant here. The town-house, founded by Charles the Bold in 1468, is adorned with twenty-five statues of counts and countesses of Holland and Zealand. A once celebrated abbey (12th c.) is now used as administrative offices. Pop. 19,455.

Middle Level. See BEDFORD LEVEL.

Middlesbrough, a great iron-manufacturing and shipping centre in the North Riding of Yorkshire, is a municipal, parliamentary, and county borough, and capital of the district of Cleveland. It is on the south bank of the Tees near its mouth, 15 miles by rail ENE. of Darlington, 50 N. of York, and 246 N. by W. of London. In 1829 the site was occupied by a solitary farm-house surrounded by marshy land; the town owes its remarkably rapid growth partly to the extension thither (in 1830) of the Stockton and Darlington Railway, but mainly to the discovery of iron ore in the adjoining Cleveland hills (1850). Another industry—that of boring salt—was added in 1886. There are here iron and steel works, blast-furnaces, chemical works, wood and iron shipbuilding-yards, saw-mills, marine engineering works, wire, nail, and tube works, salt and soda works, &c. A graving-dock was finished in 1875 at a cost of £120,000; and the South Gare breakwater (1864–88) is nearly 2½ miles long. The shipbuilding-yards employ 3000 men; and the export of coal is extensive. There are, besides Anglican and Nonconformist churches, a Roman Catholic cathedral and a synagogue. The town-hall and municipal buildings were erected at a cost of £120,000, and were opened in 1889 by the Prince and Princess of Wales. Among other public buildings are a market-house, corporation baths, royal exchange, high school, &c.; and there are theatres, clubs, masonic and temperance halls. The Albert Park of 72 acres was given in 1868 to the borough by Mr H. W. F. Bolckow (1806–78), the first mayor and member of parliament; on the celebration of Middlesbrough Jubilee in 1881 a monument to his memory was unveiled. There is also a monument in Exchange Place to Mr Vaughan, the founder of the Cleveland iron trade. The first governing body was established in 1841; the borough was incorporated in 1853; and since 1867. Middlesbrough returns one member to parliament. Pop. (1831) 154; (1841) 5463; of municipal borough (1861) 18,892; (1871) 39,824; (1881) 55,288; (1901) 91,302. See H. G. Reid's *Middlesborough and its Jubilee* (1881).

Middlesex, a small county in the south of England, bounded by Hertfordshire, Essex, Buckinghamshire, the Thames, and the county of London (as established in 1888). On the east the river Lea and on the west the Colne and Brent form the natural boundaries. Although the area is only 233 sq. m., the pop. is large (792,314 in 1901), which is accounted for by the neighbourhood of the county and city of London. (For the 'ancient' county, including the districts now in London county, see the table at ENGLAND, p. 253.) We first hear of Middlesex as a subkingdom dependent on Essex. Its position between the territory of the East Saxons and that of the West Saxons accounts for the name. The greater part of the surface was covered with a forest, of which Enfield Chase and Hampstead Heath are relics; but it was traversed by the great road which crossed the Thames, probably by a ford at Westminster, and led north-westward under the name of the Watling Street. There is but little tillage, except for market-gardens, and a great part of the county consists of grazing land, being occupied largely with villa residences, surrounded in many places with large parks. Brickfields occupy the western border, and the number of large suburban villages—without, however, any important town—is remarkable. Brentford, Uxbridge, and Ealing are to the west of London, and the first-named is usually reckoned the county town. Northward are Harrow, Enfield, and Tottenham. Eastward are Highgate and Hornsey. London, it may be well to note, was never in Middlesex.

Middleton, a town of Lancashire, on the Irk, 3 miles W. of Oldham and 6 NNE. of Manchester. Dating mainly from 1791, when it received a charter for a weekly market, it was incorporated as a municipal borough in 1886, the boundary being extended in 1891. It is chiefly dependent upon its manufactures of silk and cotton, and has an interesting parish church, a grammar-school (1572), public baths and libraries, &c. Pop. (1851) 5740; (1901) 25,178.

Middleton, a town of Ireland, 13 miles by rail E. of Cork. At the college (1696) Curran was educated. Pop. 3446.

Middleton-in-Teesdale, a town of Durham, on the Tees, 9 miles NW. of Barnard Castle. Pop. of parish, 2000.

Middletown, (1) a port of Connecticut, on the right bank of the Connecticut River, 15 miles below Hartford. It is a well-built city, dating from 1636, with wide, shaded streets, the Wesleyan University (1831), the Berkeley Divinity School (Episcopal), a large state hospital for the insane, a girls' industrial school, and manufactures of sewing-machines, tape, webbing, Britannia ware, &c. Pop. 9613.—(2) A town of New York, 67 miles NNW. of New York City. It contains the state homœopathic insane asylum, and manufactures iron, blankets, hats, &c. Pop. 14,977.—(3) A town of Ohio, on the Miami River and Canal, 35 miles N. of Cincinnati, with paper-mills and tobacco-factories. Pop. 9681.

Middlewich, an old-fashioned market-town of Cheshire, on the river Dane and the Grand Trunk Canal, 21 miles E. of Chester. Its salt-manufacture has declined. Pop. 4706.

Midhurst, a market-town of Sussex, on the Rother, a navigable tributary of the Arun, 65 miles by rail SW. of London and 12 N. of Chichester. Cobden was born close by, and Lyell was educated at the grammar-school (1672). Cowdray House, ½ mile NE., was built about 1530 by the Earl of Southampton, and for 239 years had been the seat of eight Viscounts Montague, when in 1793 it was reduced by fire to a beautiful ruin. Till 1885 Midhurst borough (35 sq. m. in area) returned a member to parliament. Pop. of parish, 1674.

Midi, CANAL DU. See GARONNE.

Midlothian. See EDINBURGHSHIRE.

Midnapur, a town of Bengal, on the Kasai River, 68 miles W. of Calcutta. Pop. 33,264.

Mid'somer Norton, a town of Somerset, 10 miles SW. of Bath, with malting and brewing, and a R.C. college (1814). Pop. 5850.

Miknas, or MEQUINEZ, a walled town of Morocco, 32 miles W. by S. of Fez and 70 from the coast. The palace is the sultan's summer residence, and the mosque of Muley Ismail is the royal burial-place. Pop. 30,000.

Milan (usu. *Mil'an;* Ital. spelling *Milano*), one of the three chief Italian cities, stands in the great plain of Lombardy, 80 miles NE. of Turin, 155 W. of Venice, and 25 S. of Lake Como. The city, nearly circular in shape, is surrounded on three sides by walls, has a circuit of nearly 8 miles, and is entered by 14 gates. The principal church is the cathedral of the archbishop, rebuilt by Gian Galeazzo Visconti in 1386, and completed by order of Napoleon I. in 1805–13. It is built entirely of marble, and in the Gothic style; but the windows and portals of the façade (partly of the 16th century) are not Gothic, but Italian. The exterior is adorned with pinnacles and 6000 statues in niches. Other churches are St Ambrose, founded in 868, on the site of one dedicated by the saint himself in 387; St Eustorgius, dedicated in 320; St Maria delle Grazie (1463), on the walls of whose refectory is Leonardo da Vinci's 'Last Supper;' and St Maurice the Greater (1497–1506), with paintings by Luini and his school. The Brera Palace (12th century), formerly a Jesuit college, has now a great gallery of paintings by Raphael, Da Vinci, Luini, Mantegna, the Bellinis, Titian, Vandyck, &c., an academy of art, a collection of casts, the magnificent monument of Gaston de Foix, the national library (1770) of 162,000 vols. and 3650 MSS., an archæological museum, and an observatory. In the famous Ambrosian Library (1609) there are 164,000 vols. and 8100 MSS., besides collections of drawings, engravings, and pictures. The city is adorned with numerous palaces, as that of the archbishop (1570); the royal palace, with fine modern frescoes; the Late Renaissance municipal palace (1558); the former castle of the Visconti (15th century), with frescoes by Luini; the Poldi-Pezzoli palace, &c. The arcaded colonnade of Victor Emmanuel (1865–67), lined with fine shops, forms a favourite promenade. The Arch of Peace, built of white marble (1807–38), commemorates the exploits of Napoleon. The Della Scala opera-house (1778) is the second in size (after San Carlo at Naples) in Italy; and the Milan *conservatoire* is the most famous school of music in Europe. Beccaria, Manzoni, the popes Pius IV. and Gregory XIV. were natives. The Great Hospital (1448) can accommodate 2500 patients. Owing to its situation Milan has always been a place of great commerce, much increased since the opening of the Gothard railway. It manufactures silks, velvets, gold, silver, and iron wares, railway carriages, tobacco, porcelain, and electric-light apparatus, besides being an active centre of the printing-trade. Pop. (1876) 283,225; (1881, city and suburbs) 295,543; (1901, commune) 491,460.

Milan (Lat. *Mediolanum*) was conquered by the Romans in 222 B.C., and sacked by the Huns (under Attila) in 452, by the Goths in 539. It passed to the Longobards (569), the Franks, and the German empire. Here several of the German emperors were crowned with the Iron Crown. Frederick I. twice besieged it and razed it to the ground. Supreme power became (from 1277) vested in the Ghibelline Visconti, who extended the ascendency of Milan over the whole of Lombardy, and in 1395 became dukes. The successors of the Visconti were the Sforzas (1450–1535). From 1555 to 1713 Milan submitted to Spain, and from Spain passed to Austria. Under Bonaparte it was declared the capital of the Cisalpine Republic, of the Italian Republic, and, finally, of the Kingdom of Italy. From 1815 till 1859, when it became Italian, Milan was again the capital of the Austro-Italian dominions.

Milazzo (*Milat'so;* anc. *Mylæ*), a fortified seaport of Sicily, on a promontory 21 miles W. of Messina. Off Mylæ in 260 B.C. the Romans won a great sea-fight over the Carthaginians; and here in 1860 Garibaldi, with 2500 men, defeated 7000 Neapolitans. Pop. 7971.

Milborne Port, a town of Somerset, 3½ miles NE. of Sherborne. Pop. of parish, 1951.

Mildenhall, a Suffolk market-town, on the Lark, 12 miles NW. of Bury-St-Edmunds. Pop. of parish, 3732.

Mile'tus, anciently the most flourishing city of Ionia, in Asia Minor, stood near the mouth of the Mæander. It was the birthplace of Thales, Anaximander, Anaximenes, and Hecatæus.

Milford, a parliamentary borough (contributory to Pembroke) and seaport of South Wales, in the county of Pembroke, on the north side of Milford Haven, 271 miles W. of London. The fortified Haven, which as a natural harbour is unequalled in area, complete shelter, and facility of entrance, stretches inland 10 miles, varies in breadth from 1 to nearly 2 miles, and has a depth in most places of from 15 to 19 fathoms. In 1485 the Earl of Richmond (afterwards Henry VII.) disembarked here from Brittany shortly before the battle of Bosworth. Docks designed by Sir E. J. Reed, and capable of accommodating vessels of the largest size, were completed in 1882, but not opened to shipping until 21st September 1888: their total area is 60 acres, and the depth of water inside 28 feet. Pop. 5110.

Milford, a town of Massachusetts, 36 miles W. by S. of Boston, with boot-factories. Pop. 11,380.

Military Frontier. See CROATIA.

Militello, a town of Sicily, 21 miles SW. of Catania. Pop. 10,505.

Millau (*Mee'yo*), a town in the French dep. of Aveyron, on the Tarn's right bank, 52 miles NW. of Montpellier. During the 16th and 17th centuries it was a Calvinist stronghold. Leather and gloves are manufactured. Pop. 18,181.

Millbury, Massachusetts, on the Blackstone River, is 39 miles by rail W. of Boston, and has cotton and woollen factories. Pop. 4455.

Milledgeville, the former capital of Georgia (q.v.), 32 miles ENE. of Macon. Pop. 4800.

Mill Hill, a village of Middlesex, 8½ miles NW. of London by rail, with an important Nonconformist school and a R. C. missionary college.

Millom, a town of Cumberland, on the west side of the Duddon estuary, 30 miles SSE. of Whitehaven. It has mines and ironworks. Pop. (1851) 1070; (1901) 10,426.

Millport. See CUMBRAE.

Millville, a city of New Jersey, on the Maurice River, 41 miles S. by E. of Philadelphia. It manufactures cottons and glass. Pop. 10,600.

Milnathort, a town of Kinross-shire, 1½ mile N. by E. of Kinross. Pop. 1050.

Milngavie (*Mil-guy'*), a town of Stirlingshire, 7 miles NNW. of Glasgow. Pop. 3503.

Milnrow, a town of Lancashire, 2 miles ESE. of Rochdale. John Collier ('Tim Bobbin') was schoolmaster here. Pop. 8246.

Milnthorpe, a town of Westmorland, on the Kent, 7½ miles S. of Kendal. Pop. 1064.

Milton-next-Sittingbourne, a town of Kent, at the head of a creek of the Swale, 10 miles ESE. of Chatham. Pop. of parish, 7213.

Milverton, a town of Somerset, 13½ miles SW. of Bridgwater. Pop. of parish, 1562.

Milwau'kee, capital of Milwaukee county, Wisconsin, and the largest city in the state, is situated on the west shore of Lake Michigan, at the common mouth of three improved and navigable rivers, which, with a canal, supply 20 miles of dockage. It is 85 miles by rail N. of Chicago, and overlooks Milwaukee Bay, which has a width of 7 miles and contains a harbour of refuge. The parked and terraced bluffs have an average height of 80 feet above the water. Milwaukee is built with light yellow bricks, and hence called 'the Cream City.' The streets are wide and lined on either side by magnificent elms. The public parks contain some 600 acres, and are connected by wide boulevards. The street railway lines are operated by electricity, and the streets mainly lighted by arc lights. A new and vast system of intercepting sewers is in operation, and the river is flushed by means of a huge tunnel from the lake, built at a cost of $250,000. In 1889 two new railway passenger depôts were built at a cost of $200,000 each; and more recent undertakings have been a new government building to cost $2,000,000, a new city-hall, and a public library and museum building. The public library contains 100,000 volumes. In 1888 was completed the Layton Free Art Gallery, the gift for which, exclusive of the value of pictures and statuary, was $300,000. Milwaukee, founded in 1835, is essentially a manufacturing city, chief products being lager beer, flour, pork, engines, machinery, iron and brass goods, &c. In October 1892 there was a tremendous fire. Pop. (1870) 71,440; (1880) 115,578; (1900) 285,315 (64,000 Germans).

Minas, capital of a mountainous Uruguayan province (area, 4844 sq. m.; pop. 38,200), 75 miles by rail NE. of Montevideo. Pop. 5000.

Minas Geraes (*Meenas Zhayrah'ez*), the most populous state of Brazil, lies inland from Espirito Santo and south of Bahia. Area, 222,160 sq. m.; pop. 3,218,807. The surface rises in the Serra do Espinhaco to 5900 feet; the chief rivers are the navigable São Francisco and the Rio Grande, which with the Paranahyba forms the Paraná.

Minch (*Minsh*), the channel separating the island of Lewis from the mainland of Scotland. It is 24 to 40 miles wide, and has a rapid current. The *Little Minch*, separating Skye from North Uist, &c., is 14 to 20 miles wide.

Minchinhampton, a market-town of Gloucestershire, 3½ miles SSE. of Stroud. James Bradley is buried in the churchyard. Pop. of parish, 3736.

Minchmoor, a mountain (1856 feet), 3 miles SE. of Innerleithen, Peeblesshire.

Mincio (*Mintchio*), a tributary of the Po, rises in south Tyrol, flows (as the Sarca) 80 miles to Lake Garda, and thence has a southerly course of 93 miles past Mantua to the Po.

Mindanao. See PHILIPPINE ISLANDS.

Minden, a Prussian town in Westphalia, on the Weser, 40 miles W. of Hanover. Till 1873 a second-class fortress, it was already a town in Charlemagne's day, and suffered much in the Thirty Years' War, and again in the Seven Years' War, when, in 1759, the French were defeated here by an Anglo-Hanoverian army. It has a fine new bridge (1874), a Gothic town-hall, a Catholic church (11th c.—1379; till 1811 cathedral), and manufactures of tobacco, beer, brandy, glass, &c. Pop. 25,223. See also MÜNDEN.

Minehead, a watering-place (till 1832 parl. borough) of Somerset, on the Bristol Channel, 25 miles NW. of Taunton. Pop. 2511.

Minervino, an agricultural town of southern Italy, 44 miles W. of Bari. Pop. 17,972.

Mingrelia. See GEORGIA, CAUCASUS.

Minho (*Min'yo;* Span. *Miño*, anc. *Minius*), a river rising in Galicia, and flowing 174 miles SW. through Spain and along the Portuguese frontier to the Atlantic.

Minieh, a town of Egypt, on the left bank of the Nile, 150 miles above Cairo. It has a government cotton-factory. Pop. 20,500.

Minneap'olis, the largest city of Minnesota, stands on both sides of the Mississippi. The Falls of St Anthony, with a perpendicular descent of 16 feet, afford a water-power which has been a chief source of the city's prosperity. The streets are wide and handsome, and there are beautiful public parks. Notable buildings are the masonic hall, the post-office, the Exposition Building, and the Guarantee Loan edifice. This last is twelve stories high, built of granite and sandstone; it contains 400 offices, and on the roof is a garden where concerts are given. The state university here has nearly four thousand students of both sexes. There is a public library of over 150,000 volumes. The lumber and flour mills of Minneapolis, which dates only from 1838, are among the largest in the country. Pop. (1870) 13,066; (1880) 46,887; (1900) 202,718, many of them Scandinavians.—Five miles by rail SE. of Minneapolis are the Falls of Minnehaha ('Laughing Water'), celebrated in Longfellow's *Hiawatha*.

Minnehaha. See MINNEAPOLIS.

Minneso'ta (an Indian name, signifying 'sky-tinted water'), one of the north-central states of the American Union, the northernmost in the Mississippi valley. It is bounded by Manitoba, Ontario, Lake Superior, Wisconsin, Iowa, and North and South Dakota. Its area is 83,530 sq. m., or nearly as large as Great Britain. In Minnesota are the remote sources of the great rivers Mississippi, Red River of the North, and St Lawrence, whose waters flow in different directions to the Gulf of Mexico, Hudson Bay, and the Atlantic. Within the state the Minnesota River is the largest tributary of the Mississippi. Between the St Croix River and Red River of the North are hundreds of clear lakes, the largest of which are Red Lake (530 sq. m.), Mille Lacs, and Leech Lake. Over a half of the land area is under farms, but in the north there are extensive pine-forests, and in the north-east great marshes. The minerals include iron (which is profitably worked), slate, granite and other rocks, and the red pipestone. The climate is bracing in winter, very dry and equable. Minnesota is an agricultural and especially a wheat-producing state; its principal manufactories are flour and lumber mills. The Mississippi is navigable as high as St Paul; the lakes, with Duluth for a port, open a water-way to the Atlantic; and there are over 7000 miles of railway in the state.

Minnesota was visited by French explorers in 1659–60, and the portion west of the Mississippi was part of the province of Louisiana purchased by the United States from France in 1803. In 1837 the Chippeway Indians surrendered all the land east of the Mississippi; immigration then began, and Minnesota became a territory in 1849, a state in 1858. In 1862 occurred a terrible massacre by the Indians, who in ten days killed some 800 persons. The principal cities are the capital, St Paul, Minneapolis, and Duluth. Pop. (1860) 172,023; (1880) 780,773; (1900) 1,751,394, including many Scandinavians and Germans.

Minorca, the second largest of the Balearic

Isles (q.v.), lies 25 miles NE. of Majorca. It is 28 miles long by 10 wide, and has an area of 284 sq. m. Pop. 39,173. Its coast is rocky and inaccessible, but broken by numerous inlets, and its surface low, undulating, and stony. The chief towns are Port Mahon and Ciudadela. The island has many megalithic remains (called talayots) and stalactite caves (at Prella).

Minsk, the chief town of a Russian government, on an affluent of the Beresina, 436 miles by rail WSW. of Moscow and 331 ENE. of Warsaw. Pop. 95,048. Area of government, 35,282 sq. m., 70 per cent. marsh, moor, and forest; pop. 2,156,613.

Miquelon (*Meek'elon*^{g}), GREAT and LITTLE, two islands connected by a long, narrow, sandy isthmus, off the SW. coast of Newfoundland, forming with St Pierre the only remaining French colony in North America. Fishing is the sole industry. Area, 78 sq. m.; pop. (with St Pierre) 6500.

Miraj, a native state of India in the southern Mahratta country; pop. 123,500. The capital is Miraj, near the Kistna River (pop. 26,060).

Miramar, a palace on the Adriatic, near Grignano, 6 miles NW. of Trieste, the home of the Archduke Maximilian, afterwards emperor of Mexico. See also MAJORCA.

Miramichi (*Meeramishee'*), the second river (220 miles) of New Brunswick, entering the Gulf of St Lawrence through Miramichi Bay. It is navigable to 2 miles above Newcastle.

Miran'dola, a cathedral city of northern Italy, 19 miles by rail NNE. of Modena. Pop. 13,800.

Mirecourt (*Meercoor'*), a town in the dep. of Vosges, 236 miles ESE. of Paris. Pop. 4700.

Mirfield, a manufacturing town of Yorkshire, 3 miles W. by S. of Dewsbury, and 4½ NE. of Huddersfield. It has a town-hall (1868), a parish church (restored in 1871 by Sir G. G. Scott), and manufactures of woollen cloths, carpets, blankets, and the like. The population, almost stationary since 1881, is 11,340.

Mirzapur, a town in the North-west Provinces, on the right bank of the Ganges, 45 miles by rail SW. of Benares. It manufactures shellac, carpets, and brass-wares. Pop. 84,130.

Miseno (*Meezay'no*), a promontory forming the western side of the Bay of Pozzuoli (*Cumæ*), 10 miles SW. of Naples. On it are ruins of the ancient city and naval station of Misenum.

Misiones (*Meezio'nes*), an Argentinian territory, lies between the Uruguay and the Paraná, and is bounded on all sides but the SW. by Brazil and Paraguay. Area, 20,823 sq. m.; pop. 30,000. Capital, Posadas (pop. 3000), on the Paraná.

Miskolcz, a town of Hungary, 113 miles by rail NE. of Pesth. Pop. 40,408.

Mississip'pi, one of the Gulf States of the American Union, lies west of Alabama and south of western Tennessee, and is bounded on the W. by the Mississippi River. Length, north to south, 335 miles; width, 150 miles; area, 46,810 sq. m. The surface, except in the Yazoo delta, is generally hilly, though nowhere mountainous, the highest hills rising only 800 feet above the sea-level. There are three distinct watersheds, represented by the Tombigbee, the Pascagoula, and the Yazoo. There are mineral springs here and there. Mississippi is essentially an agricultural state. The north-eastern prairie region, 70 miles long and 15 to 20 wide, with its fertile, black, calcareous soil, contains much of the best farming and grazing land in the state. There are no springs here, but cisterns dug in the rotten limestone, bored wells, and artesian wells furnish ample water. In the north the bottom-lands along the numerous creeks and rivers especially are well adapted to agriculture; while in the central portion stock-raising is carried on, and in the yellow-pine region large herds of sheep are raised. The *Yazoo Delta*, embracing the elliptical area of alluvial bottoms between the Mississippi and Yazoo rivers, was subject to inundations; but levees now protect the lands. The delta contains 4½ millions of acres of alluvial land, only 500,000 acres of which are under cultivation. Virgin forests of hardwoods cover the rest. Chief products are cotton, corn, oats, fruits, and vegetables. The winters are short and mild, the mean temperature 45° F., the annual rainfall 48 to 58 inches. Cotton is manufactured, and there is some trade in lumber. Mississippi was first settled by the French in 1699, as part of Louisiana. It was ceded to Great Britain in 1763; was admitted into the Union as a state in 1817; seceded in 1861; was readmitted into the Union, 1869. Vicksburg, Greenville, and Natchez are principal ports on the Mississippi River, and Pascagoula and Biloxi on the Gulf. Meridian is the second town, and Jackson is the capital. Pop. (1820) 75,448; (1850) 605,948; (1880) 1,131,597; (1900) 1,551,270.

Mississippi-Missouri. The Mississippi River (Algonkin *Missi Sipi*, 'Great River'), the largest river of North America, is, with its tributaries, wholly within the boundaries of the United States. It drains most of the territory between the Rocky and Alleghany Mountains, embracing an area of 1,257,545 sq. m., or more than two-fifths of the United States. Besides the Missouri, Ohio, Red River, and Arkansas, there are forty-one other tributaries navigable. The total length of the Mississippi is 2960 miles, of which 2161 are navigable; but the Missouri affluent is longer than the Upper Mississippi, and with the lower river gives a total of 4200 miles. The total navigable waters amount to 16,090 miles.

The source of the Mississippi is Lake Itasca (7 by 3 miles) in the north-west central part of Minnesota, which has, however, several feeders, the principal being Elk or Glazier Lake. The remotest springs of Itasca rise in 47° 34′ N. lat. and 95° 20′ W. long., and are 1680 feet above sea-level. As it issues from this lake the Mississippi is about 12 feet wide and 18 inches deep. Through pine-forests and swamps for hundreds of miles it winds from lake to lake, with frequent rapids and picturesque falls, until, 400 yards wide, at Minneapolis it plunges over the Falls of St Anthony—the head of river-navigation. After receiving the St Croix, the Mississippi becomes the boundary between the states of Minnesota, Iowa, Missouri, Arkansas, and Louisiana on the right, and Wisconsin, Illinois, Kentucky, Tennessee, and Mississippi on the left. On the Wisconsin boundary the river expands into Lake Pepin, and thereafter, fully a mile wide, flows between bluffs 200 and 300 feet high, and sometimes through dense forests. At Rock Island there are rapids with 22 feet of fall, and 125 miles farther down are the Des Moines rapids with 24 feet of fall. Around these obstructions to navigation the United States government has constructed ship-canals. For several miles after the entrance of the turbid Missouri the diverse waters refuse to mingle, the Missouri's muddy tribute taking the right bank and the Upper Mississippi's clear stream the left. From the mouth of the Ohio the trough of the Mississippi is about 1490 yards wide, but as it approaches the Red it is

narrowed to 1000, and at New Orleans to 830. The usual depth of the channel southward from the Ohio is from 75 to 100 feet, and its surface is sometimes higher than the country beyond its banks; from the Missouri to the Gulf the Mississippi rolls in serpentine course through vast alluvial tracts or 'bottoms,' whose width varies from 30 to 150 miles. Though of unsurpassed fertility, scarcely one-tenth of these lands is cultivated owing to the dangers of the annual overflow. The melting of the ice and snow in the upper basin swells the lower current from March to June. Levees or embankments, largely built by the government, now extend for more than 1600 miles. Below the Red River the waters are discharged through numerous 'bayous' into the Gulf of Mexico. The main channel runs south-eastward, and finally divides into five or six passes—the principal, the South Pass. The vast deposits and the constant changes caused by floods tend to embarrass the entrance to the great river. To keep an open channel, Captain Eads made (1875-79) an admirably successful system of jetties at the South Pass, which has secured a depth exceeding 30 feet. The mouth of the Mississippi is essentially tideless. The principal cities on the great river are Minneapolis, St Paul, La Crosse, Dubuque, Keokuk, Quincy, Hannibal, St Louis, Memphis, and New Orleans, at several of which the river is crossed by railway bridges (at St Louis by two).

Missouri River ('Big Muddy'), the principal branch of the Mississippi River, is formed by the confluence of the Jefferson, Gallatin, and Madison rivers, at Gallatin City, Montana, 4132 feet above the sea-level. These rivers rise in the Rocky Mountains, close to the sources of the Columbia and Colorado rivers, and to the Continental Divide. The Madison has the remotest source in a small lake of the same name in Yellowstone National Park in Wyoming, 44° 19′ N. lat. and 110° 50′ W. long., at an elevation of 7632 feet, and flows north-west and north to the junction of the Three Forks. Thence the Missouri flows N. and NE. to Fort Benton, the head of navigation, 225 miles from Gallatin City. About 40 miles above Fort Benton are the Great Falls, where the river descends 327 feet in 15 miles by a series of cataracts (the highest 87 feet). From Fort Benton the course is easterly, the river being flanked by bluffs about a mile apart until it passes the rapids 400 miles below, when the valley opens to a width of 10 miles. The Milk River is its first large tributary, but at the boundary of North Dakota the still larger Yellowstone (1152 miles) joins it. From the last junction, which is the head of navigation in the low-water season, the Missouri flows E. and SE. through North Dakota, to Bismarck (1610 feet above sea-level, where it is crossed by the splendid bridge of the Northern Pacific Railroad), and through South Dakota to Sioux City, whence flowing south the river bounds Nebraska and Kansas on the right and Iowa and Missouri on the left. On receiving the tributary Kansas the stream turns to the east, and flowing across the state of Missouri pours its muddy waters into the Mississippi, 20 miles above St Louis. The Missouri is 3047 miles long, of which 2682 are called navigable, but owing to its tortuous, treacherous, and obstructed channel navigation is attended with great risks. The chief towns on the banks are Bismarck, Yankton, Sioux City, Omaha, Council Bluffs, Nebraska City, St Joseph, Atchison, Leavenworth, and Kansas City.

See *Commerce and Navigation of the Mississippi* (1888), and other works by Humphrey and Abbot (1861), and Glazier (1893).

Missolonghi (*Missolong'gee; g* hard), a Greek seaport, on the N. shore of the Gulf of Patras, 24 miles W. of Lepanto. A modern place, built on a swampy flat, it was vainly invested by the Turks in 1821–22; in 1825–26, after ten months of resistance, its garrison, reduced from 5000 to 3000 fighting-men, cut their way through the enemy, carrying with them a great number of the women and children. There is a statue (1835) over the grave of Bozzaris, and one (1881) of Lord Byron, where his heart is interred. Pop. 8324.

Missouri (*Mis-soo'ree*), one of the central states, and the fifth in order of population, of the American Union. It is 280 miles long from N. to S., and gradually increases southward in width from 208 miles to 312. Area, 68,735 sq. m., or nearly that of Scotland, Ireland, and Wales. The Missouri River divides the state into two unequal sections, north and south. North Missouri is generally level or slightly undulating, consisting of rolling prairies and level bottom-lands, with a luxuriant growth of timber along the streams. The southern section derives its distinctive features from the Ozark Mountains, throughout the greater part of their length rather tablelands, reaching their highest altitude (1500 feet) in Greene and Webster counties, and gradually breaking up into narrow ridges, spurs, knobs, and peaks farther east. The entire eastern boundary is washed by the Mississippi River, with a water front of 560 miles. The general drainage of the surface is indicated by long gentle slopes toward the Mississippi and Missouri rivers, except in the south-west, where the streams flow into the Arkansas. The extremes of heat and cold peculiar to this latitude are experienced; but the mean annual temperature is 54°, and the mean average rainfall is 41 inches. Missouri is pre-eminently an agricultural state. The soils are rich, deep, and unsurpassed in variety and productiveness. The principal crops are Indian corn, oats, wheat, potatoes, rye, barley, hemp, flax, cotton, sorghum, buckwheat, hay, and tobacco; whilst orchard products are grown in great abundance. There are vast numbers of grazing animals, though sheep are not largely raised. The immense quantities of dressed beef and pork shipped annually are constantly increasing. The mineral resources are exceedingly rich, comprising coalfields that cover more than 20,000 sq. m.; also vast deposits of iron ore, lead, and zinc; while copper, cobalt, nickel, fireclays, fine marble, granite, and limestone abound. Excellent transportation facilities are afforded by the Mississippi River along the eastern border, and by the Missouri River across the state; and the railroads are about 7000 miles in length. The metropolis of Missouri is St Louis. Next come Kansas City, St Joseph, Springfield, Sedalia, Hannibal, Joplin, Moberly, Carthage, Nevada, &c. Pop. (1820) 20,845; (1840) 140,455; (1860) 1,182,012; (1880) 2,168,380; (1900) 3,106,665. Missouri was first explored by De Soto in 1541. It formed part of the 'Louisiana Purchase' (1803); in 1821 Missouri was admitted into the Union, but the present limits of the state were not established till 1836.

Missouri River. See Mississippi.

Mistassini (*Mistassee'nee*), Lake, in Labrador, 100 miles long by 12 broad, and some 300 miles N. by W. of Quebec, is an expansion of the Rupert, which flows into Hudson Bay.

Mistretta, a town of Sicily, near the north coast, 60 miles ESE. of Palermo. Pop. 12,235.

Mitau (*Mitow'*), the capital of the Russian

government of Courland, on the right bank of the Aa, 27 miles by rail SW. of Riga. Founded in 1271 by the Teutonic Knights, and annexed to Russia in 1795, it has a castle, begun by Biron in 1738, and a museum. Pop. 39,615.

Mitcham, a village of Surrey, 8½ miles by rail SW. of Victoria Station, London, lies in the centre of a district in which flowers and aromatic herbs (roses, lavender, camomile, &c.) are extensively grown. Pop. of parish, 15,127.

Mitchell, capital of Davison county, South Dakota, 70 miles by rail W. of Sioux Falls, has a foundry and machine-shop, flour-mills, packing-house, &c. Pop. 5000.

Mitchelstown, a market-town of County Cork, Ireland, 11 miles N. of Fermoy, scene of a memorable riot in 1887; 7½ miles NE. there are stalactite caves. Pop. 2100.

Mito, a town of the main island of Japan, near the coast, 70 miles NE. of Tokyo. Pop. 33,800.

Mitrovicza, a town of Austria-Hungary, 24 miles SSW. of Peterwardein. Pop. 11,520.

Mittweida (*Mit-vī'da*), a town of Saxony, 11 miles by rail N. by E. of Chemnitz. Pop. 16,120.

Mitylene. See Lesbos.

Moate, a Westmeath market-town, 18 miles SW. of Mullingar. Pop. 1280.

Mobangi. See Congo.

Moberly, in Missouri, 148 miles WNW. of St Louis, is in a rich coal country. Pop. 10,000.

Mobile (*Mobeel'*), the principal city and only seaport of Alabama, is situated on the west side of Mobile River, and at the head of Mobile Bay, which opens into the Gulf of Mexico, and is defended by Fort Morgan. It is 141 miles by rail ENE. of New Orleans, and is built with broad shaded streets on a sandy plain, rising gradually from the river. It has a fine custom-house and post-office (1859), a city-hall and market-house (1857), a R. C. cathedral, a medical college, a Jesuit college, &c. Mobile contains a floating dry-dock and shipyards, foundries, cotton and cottonseed-oil mills, a tannery, a manufactory of chewing-gum, cigar-factories, &c. Before the war the chief business was the export of cotton; but since then this trade has greatly shrunk, while the export of timber has increased. Settled by the French in 1702, Mobile was a Spanish town until 1813, and still shows traces of this Latin origin. In 1879 the city limits were curtailed. Pop. (1870) 32,034; (1901) 38,469.

Mocha (usu. *Mokka*), a decayed seaport, once the capital of Yemen in Arabia, on the Red Sea, 130 miles WNW. of Aden. From early in the 16th c. until the middle of the 17th, Mocha was the port whence the coffee of Yemen ('Mocha coffee') was principally exported. Pop. 5000.

Modbury, a town of Devon, 12 miles E. of Plymouth. Pop. of parish, 1206.

Mod'ena (anc. *Mutīna*), capital of a former duchy, stands on a broad plain in northern Italy, 23 miles by rail NW. of Bologna. Pop. 65,000. The ancient Via Æmilia divides it into the old and new city. The Romanesque cathedral dates from 1099, and has a fine façade; its campanile is one of the great towers of Italy. The ducal (now royal) palace, a picturesque structure of the 17th century, contains the Este library of 132,000 volumes and 8000 MSS., the Este archives, collections of coins, and pictures by Guido, the Carracci, Guercino, Correggio, &c. Modena possesses besides a university (1678), with 45 teachers and 500 students. The chief manufactured products are silk, leather, vinegar, and cast metals. Originally an Etruscan town, Modena was conquered successively by the Gauls and the Romans, and destroyed by Constantine the Great, the Goths, and the Longobards. The Este family became its masters in 1288, in 1452 became dukes, and were expelled in 1860, when the duchy was incorporated with the Kingdom of Italy.

Mod'ica, an inland town of Sicily, 45 miles SW. of Syracuse. Pop. 48,390.

Moel Famman, a hill (1823 feet) of North Wales, 4 miles W. of Mold.

Møen, a Danish island, 20 miles long, in the Baltic, at the SE. end of Zealand. Pop. 15,000.

Mœris (*Meeris*), Lake, the ancient Greek name of a brackish sheet of water in Egypt, now in the province of Fayyûm (q.v.), 50 miles SW. of Cairo; extreme length from NE. to SW., 35 miles. See a work by Major Brown (1893).

Moero (*Meero*), or Meru, Lake, lies SW. of Tanganyika in Central Africa, on 9° S. lat. and 29° E. long., and is traversed by the Luapula. It was discovered by Livingstone in 1868.

Mœsia (*Mezia*), an ancient Roman province, divided by the river Cibrus (Zibritza) into two parts, the eastern corresponding to Bulgaria, and the western (Mœsia Superior) to Servia.

Moffat, a pleasant watering-place and burgh of barony (1635) in Upper Annandale, Dumfriesshire, 51 miles SSW. of Edinburgh by road, and 64 by a short branch (1883) of the Caledonian Railway. It lies 370 feet above sea-level, engirt by round grassy hills (the loftiest, Hartfell, 2651 feet), and in the midst of delightful scenery, chief features of which are 'dark Loch Skene,' the Grey Mare's Tail, and the Devil's Beef-tub. Its mineral springs, the principal of which, like that of Harrogate, is saline and sulphurous, have been celebrated since 1653; and its visitors have included Home, Hume, Carlyle, 'Ossian Macpherson,' Boswell, Blair, Burns, and William Black. Pop. (1841) 1413; (1901) 2153. See Turnbull's *History of Moffat* (1871).

Mogador', or Sueïra, a seaport 130 miles WSW. of the city of Morocco, on a rocky promontory opposite a small island. It is the best built town in the empire, having been laid out in 1760 by a French engineer. The exports include almonds, olive-oil, wool, goat-skins, hair, &c.; the imports woollens, cottons, glass, candles, and hardware. The manufactures are brass trays, daggers, furniture of ârar wood, woollen cloth, &c. Pop. 19,000, of whom 8000 are Jews, and 200 Europeans.

Mogileff. See Mohileff.

Moguer (*Mo-gayr'*), a small port of Spain, on the Rio Tinto, near its mouth, and 8 miles E. of Huelva. Pop. 8714.

Mohacs (*Mo'hatch*), a town of Hungary, on the western arm of the Danube, 37 miles by rail ESE. of Fünfkirchen. Pop. 15,385. Here, on 29th August 1526, Louis II. of Hungary, with 25,000 Hungarians, was routed by 200,000 Turks. Here, too, on 12th August 1687, the Turks in their turn were defeated by an Austro-Hungarian army under Charles of Lorraine. These two battles marked the beginning and the end of Turkish dominion in Hungary.

Moham'merah, a town of Khuzistan, Persia, on the Lower Karun, near the Turkish frontier. Pop. 5000.

Mohave Desert (*Mohah'veh*), a basin, with

little water or vegetation, chiefly in the SE. of California, and extending into Arizona. The Mohave River rises in the San Bernardino range, and finally disappears in the Mohave Sink.

Moher, Cliffs of, a wall of rock facing the Atlantic, on the coast of Clare, 20 miles NW. of Ennis, 4 miles long and from 440 to 660 feet high.

Mohileff, or Mogileff, (1) the capital of a Russian government (area, 18,551 sq. m.; pop. 1,715,258), on the right bank of the Dnieper, 95 miles SW. of Smolensk. It has two archiepiscopal cathedrals, Greek (1780) and Roman Catholic (1692), an old castle, and a town-house (1679). Tanning is the principal industry. Pop. 44,500, largely Jews. The town was burned down by Peter the Great for strategical reasons in 1708. Here, on 23d July 1812, the French under Davoût defeated the Russians under Bagration.—(2) A town of Podolia, Russia, on the left bank of the Dniester, 190 miles NW. of Odessa. Pop. 18,421.

Mohill, a town of counties Leitrim and Longford, 5 miles NE. of Dromod station. Pop. 790.

Moidart, a coast-district, SW. Inverness-shire.

Moissac (*Mwassak'*), a town in the French dep. of Tarn-et-Garonne, on the Tarn, 111 miles SE. of Bordeaux. Pop. 8241.

Mola, a seaport of Italy, on the Adriatic, 12 miles by rail SE. of Bari. Pop. 14,070.

Mola di Gaeta. See Formia.

Mold, a town of Flintshire, on the Alyn, in a rich mineral district, 14 miles by rail W. by S. of Chester. Its fine 15th-century church, rich in stained glass, contains the grave of the painter Wilson. The county prison, recently built at a cost of £25,000, was sold in 1880 for £3500 to expelled French Jesuits, who renamed it St Germanus' House, in memory of the Britons' 'Alleluia Victory' over the Picts and Saxons. With Flint, &c., Mold returns one member. Pop. 4257.

Moldau (*Moldow*; Bohemian *Vltava*), the chief river of Bohemia, and an important tributary of the Elbe, rises in the Böhmerwald Mountains, on the south-west frontier, at an elevation of 3870 feet, and flows 278 miles SE. and N. past Budweis and Prague to the Elbe opposite Meluik.

Moldavia, a former principality, now the northern division of Roumania (q.v.).

Mole, two rivers of Devon and Surrey, affluents of the Taw and the Thames.

Molfetta, a seaport and cathedral city of southern Italy, on the Adriatic, 16 miles by rail NW. of Bari. Pop. 39,097.

Moline (*Mo-leen'*), a city of Illinois, on the Mississippi, 179 miles by rail W. by S. of Chicago, and separated from Rock Island only by a swift and narrow channel affording great water-power to many busy mills and factories. Pop. 17,491.

Mollendo (Span. *Mo-yen'do*), a port of Peru, lying SW. from Lake Titicaca. It has railway connection with Puno (107 miles), and thence to Arequipa (218). Pop. 2500.

Mollwitz (*Mol-veetz*), a village of Prussian Silesia, 7 miles W. of Brieg. An obelisk (1878) marks the battlefield where Frederick the Great defeated the Austrians, April 10, 1741.

Molo'ga, a town in the Russian government of Jaroslav, near the confluence of the Mologa and Volga, 68 miles WNW. of Jaroslav. Pop. 6361.—The river Mologa winds 337 miles SE. through Tver, Novgorod, and Jaroslav governments.

Molokai. See Hawaii.

Molton, South. See South Molton.

Moluc'cas (also called Spice Islands), the easternmost division of the Malay Archipelago, comprising most of the islands between Celebes and New Guinea, belonging to the Dutch. The northern group comprises Morotai (Morty) and Rau (Riao) in the north, Jilolo, Ternate, Tidor, &c. in the centre, Batchian (Batjan), Tawali, Mandioli, and Great and Little Obi in the south, with a total area of nearly 10,000 sq. m. (of which Jilolo has 7000). The pop. is estimated at 60,000, nearly half in the small but politically important islands of Tidor and Ternate. The Southern Moluccas comprise the two large islands of Buru (8500 sq. m.) and Ceram (7000), the small Amboyna, Uliasser, Banda, and Ceram Laut sub-groups, the outlying Ké and Aru clusters, &c., with a collective area of 16,500 sq. m., and a pop. of 350,000, of whom 200,000 are in Ceram, 60,000 in Buru, and 30,000 in Amboyna. Thus the Moluccas have a total area of over 26,000 sq. m., and a pop. of some 400,000, chiefly civilised Malays in the Little Moluccas (the small islands west of Jilolo), Banda, and Amboyna, elsewhere 'Alfuros' (uncivilised natives), some Indonesians, Malays, and Malayo-Papuans.

The Moluccas lie partly on the line of the great volcanic fault, which sweeps round in a vast curve from Sumatra to the Philippines and Japan, and which in the Moluccas is indicated by the still active volcanoes Gunong-Api (1870 feet) in Banda, Tidor (5730), Ternate (5650), Motir (2800), three cones in Jilolo, Tolo in Morotai. Despite their tropical position, being nearly bisected by the equator, the Moluccas enjoy a relatively healthy climate, and in some places the European race (Portuguese and Dutch) has even been acclimatised. The excessive heats are everywhere tempered by sea-breezes and by the mountainous character of the islands, which in Buru and Ceram rise to heights of 8000 and even 10,000 feet. Indigenous to most parts of this region are the clove, nutmeg, and other spices, allowed by the Dutch to be cultivated only in Amboyna and the Banda group; also the sago-palm, pandanus, dammar pine, and cajeput. Amongst animals are the babiroussa, the bird of paradise, the marsupial cuscus and flying opossum, the cassowary, the mound-building bird, the crimson lory, and many gorgeous parrots and pigeons.

Notwithstanding their small size, Ternate and Tidor have always been the chief centres of political power in the northern, and Amboyna in the southern Moluccas, as having long been occupied by civilised Malays. In Ternate is still centred most of the trade of the northern Moluccas, which export spices, tortoise-shell, trepang, beeswax, bark, and birds of paradise. Amboyna, capital of all the Dutch Moluccas, exports cloves. Banda is the home of the nutmeg, and yields sago and cocoa-nuts.

See A. R. Wallace, *The Malay Archipelago* (new ed. 1894); Reclus, *Universal Geography;* Müller's *Reizen;* and German works by Bastian, Von Rosenberg, and Bernstein.

Mombas'a, a seaport of growing importance and capital of the British East Africa Protectorate, is situated on a small coralline island 3 miles long by 2½ broad close to the coast, 150 miles N. of Zanzibar. It was held by the Portuguese pretty continuously from 1505 to 1698; was under British protection in 1825–30, and then under the sultan of Zanzibar, who in 1888 ceded it provisionally to the British East Africa Company. They were made definitive masters of the place two years later, when they also were put in possession of a vast tract of country, extend-

ing 400 miles along the coast, and inland up to the Victoria Nyanza (see Ibea); but in 1895 the company's territory was declared a British protectorate. Hence in 1896–1902 a railway was made to the Victoria Nyanza, a distance of 572 miles. The harbour, one of the largest, safest, and healthiest on the east coast of Africa, was in 1890 made a British naval coaling station. The town has been largely rebuilt; and extensive harbour-works were undertaken in 1890. Pop. about 20,000, mostly Africans, with some Arabs and Banyans. On the mainland opposite is Frere Town, the see of an Anglican bishop.

Momien, a Chinese frontier-town in the extreme west of Yunnan, 135 miles NE. of Bhamo.

Mompox, or Mompos, a town of Bolivar in Colombia, on the Magdalena, 110 miles SE. of Cartagena. It was founded in 1538. Pop. 11,000.

Mon'aco, a small principality on the Mediterranean, 149 miles ENE. of Marseilles, and 9 from Nice. Area, 8 sq. m.; pop. (1873) 5741; (1900) 15,180, of whom 3292 were in the town of Monaco, 6218 in Condamine, and 3794 in Monte Carlo. The territory, which is encircled by the French dep. of Alpes Maritimes and the sea, consists mainly of the rocky promontory on which the capital is built, and a small strip of coast. The family of Grimaldi acquired Monaco in 968, Mentone and Roquebrune and Castillon about 1230, and Antibes in 1237. Honoré II. put his country under a French protectorate in 1644. In 1846 Mentone and Roquebrune were annexed by Sardinia, and after 1859 the whole territory belonged for a short time to Victor Emmanuel; and in 1861 the lawful owner sold Mentone and Roquebrune to Napoleon III. for 4,000,000 francs. About 1000 of the inhabitants are employed in the rooms and gardens of the celebrated Casino. These gambling-rooms, built at Monte Carlo on ground leased till 1913 from the Prince of Monaco, belong to a joint-stock company, and have about 400,000 visitors annually. The climate of Monaco is milder than that of any other place in the Riviera; palms and aloes grow most luxuriantly, and rare wild flowers are found on its rocky promontory. See Pemberton's *Monaco, Past and Present* (1867), and French works by Métivier (2d ed. 1865) and Boyer de Sainte-Suzanne (1884).

Monadhliath (usu. *Monalee'a*), Inverness-shire mountains (3087 feet), 20 miles W. of Kingussie.

Monaghan (*Mon'ahan*), an inland county of Ulster, Ireland, between Tyrone on the N. and Meath (in Leinster) on the S. Its greatest length from north to south is 37 miles; the total area being 319,741 acres (496 sq. m.), of which about 140,000 are under tillage. Pop. (1841) 200,442; (1901) 74,611, of whom 54,757 were Catholics. The general surface is undulatory; the highest point is 1254 feet above the sea. Monaghan is interspersed with lakelets, and has many small streams. Limestone, freestone, and slates are worked. The flax crop has greatly increased of late years, and the linen manufacture is thriving. The principal towns are Monaghan, Carrickmacross, Clones, and Castle-Blayney. There are two county members. Monaghan possesses two round towers, at Clones and Inniskeen; and there are several raths and Danish forts.

Monaghan (Gaelic *Muinechan*, 'Monkstown'), the county town, is 76 miles NNW. of Dublin by rail. It returned two members to the Irish parliament, and is the centre of some trade in agricultural produce. Pop. (1861) 3910; (1901) 2932. See Evelyn P. Shirley's *History of the County of Monaghan* (1877–80).

Monasterboice, 6 miles NW. of Drogheda, has a round tower 90 feet high, three fine Celtic crosses, and the ruins of two churches.

Monastere'vin, a Kildare market-town, 37 miles SW. of Dublin. Pop. 769.

Monastir', or Bitolia (anc. *Pelagonia*), a town of Turkish Macedonia, 90 miles NW. of Salonica. It makes carpets and filigree. Pop. 45,000.

Moncalieri (*Mon-ka-lyay'ree*), a town of Italy, on the Po, 5 miles S. of Turin. Pop. 11,560.

Moncontour (*Mon^{g}con^{g}toor'*), a village in the French dep. of Vienne, 48 miles SW. of Tours. Here the Huguenots were routed, 3d Oct. 1569.

Moncton, a New Brunswick town, on the Petitcodiac, 89 miles NE. of St John. Pop. 9500.

Mon'dovi, a cathedral city of Italy, 58 miles S. of Turin by rail. Here, on 22d April 1796, Napoleon routed the Sardinians. Pop. 10,302.

Moness, Falls of. See Aberfeldy.

Moneymore, a market-town of Londonderry, 4 Miles NE. of Cookstown. Pop. 517.

Monghyr, a picturesque city of Bengal, on the Ganges' right bank, 80 miles E. by S. of Patna, with a fort on a rocky crag. Pop. 37,077.

Mongolia, the country of the Mongols, a term now vaguely applied to the northern portion of the Chinese Empire.

Moniaive (*Minnichive'*), a Dumfriesshire village, 16½ miles NW. of Dumfries. Pop. 530.

Monk Bretton, a town of Yorkshire, 3¼ miles NE. of Barnsley. Pop. 4000.

Monkland, Old and New, two Lanarkshire parishes, containing Coatbridge and Airdrie.

Monk Soham, a Suffolk parish, 5 miles WNW. of Framlingham.

Monkwearmouth. See Sunderland.

Monmouth (*Mon'muth*), the county town of Monmouthshire, stands, girt by wooded hills, at the influx of the Monnow to the Wye, 16 miles N. of Chepstow, 18 S. of Hereford, and 26 WSW. of Gloucester. Its chief features are the ruined castle of John of Gaunt, in which Henry V. was born; the parish church, dating from the 14th century, and restored in 1882 by Street at a cost of £7000, with a graceful spire 200 feet high; the bridge over the Monnow (1272), with its 'Welsh gate,' and near it, a small Norman chapel; a fragment of a Benedictine priory, with 'Geoffrey of Monmouth's study;' the new town-hall, built in 1888 at a cost of £10,000; and a grammar-school (1614). In the neighbourhood are the temple-crowned Kymin (800 feet), commanding a glorious view; the Buckstone, a rocking-stone, displaced by tourists in 1885, but since re-poised; and, 7 miles SW., the superb ruins of Raglan Castle, defended for ten weeks in 1646 against Fairfax by the old Marquis of Worcester. First chartered by Edward VI., Monmouth unites with Newport and Usk to return a member. Pop. 5070. See *Charters of Monmouth* (1826), and works by Heath (1804) and Greene (1870).

Monmouth, capital of Warren county, Illinois, 179 miles by rail WSW. of Chicago, is the seat of Monmouth College (United Presbyterian, 1856), with 400 students, and manufactures farm implements, sewer pipes, and cigars. Pop. 7936.

Monmouthshire, a county in the west of England, bounded by Hereford, Gloucester, the estuary of the Severn, and South Wales. With a maximum length and breadth of 32 and 28 miles, it contains 578 sq. m., or 370,350 acres, of which more than one half is under permanent

pasture, and about one-twelfth in woods. Pop. (1801) 45,582; (1841) 134,368; (1901) 292,317. Its surface is for the most part hilly, especially in the north and north-west (the Sugar Loaf is 1954 feet high), but the Caldicot and Wentloog Levels, which for a distance of 25 miles skirt the southern coast, are so low as to require in places the protection of sea-walls and earthworks. The Wye, with its tributary the Monnow, the Usk, Ebwy, and Rumney, all flowing south into the estuary of the Severn, are the principal rivers. There are extensive orchards. The great wealth of Monmouthshire is derived from its minerals, coal and ironstone abounding in the region of Pontypool and Rhymney. The county comprises six hundreds, the municipal boroughs of Monmouth and Newport, and 147 civil parishes. Three members are returned to parliament for the county, and one for the combined borough of Monmouth, Newport, and Usk. Towns other than the above are Abergavenny, Blaenavon, Caerleon, Chepstow, and Tredegar. Monmouthshire, which until 1535 formed part of Wales, and which was treated as such in the Welsh Disestablishment Bill of 1894, is noted for its beautiful scenery and for the many remains of feudal castles, &c. scattered throughout it. Of these the finest examples are the castles of Raglan, Caldicot, and Chepstow, and the abbeys of Llanthony and Tintern. See the county histories by Williams (1796) and Coxe (1801).

Monnow, a river of Hereford and Monmouth, flowing 28 miles to the Wye at Monmouth.

Monongahe'la, a river rising in West Virginia and flowing north to Pittsburgh, where it unites with the Alleghany to form the Ohio.

Mono'poli, a town of S. Italy, on the Adriatic, 43 miles by rail NW. of Brindisi, with a cathedral, and ancient walls and castle. Pop. 23,154.

Monreale (*Mon-re-ah'le*), a city of Sicily, 5 miles SW. of Palermo. On its 'royal mount' (1231 feet high) stands the Norman cathedral (1176), with its mosaics. Pop. 23,898.

Monroe', a city of Michigan, on the Raisin River, 2 miles by a ship-canal from Lake Erie, and 40 by rail SSW. of Detroit, with flour-mills, a woollen-mill, &c. Pop. 5068.

Monrovia. See LIBERIA.

Mons (*Mon^{g}ss;* Flem. *Berghen*), the capital of the Belgian province of Hainault, on the Trouille, 38 miles SSW. of Brussels. Its fortifications were demolished in 1862; but the country around can be laid under water. The church of St Waudru (1450–1580) is a masterpiece of Gothic; and there are a town-hall (1458), a belfry (1662) 275 feet high, a good library, &c. The manufactures include woollen and cotton goods, cutlery, and sugar; in the vicinity is an extensive coalfield. Pop. (1875) 24,539; (1901) 27,015.

Montagnana (*Mon-tan-yah'na*), a town of northern Italy, 32 miles SW. of Padua. Pop. 8200.

Montalcino (*Montalchee'no*), a cathedral city of Italy, on a hill (1900 feet), 22 miles SSE. of Siena. Pop. 3353.

Montana (*Montah'na*), one of the north-western states of the American Union, bounded by the Canadian provinces of Alberta and Saskatchewan, North and South Dakota, Wyoming, and Idaho. In area—146,080 sq. m., or nearly five times the size of Scotland—it ranks third among the states and territories, but in population only forty-fourth. The density of the population is only 1.7 person per square mile. The Rocky Mountains occupy fully one-fifth of the surface, in the south and west; the rest of the state is made up of valleys or high, rolling prairies. The head-waters of the Columbia and Missouri have their sources in Montana. The mean elevation of the state is about 3000 feet; the highest peaks of the Rocky Mountains rise to 10,000 or 12,000 feet. The Yellowstone National Park forms part of the southern boundary. In the south-east the Bad Lands extend into the state from Wyoming. The climate is mild, and the atmosphere remarkable for its clearness. The soil contains all that is needed for sustaining vegetation, but it is almost valueless without irrigation; with that, however, the yield of grains and vegetables is enormous. Stock-raising, however, is more profitable than agriculture. But the great industry is the mining and reduction of gold, silver, lead, and copper ores. The first systematic working of placer mines for gold commenced in 1862; in 1863 the first gold-quartz mill was built. The portion of Montana east of the Rocky Mountains was part of the Louisiana Purchase; that to the west was part of Oregon and Washington. It was first visited by the French in 1742, and by Lewis and Clarke in 1804–6; these were followed by fur-traders and trappers, and by Jesuit missionaries. Gold was discovered in 1861. In 1864 the territory was organised, and in 1889 Montana became a state of the Union. The chief towns are the capital, Helena, and Butte City. Pop. (1870) 20,595; (1880) 39,159; (1900) 243,329.

Montargis (*Mon^{g}tarzhee'*), a town in the French dep. of Loiret, 47 miles E. by N. of Orleans, with a fine church (12th century—1868) and ruins of a vast castle. Here in 1371 is said to have occurred the famous judicial combat between 'the dog of Montargis' and Macaire its master's murderer. Pop. 10,500.

Montauban (*Mon^{g}tobon^{g}*), the capital of the French dep. of Tarn-et-Garonne, on the river Tarn, 31 miles N. of Toulouse. A well-built, handsome place, it has a modernised brick bridge (1335), 224 yards long; a fine cathedral (1739) in the Italian style; and a monument (1871) to Ingres, the painter, a native. It has woollen manufactures, and trades in wine, grain, leather, &c. Montauban was founded in 1144, became the seat of a bishop in 1317, embraced the Reformation in 1560, and acquired historical celebrity as the stronghold of the Huguenots, vainly besieged for three months in 1621. Nearly half the inhabitants still are Protestants, and it has a Protestant college. Pop. (1872) 18,855; (1901) 24,979.

Montbeliard (*Mon^{g}bayl-yar';* Ger. *Mömpelgard*), a town in the French dep. of Doubs, 48 miles NE. of Besançon. It lies in a valley between the Vosges and Jura Mountains, is surmounted by an old château (now a prison), and manufactures watch-springs, watchmaking tools, and cotton. A possession of the House of Würtemberg from 1397, it was a Protestant centre from 1525, was formally ceded to France in 1801, and suffered much in the Franco-German war. Cuvier was a native; there is a statue of him, as also of Denfert, the defender of Belfort. Pop. (1872) 5865; (1901) 9154, mostly Lutherans.

Mont Blanc (*Mon^{g} Blon^{g}*), the highest mountain in Europe (if we regard the Caucasus as Asiatic), 15,782 feet above sea-level, is situated in France, close to the Italian frontier, 40 miles S. of the Lake of Geneva. The waters which spring from its western slopes are drained off to the Rhone, those which originate on the east side to the Po. It rises into several sharp peaks (*aiguilles*)

and forms great glaciers—the Glacier du Géant, Mer de Glace, &c. In 1760 Saussure offered a prize for the discovery of a practicable route to the summit, which was gained in June 1786 by Balmat and Paccard, guides. There is an observatory (1890) at a height of 14,470 feet.

Montbrison, a French town in Loire, 35 miles SW. of Lyons, with mineral wells. Pop. 6880.

Mont Cenis (*Mon*^{g} *Saynee'*), or MONTE CENISIO, an Alpine peak (11,792 feet) and pass (6884) between Savoy and Piedmont. Over the pass a road was constructed (1802–10) by Napoleon's orders, at an expense of £300,000. A railway tunnel, 13 miles W. of the pass and 7½ miles long, was begun in 1857 on the Italian side, and in 1863 on the French, and was finished in 1870 at a cost of £3,000,000.

Mont-de-Marsan (*Mon*^{g}*-de-Marson*^{g}), capital of the French dep. of Landes, 92 miles by rail S. of Bordeaux, with a mineral spring and manufactures of chemicals, iron, &c. Pop. 10,954.

Mont-Dore-les-Bains (*Mon*^{g}*-dor-lay-Ban*^{g}), a village of Auvergne, in the dep. of Puy de Dôme, 26 miles SSW. of Clermont-Ferrand. It lies 3412 feet above the sea-level, in the picturesque valley of the Dordogne. The eight mineral springs (102°–114°) were used by the Romans. The resident pop. of the village is 1339; but the baths, which are every year becoming better known, are thronged during the short season (July to September) with visitors from all parts.

Montebello Casteggio (*Mon-tey-bello Casted'jo*), an Italian village, 14 miles S. by W. of Pavia. The Austrians were twice defeated here—by the French in June 1800; and by French and Piedmontese in May 1859.

Monte Carlo. See MONACO.

Monte-Cassino (*Montey-Cassee'no*), the monastery founded (529) by St Benedict, stands nobly on beetling cliffs, 70 miles by rail NW. of Naples and 92 SE. of Rome. It was dissolved in 1866.

Monte Catini (*Montey Catee'nee*), a watering-place of Italy, by rail 30 miles NW. of Florence. Its saline springs range between 82° and 86° F. The season lasts from May to September.

Monte Corno. See APENNINES.

Monte Cristo, an uninhabited islet of granite off the Italian coast, 26 miles S. of Elba.

Montego Bay, a northern port of Jamaica (q.v.).

Monteith. See MENTEITH.

Montélimar (*Mon*^{g}*-tay-li-marr'*), a French town, 85 miles S. of Lyons. Pop. 11,121.

Montene'gro (Italian translation of the native *Czrnagora*, 'Black Mountain'), an independent state in the Balkan Peninsula, between Herzegovina and Albania, about 80 miles long by 70 broad. Its area was extended in 1878 by the addition of a large district on the north, a narrow strip on its east side, and the port of Antivari on the Adriatic, and again in 1880 by the addition of the port of Dulcigno. The area, thus extended, is 3255 sq. m., considerably less than half the size of Wales. Beyond the low coastal fringe, which has a climate like that of the south of France, comes a rugged mountain-region ranging up to 6500–8000 feet, not in a series of chains, but in a confusing maze of peaks and gigantic crags and blocks, wild gorges and natural caves, the bare gray crystalline rock being everywhere visible. The streams in some cases have underground channels. The centre of the country is occupied by the branching valleys of the rivers Zeta and Moratcha, which flow south into Lake Scutari. East and north of them the mountains are well wooded, principally with beech and pine, and afford good pasturage to sheep, goats, and cattle. The exports consist chiefly of cattle, goats, hides, smoked fish and mutton, cheese, sumach, fruits, and wine; the imports, of wheat, gunpowder, hardware, groceries, cloth, and glass. The Montenegrins, a race of primitive mountaineers, are a brave, warlike, and simple people, noted for their honesty and their chastity. They live in small stone houses, in small villages. They belong to the Servian branch of the Slavs, number (1900) 228,000, and belong, except about 10,000 Mohammedans and 4000 Roman Catholics, to the Greek Orthodox Church In the 14th century the country was tributary to Servia; but maintained its independence when Servia was subjugated by the Turks (1389). From that time down to 1880 the Montenegrins waged almost incessant war with the Turks. From 1516 till 1851 the little state was governed by ecclesiastical princes, but the civil was then separated from the ecclesiastical functions, and the throne was declared hereditary. The prince is an absolute sovereign; but he is assisted by a state council and a ministry. During the last quarter of the 19th century the little land has progressed greatly in civilisation; education has made rapid strides, the men have taken to cultivating their fields, and roads have been constructed; while the old militia has been converted into a standing army of 30,000 men, though not more than 100 serve permanently, as a bodyguard to the prince. The village of Cetinje is the capital. See works by Denton (1877), Carr (1884), Brown (1888), Wyon and Prance (1903).

Montenotte (*Monteynot'teh*), a village of northern Italy, 26 miles W. of Genoa, where Napoleon won his first victory over the Austrians in 1796.

Montepulciano (*Mon-tey-pool-tchee-ah'no*), an episcopal city of Italy, on a high hill, 43 miles by rail SE. of Siena. It was the birthplace of Politian and Bellarmine, and is famous for its red wine. Pop. 15,400.

Montereau (*Mon*^{g}*tero'*), a town in the French dep. of Seine-et-Marne, at the confluence of the Seine and Yonne, 49 miles SE. of Paris. Here in 1419 the Duke of Burgundy was assassinated; and near this Napoleon, in 1814, gained his last victory over the allies. Pop. 7479.

Monterey (*Monteyray'*), a cathedral city, 670 miles by rail N. of Mexico City. Founded in 1599, it was taken by Taylor in 1846. Pop. 66,000.

Monterey, a post-village of California, capital of California when it was a Mexican province, on Monterey Bay of the Pacific, 94 miles S. by E. of San Francisco by rail. Pop. 2500.

Monte Rosa, an Alpine mountain mass with four principal peaks, in the Pennine ridge which separates the Swiss canton of Valais from Italy. The highest peak, the Dufourspitze, 15,217 feet high, was first climbed by Mr Smyth in 1855.

Monte Sant' Angelo (*An'jelo*), a city of southern Italy, 28 miles NE. of Foggia, and 2790 feet above sea-level. Pop. 25,109.

Monte Sarchio (*Sar'keeo*), a town of southern Italy, 13 miles NW. of Avellino. Pop. 5238.

Montevideo (usu. *Mon-tey-vid'e-o*; Span. pron. *Monteyveeday'o*), the capital of the republic of Uruguay, is situated on the north shore of the La Plata estuary, 125 miles E. by S. of Buenos Ayres. It was built originally on a low promontory between the ocean and a horse-

shoe-shaped bay, 2 miles across; but its extensive suburbs now stretch far into the flat country behind, and have crept round the bay to the landmark which gives the city its name—the Cerro, a smooth, isolated cone, 505 feet high, crowned with a lighthouse and an old fort. At its base there are nearly a score of great *saladeros*, or beef-salting establishments, where 200,000 cattle yearly are killed; and here, too, is the largest of the city's dry-docks. High above the flat house-roofs rises the cathedral (133 feet), with two side towers and a dome. Other buildings are the large opera-house, town-hall, custom-house, exchange, the Cabildo (law-courts and parliament house), the school of arts and trades, the university, museum, the English and Basque churches, &c. Tramcars run in all directions; there are local electric lighting and telephone companies; and water is brought from a distance of 34 miles. The depth of water in the bay ranges from 9 to 15 feet, and vessels of heavy draught are compelled to anchor in the exposed roadstead outside; but great port improvements were begun in 1901. Pop. (1877) 110,200; (1905) 268,000, of whom nearly one-third were foreigners. A fort was built on the Cerro, by the Spaniards, in 1717, and the first settlement of the town made in 1726; in 1828 it became the capital of the newly-formed republic of Banda Oriental. See URUGUAY.

Montferrat (*Mon²ferrah'*), formerly an independent marquisate and duchy of Italy, between Piedmont, Milan, and Genoa, in 1631–1703 acquired by the Dukes of Savoy, and now forming part of the kingdom of Italy. It consisted of two separate portions, both lying between the Maritime Alps and the Po, and having a united area of over 1300 sq. m. The capital was Casale.

Montgomery (*Montgum'mery*), the capital of Alabama, on the left bank of the Alabama River, 400 miles above Mobile. It contains a fine state-house and a handsome Masonic hall, and has foundries, flour-mills, steam cotton-gins, a cotton factory, and oil-works. Several railways meet here, and an active trade is carried on, much cotton, especially, is shipped. Montgomery was for a time the capital of the Confederate States. Pop. (1880) 16,713; (1900) 30,346.

Montgomery, a town of the Punjab, in the Multan division, midway between Lahore and Multan. It was named in 1865 after the governor of the Punjab. Pop. 5500.

Montgomeryshire, an inland county of North Wales, 40 miles long and 35 broad, bounded NE. and NW. by the counties of Denbigh, Merioneth, Salop, Radnor, and Cardigan. Area, 773 sq. m., or 495,089 acres, of which more than one-third is laid down in permanent pasture, and 58,000 acres are under tillage. Pop. (1801) 47,978; (1831) 65,700; (1881) 65,718; (1901) 54,901. The surface is for the most part barren, and in places mountainous, Plinlimmon (2469 feet), on the Cardigan border, the Berwyn Mountains in the NE., and the Breidden Hills—some 12 miles E. of Shrewsbury—being the principal elevations; but towards the English border it consists of a series of fertile and well-wooded valleys. The Severn, with its tributary the Vyrnwy (q.v.), and the Dovey—alike noted for their fishing—are the most important rivers, whilst Offa's Dyke (q.v.) traverses the south-east corner of the county. Of manufactures, that of Welsh flannel at Newtown is the most extensive. The county comprises nine hundreds, the municipal boroughs of Llanfyllin, Llanidloes, Montgomery, and Welshpool, and sixty-eight parishes. One M.P. is returned for the county, as also one for the Montgomery district of boroughs—viz. Llanfyllin, Llanidloes, Machynlleth, Montgomery, Newtown, and Welshpool.—The county town, Montgomery, is 7 miles S. of Welshpool, and was incorporated in 1885. Pop. 1038.

Montilla (*Monteelya*), a town of Spain, 23 miles SSE. of Cordova by rail. Pop. 13,701.

Montluçon (*Mon²lüsson²'*), a town in the French dep. of Allier, on a castle-crowned hill whose base is washed by the Cher, 202 miles S. of Paris. It owes its rapid growth to the Commentry coalfield, and has ironworks and plate-glass manufactories. Pop. (1872) 20,251; (1901) 34,042.—NÉRIS-LES-BAINS, 18 miles SE., is the *Neriomagus* of the Romans—of whom many traces are left—and since 1821 has again risen into repute through its warm alkaline mineral waters (126° F.). Pop. 2395.

Montmartre. See PARIS.

Montmédy (*Mon²maydee'*), a town and fortress in the French dep. of Meuse, 25 miles N. of Verdun and 31 SE. of Sedan, lies in the valley of the Chiers, a tributary of the Meuse. It long was part of the Spanish Netherlands, was often taken and retaken, but became finally French in 1659, and was re-fortified by Vauban. It was, however, captured by the Germans in 1815 and again in 1870. Pop. 2417.

Montmorency, a river of Quebec, a tributary of the St Lawrence, famous for its beautiful falls, 8 miles NE. of Quebec. Here the stream is 100 feet wide, and falls 250 feet.

Monto'ro, a town of Spain, on the Guadalquivir, 26 miles ENE. of Cordova. Pop. 11,935.

Montpe'lier, the capital of Vermont since 1805, on the Winooski or Onion River, 206 miles by rail NNW. of Boston. It contains a granite state-house, with a statue of Ethan Allen. Pop. 6260.

Montpellier (*Mon²pel-yay'*), the capital of the French dep. of Hérault, on the Lez, 6 miles from the sea and 31 SW. of Nimes. Pop. (1872) 54,466; (1901) 69,193. Lying near the centre of Languedoc, on the great route from Italy and Provence to Spain, with its seaport at a point offering the shortest land-route not only to all parts of Languedoc, but to north France, Montpellier's position was a highly favourable one during the middle ages. Its schools of medicine, law, and arts were formally constituted a university by a papal bull in 1289, at which time the schools of law and medicine (the latter founded by Arabian physicians) rivalled those of Paris. Among its students and professors have been Petrarch, Arnaud de Villeneuve, Rabelais, Rondelet the anatomist, Casaubon, Lobel, Clusius, the brothers Bauhin, Magnol, Tournefort, the elder De Jussieu, and De Candolle; Clarendon also and Locke were residents. The oldest botanic garden in France was founded here in 1592, and De Candolle laid out the first botanic garden upon the natural system in 1810. The medical school also has had a notable history; and in 1890 the university celebrated its sexcentenary and was reorganised. The town has an important picture-gallery and library. A centre of wine production, Montpellier suffered greatly by the phylloxera; it was here that the cure of grafting French vines upon American stocks was earliest applied. Of the mediæval town little remains, its fortifications and most of its buildings, save the cathedral and the adjoining bishop's palace (which now houses the school of medicine), having been destroyed

in the religious wars, in the Revolution, or by municipal improvements. The chief modern buildings are the theatre and law-courts; but the principal glory of the town is its two great terraces, forming public promenades overlooking the undulating country away to the Mediterranean, Cevennes, Pyrenees, and Alps.

Montreal (*Montreawl'*; Fr. pron. *Mon^{g}-tray-ahl'*), the largest city of the Dominion of Canada, is built on the south-east side of an island formed by the junction of the Ottawa River with the St Lawrence, and may be said to be situated on the northern bank of the St Lawrence, which is spanned here by the tubular Victoria Railway Bridge (1854–59), nearly 1¾ mile long, the rails being 60 feet above the river's level. The city is about 4 miles long and 2 wide, the Central Mountain in the rear narrowing the city at its base. It is not the official capital of the province of Quebec, but it exerts an immense political and commercial influence, and is also the seat of the greatest universities, hospitals, convents, and seminaries in all Canada. Finally it is during the season of navigation—i.e. from May to November—the great maritime port of the Dominion, headquarters of several transatlantic shipping companies, irrespective of active lake and river and coast navigation. It is nearly 1000 miles from Montreal to the ocean proper, and 250 to the first salt water. Pop. (1871) 107,225; (1881) 140,747; (1901) 266,826 (with suburbs, 323,221), over half being of French descent. The growth of the commerce of Montreal is very remarkable, having more than doubled since 1870, though a great fire in 1901 caused damage to the amount of $4,000,000. The 1500 miles of the St Lawrence River contribute to growth of exports, and distribute largely the growth of import. The canal system which finds its outlet at Montreal is remarkable, the canals affording a continuous course of water-communication extending from the Straits of Belle Isle to Port Arthur at the head of Lake Superior, a distance of 2260 miles. Montreal is the headquarters of the Grand Trunk Railway, the Canadian Pacific Railway (to Vancouver City, 2906 miles), the South-Eastern Railway, the Central Vermont Railway. In the boot and shoe manufacture over 3000 hands are employed, in clothing-factories over 2500, in tobacco-factories 3000, in the breweries 500; and in the railway-workshops a perfect army of men. There are also rubber-factories, saw-mills, sack-factories, tool-factories, silk-factories, cotton-mills, and a variety of small industries protected by the tariff.

Of the Episcopal churches, Christ Church Cathedral has a tower 224 feet in height, and St George's of 230 feet. The Catholic churches are numerous and some of them splendid: St Peter's Church is a repetition on a smaller scale of the church at Rome; Notre Dame is said to hold 10,000 people; St Patrick's is the church of the Irish Catholics. M'Gill University (1821) has been active since 1852. Laval University of Quebec has a branch at Montreal; the seminary of St Sulpice (1657) is a theological institution; the Presbyterian College was chartered in 1865; and others in the long list are the Wesleyan Theological College (1873), the Congregational College, the Anglican Diocesan College, St Mary's Jesuit College (1848), the Jacques Cartier Normal School, &c. The *Montreal Gazette* (1778) was, after the *Quebec Gazette* (1764), the first paper published in Canada. There are several fine libraries, and musical, art, and historical associations also, which maintain in Montreal a taste for art, literature, and science not common in colonial commercial cities. Founded as Ville-Marie de Montreal in 1642, the town was in 1760 surrendered by the French to the British; in 1776–77 it was occupied by invaders from the revolted American colonies.

Montreux (*Mon^{g}truh'*), a group of villages on the north shore of the Lake of Geneva, 15 miles by rail SE. of Lausanne. The name properly belongs to one small hamlet, but is popularly extended to the adjoining villages of Clarens, Vernex, Veytaux, &c., with a pop. of 8019. The beauty and climate of 'the Swiss Nice' attract many invalids. Near it is the castle of Chillon.

Montrose, a seaport of Forfarshire, 76 miles NNE. of Edinburgh and 42 SSW. of Aberdeen. It stands on a level peninsula between Montrose Basin (a tidal loch, measuring 2 by 1¾ miles, but almost dry at low-water) and the mouth of the river South Esk. A fine suspension bridge (1829), 432 feet long, leads to Inchbrayock or Rossie Island, in the Esk's channel, and is continued thence by a drawbridge; and there is also a railway viaduct (1883). Montrose has a plain town-hall (1763–1819); a large parish church (1791–1834), with a steeple 200 feet high; an academy (1820); a lunatic asylum (1868), 2 miles NNW.; good links; and a wet-dock (1840). The foreign trade—timber its staple—is chiefly with the Baltic and Canada. Flax-spinning is the principal industry; and ropes, canvas, soap, &c. are manufactured. Montrose was the birthplace of Robert Brown, botanist; Joseph Hume; Sir Alexander Burnes; and George Paul Chalmers, R.S.A. It has memories of Edward I., the two Melvilles, the Great Marquis, the Old Pretender, Dr Johnson, and Lola Montez. A royal burgh since 1352 and earlier, it unites with Arbroath, Brechin, Forfar, and Bervie to return one member. Pop. (1851) 15,238; (1901) 12,472. See Mitchell's *History of Montrose* (Montrose, 1866).

Montserrat (*Mon^{g}ser-rat'*; Lat. *Mons Serratus*, so named from its saw-like, fantastic outline), a mountain of Catalonia, in north-east Spain, 30 miles NW. of Barcelona. Its height is 4055 feet. The mountain owes its celebrity to the Benedictine abbey built half-way up, with its wonder-working image of the Virgin.

Montserrat (*Mon-ser-rat'*), one of the Lesser Antilles, belonging to Britain, lies 27 miles SW. of Antigua. It is about 11 miles in length, 7 in breadth, and has an area of 32 sq. m. Pop. between 12,000 and 13,000. The surface is mountainous (3000 feet), and heavily timbered. Sugar and limes and lime-juice are produced. The island, discovered in 1493, was colonised by the British in 1632. In 1664–68 and 1782–84, it was held by France. The chief town is Plymouth (pop. 1460).

Mont St Michel. See St Michel.

Monza (*Montsa*), a town of Italy, on the Lambro, 9 miles by rail NNE. of Milan. The ancient capital of the Lombard sovereigns, it was, in the middle ages, in spite of thirty-two sieges, conspicuous for the wealth of its citizens and nobles, and for its cloth-trade. The cathedral, founded in 595 by Theodelinda, contains many relics of this great queen. The famous Iron Crown, removed to Vienna in 1859, was restored in 1866. The town has an interesting town-hall (1293), a royal palace (1777), and manufactures of cottons, hats, leather, &c. Pop. 42,600.

Mooltan. See Multan.

Moorfoot Hills, a range in Midlothian and Peeblesshire, culminating in Blackhope Scar (2136 feet).

Moorhouse, a farm 3 miles W. of Eaglesham, Renfrewshire, was birthplace of Robert Pollok.

Moorwinstow. See MORWENSTOW.

Moradabad', a town of British India, on the Ramganga, 100 miles E. by N. of Delhi. It is noted for its metal-work, especially brass and tin inlay. Other objects of industry are chintz and cotton cloth. Pop. 75,500.

Morano (*Morah'no*), a city of southern Italy, 37 miles NNW. of Cosenza. Pop. 8259.

Morar, a west coast district of Inverness-shire, with Loch Morar, 12 miles long and 2 wide.

Morar. See GWALIOR.

Morat (*Morah'*; Ger. *Murten*), a town in the Swiss canton of Freiburg, 12 miles ESE. of Neuchâtel, lies on the Lake of Morat (3½ by 2 miles, 1428 feet above sea-level). Here in 1476 the Swiss defeated Charles the Bold. Pop. 2364.

Mora'va. See MARCH (river).

Moravia (Ger. *Mähren*), a crown-land of the Austrian empire. Area, 8579 sq. m.; pop. (1870) 2,017,274; (1900) 2,437,706. It is enclosed on all sides by mountains, being separated from Silesia by the Sudetes, from Bohemia by the Moravian chain, and from Hungary by the Carpathians; while branches of these various chains intersect the whole country except in the south, where there are extensive plains. The March or Morava, from which the country derives its name, joins the Danube. The Oder, which rises among the mountains on the north-east, soon leaves the country. Moravia is essentially an agricultural region. The mineral products are coal and iron, with some graphite. The industries include the manufacture of woollen, linen, and cotton goods, and beet-root sugar, silk-weaving, lace-making, iron-founding, tanning, brewing, distilling, &c. Brünn is the capital, and another chief town is Olmütz. The majority (95 per cent.) of the people are Catholics. By nationality 71 per cent. are Slavs (Czechs and Moravians) and 28 per cent. Germans. From 1029 Moravia was associated with Bohemia, and in 1526, with all the other Bohemian lands, fell to Austria. In 1849 it was formally separated from Bohemia, and declared a distinct crown-land.

Moray Firth, an indentation of the German Ocean, on the north-east coast of Scotland, measuring 21 miles across its entrance from Tarbat Ness, in Ross-shire, to Stotfield Head, near Lossiemouth in Elginshire, and 39 miles thence to the mouth of the river Beauly. The name is applied in a wider sense to the whole extent of sea between Kinnaird's Head in Aberdeenshire and Duncansbay Head in Caithness.

Morayshire. See ELGINSHIRE.

Morbihan (*Morbeeon'*), a maritime dep. of France, formed out of ancient Brittany, with the Atlantic on the south and Finistère on the west. Area, 2624 sq. m.; pop. (1872) 490,352; (1901) 563,468. It is divided into the arrondissements of Vannes, L'Orient, Ploermel, and Pontivy.

More'a, the name borne since the middle ages by the ancient Peloponnesus, or southern peninsula of Greece.

Morecambe Bay, a sea-inlet of Lancashire and Westmorland, measuring 10 miles across the entrance (from Fleetwood to Walney), and 18 miles thence to its inmost recess.—The watering-place of MORECAMBE, 3½ miles WNW. of Lancaster, is a rising place, with good sea-bathing, a pier, aquarium and gardens, and other attractions. Pop. 12,300.

Moreleigh, or MORLEY, a Devon village, 5½ miles SSW. of Totnes.

Morelia (*Moray'lia*), capital of the Mexican state of Michoacan, in a valley 6400 feet above sea-level, 115 miles (234 by rail) W. by N. of Mexico City. It has a cathedral, and manufactures of cotton, tobacco, and candles. Morelia, which from 1541 to 1828 was called Valladolid, was the birthplace of the patriot Morelos, in whose honour the name was changed, and of Iturbide, emperor of Mexico. Pop. 35,000.

Morella (*Morel'ya*), a town of Spain, 80 miles N. by E. of Valencia. Pop. 6661.

Moresnet (*Moraynay'*), a small neutral territory between Belgium and Prussia, 5 miles SW. of Aix-la-Chapelle. Area, 70 acres; pop. 3000.

Moreton Bay, on the east coast of Queensland, Australia, is formed inside the islands of Moreton and Stradbroke. The bay is 40 miles long by 17 broad; its southern half is dotted with islands and sandbanks. Brisbane (q.v.) is on one of the streams falling into it.

Moreton-Hampstead, a town of Devon, 12 miles WSW. of Exeter. Pop. of parish, 1543.

Moreton-in-the-Marsh, a market-town of Gloucestershire, 6 miles SE. of Chipping-Campden. Pop. of parish, 1846.

Morgan, MOUNT. See MOUNT MORGAN.

Mor'garten, a mountain slope on the east margin of Lake Egeri, in the Swiss canton of Zug. Here 1400 men of the Forest Cantons routed 15,000 Austrians, November 15, 1315.

Moriah, MOUNT. See JERUSALEM.

Morlaix (*Morlay*), a picturesque and flourishing port in the Breton dep. of Finistère, on the tidal Dossen, 6½ miles from the sea and 38 ENE. of Brest. It has many quaint timbered houses, a huge railway viaduct 207 feet high, and manufactures of tobacco, paper, &c. Moreau was a native, and so probably was St Bernard, the author of 'Jerusalem the Golden.' Population about 15,000.

Morley, a municipal borough in the West Riding of Yorkshire, 5 miles SW. of Leeds, with woollen manufactures, coal-mines, and stone quarries. Mentioned in Domesday, it became a borough only in 1885, and had its boundary extended in 1891. Pop. (1851) 4821; (1901) 23,636.

Morningside, a south suburb of Edinburgh.

Moroc'co, or MAROCCO (Arab. *Maghreb-el-Aksa*, 'the farthest west'), is an empire or sultanate in that part of north-west Africa bounded on the E. by Algeria, and on the S. by Cape Nun and the Wad Draa, though both here and on the Sahara side of the Atlas the limits of the empire are rather indeterminate. It contains about 314,000 sq. m., of which the 'Tell,' or fertile region west of the Atlas contains 78,000, the Steppes or flat sterile upland pastures 27,000, and the Desert or Sahara 209,000 sq. m. Politically, Morocco comprises at present the old kingdoms of Fez and Morocco and the territories of Tafilet (Tafilalet) and Sus; but the latter two are almost independent, recognising the sultan only as the Prince of True Believers, an office which he holds as the most powerful of the Shereefs or descendants of Mohammed. Many of the Arab and most of the mountain tribes are practically independent. The pop. has been variously estimated at from 2,500,000 to 13,000,000—the actual number being perhaps between three and four millions. Morocco is, as a rule, mountainous, the Atlas (q.v.) traversing it in several chains from south-west to

north-east, and by various spurs both to the coast country and to the desert. There are, however, numerous level plains, some of which are of great extent, and very rich. There are also numerous more or less level plateaus similar to those of Algeria. Most of the country has been denuded of timber. Consequently the country looks bald, with its rolling hills and monotonous plains, green in spring, brown during summer and autumn. Farther south, and on the other side of the Atlas, where long droughts, followed by famines, are common calamities, and the rainfall is at the best of times scanty and uncertain, sandy wastes are the prevailing characteristic. In western Morocco, though the soil is sometimes thin, actual desert is rare.

The central range of the Atlas forms the watershed separating the streams which flow into the Atlantic and Mediterranean from those which run southward toward the desert, where they are often lost in marshy 'sinks.' And of the streams falling into the Atlantic and Mediterranean, many are in the hot season or after long droughts little better than a succession of pools connected by threads of water, though rolling in brown floods from bank to bank during the wet season. None of them are navigable for any distance. The climate of Morocco varies much, though the western slope, being tempered by the sea-breezes and protected from the hot desert-winds by the Atlas, is temperate, the thermometer seldom falling below 40° or rising above 90°. But in summer the interior valleys are very hot, and in winter snow often falls in Fez and Mequinez. Farther south extremes of heat and drought are more common, though as a rule the climate is equable, and, unless in swampy places during summer, extremely healthy. In the Sus country and the region of Tafilet rain is scarce and in places almost unknown. But farther north, and on the Atlantic and Mediterranean slopes, it falls with tolerable regularity every year between October and April, the amount being at times so great that the low lands are flooded and the rivers impassable. The Atlas is capped deep with snow in winter. Morocco is thus fitted for growing any crops of the temperate and tropical zones, and under a better government would become, as Barbary was in Roman times, the granary of Europe. Wheat and barley, were they allowed to be freely exported, would be produced in immense quantities. Maize forms the chief export of Mazagan. Various gums, oranges, figs, almonds, lemons, and dates are among the other vegetable products, with cotton, hemp, and sugar. Most European fruits grow well. The exports (maize, beans, chick-peas, olive-oil, wool, almonds, dates, fowls, eggs, hides, bones, esparto, cattle to Gibraltar, &c.) amount to near £1,600,000, and the imports (cotton goods, cloth, tea, coffee, sugar, candles, hardware, &c.) to £2,800,000, more than half being from Great Britain. The interior of the country is so little known that little can be said with certainty regarding its mineral wealth. But enough has been ascertained to enable us to assert that gold (placer and in quartz), silver, copper, tin, argentiferous galena, nickel, antimony, iron, manganese, and rock-salt abound. Coal and petroleum have been indicated. But these mineral deposits are scarcely touched, and no European is allowed even to visit the mines. The flora of Morocco is essentially European on the western side of the Atlas. The fauna partakes of a similar character, the Barbary fallow-deer, wild boar, Barbary monkey (found also in Gibraltar), a species of porcupine, and wild cat being the most characteristic mammals; the lion is now very rare in the inhabited parts of the country. The birds and fishes are those of southern Europe; of the forty species of reptiles and amphibia known, twenty-two also belong to Spain—facts pointing to a time when the Strait of Gibraltar did not divide Europe from Africa. Locusts often devastate the country. The inhabitants consist of six principal groups—Berbers or Kabyles (Tuaregs, &c.), the aborigines, Arabs, Jews, a few thousand Spaniards, Moors (Arabs with an admixture of Spanish blood, living in towns, though the name is often given to all the Mohammedan inhabitants), and Negroes.

The sultan, who is the last independent sovereign in the Barbary States, is one of the most perfect specimens of an absolute monarch existing; his so-called ministers are simply the favourites of the hour. He receives the entire revenue, believed to be about £1,800,000 per annum, and spends as little or as much of it as he pleases. Every office is directly or indirectly purchased, small salaries or none are paid, the holders recouping themselves by plunder and oppression. All justice is bought and sold. Yet, owing to the religious fanaticism of the people, and the mutual jealousies of the European powers, whose representatives reside at Tangier, the political equilibrium is preserved. Spain has a fortress at Ceuta, four convict settlements, and a fishing-station at Ifni. The Grand Shereef of Wazan, as the nearest descendant of Mohammed, governs that city and is lord paramount of a large territory. Education is at a low ebb; the so-called 'university' of Fez is nowadays merely a seminary attached to the chief mosque for the training of religious acolytes. There are no roads except bridle-paths, and no wheeled carriages in the interior except the sultan's state coaches. The chief industry besides the rude agriculture of the Berbers and Arabs, and the breeding of horses and mules, is the making of 'morocco' leather, harness, slippers, red 'Fez' caps, cloth for native apparel, the chiselling of brass trays, the making of rough pottery and of inlaid flint-lock muskets, and the weaving of carpets (principally in Rabat). The best mechanics and the jewellers are Jews. The army, reorganised under European officers, has about 10,000 men, drilled, armed, and clothed after an approach to the European fashion, the rest being mainly undisciplined native levies. Altogether, the sultan is believed to be able to mobilise upwards of 100,000 men. Morocco is connected with Spain by telegraph, and the telephone is in use in Tangier, Casablanca, and other coast-towns. The posts also are confined to the Europeans. Morocco has three capitals or imperial residences—Fez (q.v.), Makinas or Mequinez (q.v.), and Marakesch or the City of Morocco (q.v.). Beside these the principal coast-towns are Tangier, Tetuan, Larache (El-Arish), Rabat, Sallee, Casablanca, Mazagan, Saffi, and Mogador (q.v.). But all of them are decaying, most of them in partial ruins, and without any exception filthy, undrained, and insanitary.

Part of Mauritania under the Romans, the country fell under the Vandals in 429 A.D., but was restored to the Eastern Empire in 533. In 680 the Arab invasion began, and with little intermission the Arabs have ever since been possessors of the country, and the entire population are now the most fanatical adherents of Mohammedanism. At first, with Spain, part of

the califate of Bagdad, it was not a distinct but united kingdom till the beginning of the 18th century. It is still very backward, and a passive resistance is offered to every improvement; but though Christian slavery has been abolished and traders have, nominally, access to all parts, the interior is little different from what it was a thousand years ago, and many cities and districts are still dangerous or impossible to visit. The slave-trade is as brisk as ever. The unsettled condition of affairs compelled other countries interested to come to an understanding, and by the Anglo-French Convention in 1904, the right of France to promote administrative reforms in Morocco was recognised. A difficulty raised by Germany in 1905 was referred to a Conference of the Powers.

The city of Morocco (Arab. *Marakesch*), the southern capital of the empire, is situated between 4 and 5 miles from the left bank of the Tensift, at the northern end of an extensive and fertile plain dotted with date-palms, 1447 feet above the sea, about three and a half days' journey from Mogador and Mazagan. It is surrounded by a lime and earth wall, now dilapidated, more than five miles in circumference, between 20 and 30 feet high, flanked at regular intervals by square towers. The town is squalid and ill-built, though it bears the marks of former grandeur. A large portion of the immense space within the walls is occupied by ill-kept gardens, open areas, and market-places. In the bazaar and merchants' quarter a considerable local trade is carried on with the country-people, the mountaineers from the neighbouring Atlas, and with Sus, Tafilet, Mazagan, Saffi, and Mogador. Morocco possesses many mosques, one of which, the Kutubia, has a tower after the model of the Hassan in Rabat and the Giralda in Seville, 230 feet high. There are several tanning and leather-dyeing establishments, though of late years European goods have been gradually displacing native manufactures. The population varies according to the presence or absence of the sultan, his court, and army. In ordinary times it does not exceed 60,000, of whom from 7000 to 8000 are Jews, living in a Ghetto. No Europeans reside permanently in the city. On the south, outside the walls, stands the imperial palace, an irregular conglomeration of gardens and buildings covering about 180 acres. Morocco was founded in 1072, and reached the summit of its prosperity in the 13th century, when it is said to have had 700,000 inhabitants. Owing to its excellent situation in sight of the Atlas, from which cool streams are always flowing, its genial healthy climate, and its command of the trade-routes across the mountains, Marakesch is safe to have a great future when Morocco knows other masters than the Moors. See books by Hooker and Ball (1878), Stuttfield, Thomson, Harris, Cunninghame Graham, Meakin, Bensusan (1904); and French works by Chenier, Godard, Renou, Martinière, Montbard.

Moron (*Moroan'*), a Spanish town, on the Guadaira, 32 miles by a branch-line SE. of Seville. Its ruined castle was once impregnable. Pop. 16,005.

Mor'peth, a market-town of Northumberland, on the winding Wansbeck, 16 miles N. of Newcastle. The parish church dates from the 14th century; the free grammar-school (1552) was rebuilt in 1859, after a chancery suit lasting 150 years. The town-hall (restored in 1870) was erected in 1714 by Sir John Vanbrugh, and the county-hall in 1818 at a cost of £80,000. Morpeth has flannel-factories, breweries, tanneries, iron-foundries, &c., with neighbouring collieries and quarries. From 1553 till 1832 it returned two members, but now only one; the parliamentary borough was extended in 1868. Pop. (1851) 10,011; (1901) 50,043, of whom only 6158 were in the municipal borough.

Morristown, capital of Morris county, New Jersey, on the Whippany River, 30 miles by rail W. of New York. It has ironworks and various mills; 3 miles to the north is a large state lunatic asylum. Pop. 11,270.

Morshansk, a town of Russia, 58 miles N. of Tamboff, almost wholly burned in 1874. Pop. 31,190.

Mortimer's Cross, a Herefordshire village, on the Lugg, 5½ miles NW. of Leominster. Here, in 1460, the Yorkists defeated the Lancastrians.

Mortlake, a parish of Surrey, on the south bank of the Thames, 2 miles ENE. of Richmond and 8 W. by S. of London. From 1619 to 1703 it was famous for tapestry; now malting and brewing are the industries. It is also a great boating-place, the Oxford and Cambridge race being rowed from Putney to Mortlake. It has associations with Archbishops Anselm and Cranmer, the astrologers Dr Dee and John Partridge, Cromwell, Swift and Stella, Sir Philip Francis, Sir Richard Owen, and Sir Richard Burton. Pop. (1851) 3110; (1901) 7774. See John E. Anderson's *History of Mortlake* (priv. printed, 1888).

Morvan (*Morvon?*), Le, a barren district of France, a north-easterly extension of the central plateau, is mainly in the dep. of Nièvre.

Morvern, a peninsula of north-west Argyllshire, between Lochs Sunart and Linnhe. It is the 'Highland parish' of Norman Macleod.

Morwenstow, or Moorwinstow, a parish in the extreme north of the Cornish coast, 7 miles N. of Bude. Its church, dedicated to St Morwenna, is mainly of Norman date; R. S. Hawker was its vicar. Pop. 704.

Mos'cow, formerly the capital of Russia, and still venerated as such by the Russian peasantry, stands on the little river Moskwa, a sub-tributary of the Volga, 403 miles by rail SE. of St Petersburg, 768 ENE. of Warsaw, and 967 NNE. of Odessa. Its centre is the enclosure called the Kreml or Kremlin ('Citadel'), which is surrounded by walls, crowned by eighteen towers and pierced by five gates. This enclosure is the most sacred spot in all the vast Russian empire. The most notable of the religious buildings inside the Kremlin are the cathedral of the Assumption (1326; rebuilt 1475–79); its interior is encrusted with mosaics and jewelled ornaments, adorned with venerated pictures, and sanctified by numerous relics; within its walls the early czars and all the Russian metropolitans and patriarchs have been consecrated, and the metropolitans buried. In the cathedral of the Archangel (1333; restored 1505) were buried the Russian czars down to the brother of Peter the Great. The cathedral of the Annunciation (1489; rebuilt 1554) was formerly the private chapel of the czars. There are numerous churches of minor rank, and several monasteries; in the Voznesenski monastery (1393) the czarinas are buried. In 1600 Boris Godunoff built in the Kremlin the Ivan Veliki tower, 270 feet high, the summit of which commands a magnificent view of Moscow, with her gilded cupolas and fantastic towers, her half Asiatic, half European architecture. Close by, at its foot, stands the gigantic 'king of bells,' 19 feet high, and 198 tons in weight; it was cast in

1653, but cracked, so never hung. Here are also the imperial palace (1849); the palace built in the reign of Ivan III.; the new palace Orushenaya, which serves as a museum of Russian antiquities; the palace of the patriarchs, with archæological treasures and rare MSS.; the arsenal (1701–36), before which is the trophy of 1812, a pile of 850 French cannon; and the Hall of the Synod, with a valuable library. Outside the Kreml the chief objects of interest are the colossal 'Temple of the Saviour' (1838–81), a building commemorative of 1812; the cathedral of St Basil (1554), a 'nightmare in stone,' with fantastic towers; the gigantic bazaar; the historical museum; the library of the synod and its typographical museum; the university (1755), with 3350 students; the public museum (1861), containing a library of 300,000 vols. and 5000 MSS.; a first-rate ethnological museum; the Golitzyn Museum (1865), &c.; an observatory; and a large foundling hospital (1764).

Next to St Petersburg, Moscow is the busiest industrial city in the empire, manufacturing cotton and woollen goods, silks, leather, tobacco, candles, metallic articles, machinery, paper, chemicals, bricks, carriages, pottery, and watches. Situated nearly in the centre of European Russia, midway between the Baltic, the Black Sea, and the Caspian, it is a chief meeting-place of Asiatic and European commerce. An enormous trade is done in grain, timber, furs, hides, tallow, and cattle; in the mineral products of the Ural region; in tea, sugar, and other groceries; in cottons, silks, and woollens, and various Russian manufactures. Pop. (1864) 365,000; (1905) 1,100,000.

Finnish first, it became Great Russian in the 12th century. In 1325 the metropolitan of central Russia moved his seat here; the Kremlin was built in 1300. The principality of Moscow continued to grow in area and in political influence, and Ivan III. (1462–1505) assumed the title Czar of all Russia. In 1713 Peter the Great founded St Petersburg and made it his capital; Moscow suffered greatly from fires in 1739, 1748, and 1753; and the cup of misfortune was filled to the brim when the city was set on fire and burned in 1812, according to the traditional belief the patriotic act of its own inhabitants to save it from Napoleon and the French.—The *government* of Moscow has an area of 12,855 sq. m., and a pop. of about 2,500,000.

Moselle (*Mozel'*; Ger. *Mo'sel*), a left-hand affluent of the Rhine, rises in the SW. of the Vosges Mountains in France, at an elevation of 2412 feet. Thence it winds 315 miles NW. and NE., past Epinal, Metz, Thionville, and Treves, as far as Toul, through Luxemburg and Rhenish Prussia, till it falls into the Rhine at Coblenz. It is navigable to Frouard, 214 miles. Its principal tributaries are the Meurthe, Seille, and Saar on the right, and the Orne, Sure, and Kyll on the left. The Moselle wines are well known.

Moselle was formerly a frontier department in the north-east of France, but the greater part of it was taken by Germany after the war of 1870–71, and became as of old part of Lorraine. The small portion left to France was joined to the dep. of Meurthe. See MEURTHE-ET-MOSELLE.

Moskwa, a navigable branch of the Volga's tributary, the Oka, rises in a marsh E. of Smolensk, and has a course of 305 miles, passing Moscow.

Mosquito Coast (*Moskee'to*), British from 1655 till 1850, is now an eastern section of Nicaragua (q.v.). The inhabitants, of Mosquito Indian and African blood, number about 15,000. The chief town is Bluefields (pop. 500).

Mossame'des, a seaport on Little Fish Bay, in Angola, the Portuguese territory on the West Coast of Africa. Pop. 6000.

Mossend', a Lanarkshire mining town, 4¼ miles S. by E. of Coatbridge. Population above 3500.

Mossgiel (*Moss-geel'*; *g* hard). See MAUCHLINE.

Mossley, a manufacturing town of Lancashire, at the Yorkshire and Cheshire boundary, on the Tame, 3 miles NE. of Ashton-under-Lyne. A municipal borough since 1885, it has cotton and woollen mills, and foundries. Pop. 13,162.

Moss Side, a southern suburb of Manchester.

Mostaganem', a coast-town of Algeria, 45 miles NE. of Oran. Once a place of 40,000, it decayed utterly, but has thriven again since the French took possession in 1833. Pop. 17,768.

Mos'tar, the chief town of Herzegovina, on the Narenta, 27 miles by rail NNE. of the port of Metkovich and 84 SSW. of Sarajevo. It takes its name (= 'old bridge') from a so-called Roman, but really Venetian bridge of one arch, 95 feet in span, has numerous mosques, and is the seat of a Roman Catholic and a Greek bishop. Pop. 14,655.

Mosul (*Mozool'*), a decayed town of Asiatic Turkey, in Mesopotamia, on the right bank of the Tigris, opposite the ruins of Nineveh, 200 miles up the river from Bagdad. Once it was a very prosperous city, with much industry—*muslin* takes name from it; now its bazaars are filled with the manufactures of the West, and almost the only export is gall-nuts. Pop. 30,000.

Motherwell, a town of Lanarkshire, 12 miles SE. of Glasgow. Owing its rapid growth to the amazing extension of its mineral industries, it has a good water-supply (1877), municipal buildings (1887), a public park (1887), large iron and steel works, &c. Pop. (1841) 726; (1861) 2925; (1871) 6943; (1881) 12,904; (1901) 30,243.

Motril, a Spanish town, 31 miles S. by E. of Granada, and 3 miles from the sea, with sugar and cotton works, and lead-mines. Esparto is exported. The port is Calahonda, 6½ miles SE. Pop. 17,016.

Moukden. See MUKDEN.

Moulins (*Moolan^{g}'*), capital of the French dep. of Allier, on the Allier, here crossed by a bridge of thirteen arches, lies 196 miles by rail SSE. of Paris and 124 NW. of Lyons. A clean, well-built town, with pretty promenades, it has a cathedral (1468–1871), the choir old; a square tower of the castle of the dukes of Bourbon; and a 15th-century belfry. Marshals Villars and Berwick were natives, and Clarendon wrote here great part of his History. Nor must Sterne's Maria be forgotten. Pop. 20,000.

Moulmein. See MAULMAIN.

Moulsay, EAST and WEST, two Surrey parishes on the Thames, opposite Hampton Court, and 2½ and 3¾ miles WSW. of Kingston.

Moultan. See MULTAN.

Moultrie (*Moul'try*), FORT, a fortress on Sullivan's Island, at the mouth of Charleston Harbour, South Carolina, celebrated for the repulse by Colonel Moultrie of a British squadron in 1776.

Mountain Ash, a coal and iron urban district of Glamorgan, 4 miles NE. of Aberdare. Pop. (1901) 31,093.

Mount Bischoff. See BISCHOFF.

Mount Carmel, a borough of Pennsylvania, 135 miles NW. of Philadelphia. Pop. 13,180.

Mount Edgcumbe, seat of the Earl of Mount Edgcumbe, is opposite Plymouth.

Mount Melleray, a monastery of Irish Trappist monks (1830), on the southern slopes of the Knockmealdown Mountains, 3½ miles N. of Cappoquin in County Waterford.

Mountmellick, a town in Queen's County, on the Grand Canal, 7 miles N. of Maryborough by rail. It manufactures woollens, tobacco, leather, and beer. Pop. 2323.

Mount Morgan, a gold-mining township in Queensland, 28 miles SSW. of Rockhampton, The gold-mine at the summit of the mount, sold for £640 to a copartnery, including the brothers Morgan, became a limited liability company, with a capital of £1,000,000. Pop. 9514.

Mount Pleasant, a town of Iowa, U.S., 235 miles SW. of Chicago by rail, has a pop. of 4118.

Mountrath, a market-town of Queen's County, 60 miles SW. of Dublin. Pop. 1350.

Mount's Bay. See ST MICHAEL'S MOUNT.

Mountsorrel, a town of Leicestershire, on the Soar, 4 miles SE. of Loughborough, with granite quarries near. Pop. of parish, 2200.

Mount-Stuart. See BUTE.

Mount Vernon, residence and burial-place of General Washington, is on the right bank of the Potomac, in Virginia, 15 miles below Washington. It is national property since 1856.—It has given name to many places in the United States, one of them a city, capital of Knox county, Ohio, on the Vernon River, 44 miles by rail NNE. of Columbus, with manufactories of doors and sashes, furniture, machinery, &c.; pop. 6627.—Also a post-village, 15 miles by rail ENE. of New York, on the Bronx River, which, with adjoining villages of the same name (East, Central, West), has a population of 22,500.—Mount Vernon, in Indiana, 142 miles ESE. of St Louis, has a population of 5150.

Mourne Mountains. See DOWN.

Mourzouk. See FEZZAN.

Mousa, a Shetland island, 11 miles S. by W. of Lerwick. Here is a very perfect 'broch,' or dry-built circular tower, 42 feet high, with walls 15 feet thick.

Mousehole (*Mouz'l*), a Cornish village, 2 miles S. of Penzance. Here died Dolly Pentreath (1686–1788), the last speaker of Cornish.

Moville, a seaside resort in County Donegal, on Lough Foyle, 19 miles NNE. of Londonderry. Off it New York steamers pause for the tender with and for mails. Pop. 1217.

Moy, a market-town of Tyrone, on the Blackwater, 6½ miles N. of Armagh. Pop. 484.

Moydart. See MOIDART.

Mozambique (*Mozambeek'*), the collective name for the northern section of Portuguese East Africa, extending from the Rovuma to the Zambesi, and bordering on German East Africa, Lake Tanganyika, and British Central Africa. The coast-belt is low and swampy; but the interior rises into well-wooded plateaus, which furnish valuable timber. The soil is naturally fertile, and yields, in addition to maize, rice, manioc, &c., an abundance of natural products, such as cotton, sesame, cocoa-nut, medicinal plants, and india-rubber, but very little is done to cultivate them. The imports are cotton goods, beads, hardware, arms and gunpowder, coals, spirits, and provisions. The shipping is mostly (seven-tenths) in British hands. Customs duties are exceptionally heavy; agriculture does not flourish; mining is little prosecuted, although the country is rich in minerals; and pearls abound on the reefs. The pop. of the province is estimated at one million.

MOZAMBIQUE, the capital, stands on a small coral island lying close to the mainland, and has a fine government house, a cathedral, an arsenal, &c. Pop. 7380, of whom 6800 are natives, 280 Banyans, and 300 Europeans. It was once a centre of the slave-trade; now its total trade ranges annually between £250,000 and £320,000. —The MOZAMBIQUE CHANNEL lies between Madagascar and the east coast of Africa.

Mozdok, a town of Russian Caucasus, on the Terek, 58 miles N. of Vladikavkaz. Pop. 14,008.

Mozuffernugger. See MUZAFFARNAGAR.

Msket, or MTSKETHA, capital of the old Georgian kings, now little more than a village, stands on the south side of the Caucasus, 10 miles NNW. of Tiflis. Its cathedral dates from the 4th century.

Mtzensk, a town of Russia, 31 miles by rail NE. of Orel. Pop. 15,067.

Much Wenlock. See WENLOCK.

Much Woolton (i.e. 'Great Woolton'), a town of Lancashire, 6 miles SE. of Liverpool. Near it are large quarries. Pop. 4745.

Mudki (*Moodkee*), a Punjab village, 26 miles S. of the Sutlej, between Firozpur and Karnal. Here, in 1845, Sir Hugh Gough repulsed the Sikhs.

Mühlberg, a town of Prussian Saxony, on the Elbe, 36 miles SE. of Wittenberg. Pop. 3441. Here, on 24th April 1547, Charles V. defeated the Elector of Saxony.

Mühlhausen (*Mülhow'zen*), a town of Prussian Saxony, on the Unstrut, 25 miles by rail NNW. of Gotha. An imperial free city in the 13th century, it came finally to Prussia in 1815; it has manufactures of woollen and cotton goods, hosiery, &c. Pop. 35,000.

Muirkirk, a town of Ayrshire, 26 miles E. by N. of Ayr, and 720 feet above sea-level. It is the seat of great ironworks (1787). Pop. 3929.

Mukden, or MOUKDEN, capital of Manchuria, is situated in the southern part of the country, on a branch of the river Liao, 425 miles NE. of Peking. The Chinese call it Shingking. In 1625 Nurhachu, the founder of the present Chinese dynasty, made it his capital. It was the scene of severe fighting in the war of 1904–5. Good coal exists in the vicinity. The port is Newchwang (q.v.) Pop. 250,000.

Mukdishu. See MAGADOXO.

Mulgrave Castle, the seat of the Marquis of Normandy, in the North Riding of Yorkshire, 4 miles W. of Whitby.

Mulgrave Islands, a name given to some of the Marshall Islands (q.v.) from their discoverer, the navigator Lord Mulgrave (1744–92).

Mulhacen. See SIERRA NEVADA.

Mülhausen (*Mülhow'zen;* Fr. *Mulhouse*), a town of Alsace-Lorraine, on the Ill and the Rhone and Rhine Canal, 68 miles by rail SSW. of Strasburg and 20 NW. of Basel. It is a place of first-rate industrial importance. The cotton manufacture employs 16,000 workpeople in the town and 60,000 in the adjacent villages. Mülhausen has printing and dye works for cotton, linen, calico, wool, and silk fabrics, chemical factories, iron, machinery, and other metal works, &c. Pop. (1821) 13,027; (1861) 45,887; (1900) 89,118. Mülhausen, a free imperial city in 1273, joined the Swiss Confederation in 1515; in 1798 it was incorporated with France, and came to the front as an industrial place after 1829; and it became German after the war of 1870–71.

Mülheim (*Mül'hime*), a manufacturing town of Rhenish Prussia, on the Ruhr, 16 miles N. of Düsseldorf, with ironworks and a trade in coal. Pop. with suburbs, 81,000.—MÜLHEIM-AM-RHEIN, 8 miles above Cologne, manufactures silk, velvet, thread, leather, &c. Population over 47,000.

Mull, an Argyllshire island, the largest of the Hebrides after Lewis and Skye, is separated from the mainland by the Sound of Mull (19 miles long and 1½ to 3¼ miles wide), and is engirt by a number of smaller islands—Gometra, Ulva, Staffa, Iona, &c. It is 347 sq. m. in area, and has a maximum length and breadth of 30 and 29 miles, but is so deeply indented, especially towards the Atlantic, by a dozen sea-lochs and bays—the chief, Loch-na-Keal and Loch Scridain—that the coast-line cannot be less than 300 miles. Benmore (3185 feet) is the loftiest summit, Bentalloch the most beautiful, where there is much that is beautiful—these misty heights, the stretching moors, the sea-cliffs at Carsaig, the terraced basaltic plateaus, the glens, streams, and lakes, and the patches of wood and green pasture. The climate is good for the Highlands, and the soil of fair fertility, but grazing answers much better than corn-crops. Tobermory, in the north, 28 miles WNW. of Oban, is the only town. It was founded in 1788 at the head of its sheltered harbour, and has a pier (1864), a telegraph, a new water-supply (1882), and 1174 inhabitants. Aros and Duart Castles are interesting ruins; and Mackinnon's Cave was pronounced by Dr Johnson 'the greatest natural curiosity he had ever seen.' Pop. (1851) 7485; (1901) 4334, of whom 3060 were Gaelic-speaking. See GALLOWAY (MULL OF), KINTYRE.

Mullingar', the chief town of Westmeath, 50 miles WNW. of Dublin by rail, on the Royal Canal and the river Brosna. It is a trading town, has infantry barracks, and is a centre for anglers. Pop. 4500.

Multan (*Mooltan*), an ancient city of India, in the Punjab, 4 miles from the left bank of the Chenab, surrounded except on the south by a wall 10 to 20 feet high. The European quarter lies to the north and west of the city, whilst to the south is the citadel, which contains two Mohammedan shrines, the ruins of an ancient Hindu temple, and a massive obelisk (70 feet) to the memory of Vans Agnew and Anderson, murdered here in 1848. The vicinity abounds in mosques, tombs, shrines, &c. It has much trade, and manufactures silks, cottons, carpets, glazed pottery, and enamel work. In 1849 it was taken and annexed. Pop. 88,500.

Mumbles, a lighthouse at the west extremity of Swansea Bay.

München. See MUNICH.

Muncie, capital of Delaware county, Indiana, 54 miles by rail ENE. of Indianapolis, is a railway junction, and manufactures furniture, castings, &c. Pop. 22,500.

Münden, a town of Hanover, at the influx of the Werra and Fulda to the Weser, 15 miles NE. of Cassel. Girt by wooded hills, it has a school of forestry (1868), and manufactures india-rubber, glass, sugar, &c. Pop. 9553. See MINDEN.

Munich (Ger. *München*), the capital of Bavaria, in a barren plain, 1700 feet above sea-level, chiefly on the west bank of the impetuous Isar, a tributary of the Danube. By rail it is 440 miles SSW. of Berlin, 272 W. of Vienna, and 867 SE. of London. The elevated site and the nearness of the Alps render the city liable to sudden changes of temperature, sometimes ranging over 20° in twenty-four hours. Pop. (1801) 48,885; (1880) 230,023; (1900) 499,959, of whom 84 per cent. were Catholics. Munich is one of the handsomest cities in Germany, and the richest in art-treasures, while itself famous for its school of painting. Especially under Louis I. (1825–48), who spent £1,000,000 in beautifying the city, it was decorated with buildings of almost every style of architecture; wide and handsome streets have been constructed; and the squares and gardens adorned with statues and other monuments. Among the imposing edifices are the Glyptothek (1816–30), with its magnificent collection of ancient and modern sculpture, including the famous Æginetan marbles; the Old Pinakothek (1826–36), containing paintings by the old masters, besides engravings, drawings, and antique vases; the New Pinakothek (1846–53), devoted to the works of modern painters; the Royal and National Library, with over 1,400,000 volumes and 30,000 MSS.; and the Bavarian National Museum. The New Palace includes an older palace and chapel, the Königsbau (1826–35), in the style of the Pitti Palace at Florence, with Schnorr's frescoes of the Nibelungenlied, and the sumptuous Banqueting Hall. Other public structures are the Court Theatre; the old and the new town-house; the Temple of Fame, a Doric colonnaded building containing busts of illustrious Bavarians, in front of which rises the colossal statue of Bavaria, 65 feet high; the Generals' Portico (1844), a copy of the Loggia dei Lanzi at Florence; and the Maximilianeum, on its terrace on the right bank of the Isar, a college for civil servants. The Gate of Victory was designed after Constantine's triumphal arch in the Forum; the old Isar gate has elaborate frescoes; and the Propylæa (1862) commemorates the Greek war of independence. The oldest church is St Peter's (1294). The huge brick cathedral of Our Lady (1468–88) is remarkable for its two unfinished towers (325 feet), now capped with cupolas; in the interior is the elaborate tomb of the Emperor Louis the Bavarian. St Michael's, or the Jesuits' church (1583–91), contains a monument by Thorwaldsen to Eugène Beauharnais; the Theatine Church (1767) contains the royal burial-vault; the Louis Church (1830–44) is embellished with Cornelius' fresco of the 'Last Judgment;' the beautiful church of Mariahilf (1831–39) is noted for its gorgeous painted glass and fine woodcarvings; and the basilica of St Boniface (1835–50) for its sixty-six monoliths of gray Tyrolese marble and resplendent interior decoration. The Court Chapel is a perfect casket of art-treasures. The university, removed from Landshut to Munich in 1826, has 200 professors and teachers, and some 4100 students; its library contains over 400,000 volumes. Munich's stained-glass works, iron, brass, and bell foundries, lithographing and engraving works, and manufactories of optical and mathematical instruments, and various artistic articles are deservedly noted. Still more famous are the enormous breweries of Bavarian beer, which annually produce about 50,000,000 gallons, of which 37,000,000 are consumed in the city itself.

In 1158 Henry the Lion established here a mint and a salt-emporium. In the 13th century the dukes of the Wittelsbach dynasty selected Munich for their residence and fortified the town. In 1327 it was nearly destroyed by fire, and was rebuilt by the Emperor Louis the Bavarian; and when the fortifications were razed at the close of

the 18th century, the limits of the town were enlarged. Identified with Munich are Klenze and Gärtner the architects, Schwanthaler the sculptor, and Cornelius, Kaulbach, Piloty, and Diez, the painters. See Mrs Howitt-Watts' *Art-student in Munich* (2d ed. 1879).

Munkacs, a market-town of Hungary, at the foot of the Carpathians, 101 miles by rail NE. of Debreczin, has mines of iron and rock-crystals, called Hungarian diamonds. The citadel, on a height, is now a state-prison. Pop. 14,500.

Munnipore. See MANIPUR.

Munster, the south-west and largest of the four provinces of Ireland. It contains the six counties of Clare, Cork, Kerry, Limerick, Tipperary, and Waterford. Area, 6,064,579 statute acres. Pop. (1841) 2,396,161; (1861) 1,513,558; (1901) 1,076,188 (1,007,876 Catholics).

Münster, capital of Westphalia, 101 miles by rail N. by E. of Cologne and 106 SSW. of Bremen. It retains numerous remains of mediæval architecture, including the mixed Romanesque and Gothic cathedral (12th–14th c.); the Gothic townhall, in which, in 1648, the peace of Westphalia was signed; the castle, built in 1767, and surrounded by fine pleasure-grounds; and the 16th-century town wine-cellar, with its old pictures. The Catholic university of Münster was dissolved in 1818; there is now an academy, with a Catholic theological and a philosophical faculty, about 470 pupils, and a library of 123,000 volumes. The industrial products include woollen, cotton, and silk fabrics, and paper, besides dyeing, printing, and enamelling. Pop. (1875) 35,705; now, with suburbs, 72,300, mainly Catholics. In 791 Charlemagne made Mimigardevord the see of the new bishop of the Saxons, and about 1050 a monastery (whence Münster) was founded on the spot. In the 13th c. the city became a Hanse Town; and in 1535 was the scene of the violent movement of the Anabaptists, till the bishop repossessed himself of the city. In both the Thirty Years' War and the Seven Years' War Münster suffered severely. The principality, into which the bishopric had been elevated in the 12th century, was secularised in 1803, and the Congress of Vienna gave the greater part of it to Prussia.—There is another Münster in Alsace, 12 miles SW. of Colmar by rail; pop. 3390.

Murano. See VENICE.

Murcia (Span. pron. *Moor'theea*), a town of Spain, 46 miles by rail SW. of Alicante and 50 N. by W. of Cartagena. An old-fashioned Moorish town, it is embosomed in gardens of mulberry, orange, fig, palm, and other fruit trees. The cathedral, reconstructed in 1521, is surmounted by a fine bell-tower. Silks, saltpetre, soda, gunpowder, musical instruments, and glass are manufactured. Population, 113,000.—The province of Murcia has an area of 4478 sq. m. and a pop. of 580,000.

Murfreesborough, capital of Rutherford county, Tennessee, in 1819–26 capital of the state, is 33 miles by rail SE. of Nashville. Close by the battle of Stone River was fought, 31st December 1862 and 2d January 1863. Pop. 4000.

Murghab, a river that rises in the mountains north-east of Herat, flows north-west, and loses itself in the desert of Turkestan beyond Merv.

Murray River, the principal river of Australia, 1120 miles long. It rises in the Australian Alps, flows north-west along the frontiers of New South Wales and Victoria, and in South Australia passes southward through the shallow Lake Alexandrina to the sea at Encounter Bay. It is navigable part of the year as far as Albury, 190 miles NE. of Melbourne, but its mouth cannot be entered by ships of any size. The chief tributaries are the Lachlan, Murrumbidgee, and Darling, themselves large rivers.

Murshidabad', a town of India, on the left bank of the Bhagirathi, a branch of the Ganges, 124 miles N. of Calcutta. During the 18th century it was the capital of Bengal; but when, in 1772–90, the British made Calcutta their headquarters Murshidabad began to decline, and in 1901 its pop. was only 28,553. The chief buildings of note are the palace of the Nawab (1837), the Imambara ('house of prayer'), and a mosque. Two miles south of the city is Motijhil or Pearl Lake; on its bank stood the palace of Suraj-ud-Dowlah, in which Clive enthroned Mir Jafar, and where the English Residents—Warren Hastings the first—dwelt. The city is noted for ivory-carving, embroidery in gold and silver lace, silk-weaving, hookahs, and musical instruments.

Murten, battle. See MORAT.

Murviedro (*Moor-vee-ay'dro*; 'old walls'), or SAGUNTO, a town of Spain, 18 miles NNE. of Valencia, stands on the site of Saguntum, a Greek colony, the siege of which by Hannibal in 219 B.C. began the second Punic war. Pop. 6436.

Murzuk. See FEZZAN.

Muscat', or MASKAT, capital of the independent state of Oman or Muscat, in the south-eastern corner of Arabia. Its situation in a narrow rocky pass from the interior to the Indian Ocean makes it important for the commerce between eastern Arabia, Persia, India, East Africa, and the Red Sea. Its total trade reaches £1,100,000 annually, the chief exports being pearls, fish, salt, dates, drugs, dyestuff, horses, and the imports, coffee, rice, sugar, piece-goods, oil, &c. Pop. 20,000. In 1508 the Portuguese took possession of Muscat, and under them it developed into a prosperous commercial centre. From 1658 it was governed by native rulers (*imams*), who also (till 1856) succeeded the Portuguese as masters of Zanzibar.

Muscatine, capital of Muscatine county, Iowa, is mostly on rocky bluffs on the west bank of the Mississippi, 211 miles by rail WSW. of Chicago. It has pork-packing, flour and lumber mills, and plough and furniture factories. Pop. 14,454.

Muscovy. See RUSSIA.

Musha Islands. See OBOK.

Muske'gon, capital of Muskegon county, Michigan, is on the Muskegon River, which here (4 miles from its mouth in Lake Michigan) widens into Muskegon Lake, the best harbour on the east side of Lake Michigan. Muskegon is 40 miles by rail NW. of Grand Rapids, and saws and ships enormous quantities of lumber. It has also foundries, machine-shops, boiler-works, &c. Pop. 21,700.

Musselburgh, an old-fashioned town of Midlothian, near the mouth of the Esk in the Firth of Forth, 6 miles E. of Edinburgh by a branch-line (1847). Since 1832 it has united with Leith and Portobello to return one member, the parliamentary burgh including the large fishing-suburb of Fisherrow, with a small tidal harbour, and the pretty village of Inveresk, whose conspicuous spired church was rebuilt in 1805 by 'Jupiter' Carlyle, and occupies a Roman prætorium. Musselburgh's chief features are its golf-links (since 1817 also the Edinburgh racecourse). Loretto school (marking the site of a famed

place of pilgrimage), Pinkie House (1613), the 'Roman' bridge, the quaint tolbooth, and a statue (1853) of David Moir. Colonel Yule was a native. The manufactures include paper, nets, leather, &c. Pop. (1841) 6366; (1901) 11,711. See Paterson's *History of Musselburgh* (1857).

Mussooree, or MASURI, a sanatorium on a range of Himalayan foot-hills 7433 feet high, 12 miles NE. of Dehra, in the NW. Provinces of India. It forms a municipality with Landaur (q.v.).

Mus'tapha, a suburb of Algiers (q.v.).

Muta Nzige. See ALBERT-EDWARD NYANZA.

Muttra, or MATHURÁ, a town of India, in the United Provinces, on the right bank of the Jumna, 30 miles above Agra. There are numerous temples and mosques; the river is lined with magnificent flights of stairs, leading down to the bathing-places in the sacred river; large numbers of pilgrims resort to the city on the occasion of its religious festivals; and troops of monkeys and river-turtles are supported by charity. The city, for centuries a centre of Buddhism, was sacked by Mahmud of Ghazni in 1017, and plundered by the Afghans in 1756; in 1803 it passed to the British. Pop. 61,800.

Muyscas. See COLOMBIA.

Muzaffarnag'ar, a town in the United Provinces, 80 miles NE. of Delhi. Pop. 23,450.

Muzaffarpur', a Bengal town, on the Little Gandak, 140 miles N. by rail of Patna. Pop. 45,620.

Mycale (*Mī'ka-lee*), a promontory of ancient Ionia, over against Samos; in the channel between, the Greeks defeated the Persian fleet, 479 B.C.

Myce'næ, a very ancient city in the north-eastern part of Argolis, in the Peloponnesus, built upon a craggy height. It was the capital of Agamemnon's kingdom, and the principal city in Greece. About 468 B.C. it was destroyed by the inhabitants of Argos, and never rose again to its former prosperity. In Strabo's time its ruins alone remained; these are still to be seen in the neighbourhood of Kharvati, and are noble specimens of Cyclopean architecture. The most celebrated are the 'Gate of Lions,' chief entrance to the ancient Acropolis, and the 'Treasury of Atreus.' Excavations by Schliemann in 1876–89 brought to light another subterranean treasury and ancient tombs containing terra-cottas, vases, weapons, gold death-masks, &c. See Schliemann's *Mycenæ and Tiryns* (trans. 1877).

Mysia, a district of ancient Asia Minor, having the Propontis (Sea of Marmora) on the N., and the Ægean on the W.

Mysore, or MAISUR, a native state of southern India, surrounded entirely by districts of the Madras Presidency. Area, 29,444 sq. m.; pop. (1881) 4,186,188, (1901) 5,539,399. Mysore is an extensive tableland much broken by hill-ranges, and divided into two portions by the watershed between the Kistna and Kaveri. Gold is mined at Kolar. The rivers are used for irrigation. The annual value of the exports (betel-nut and leaves, coffee, cotton, piece-goods, cardamoms, rice, silk, and sugar) exceeds £1,200,000; of the imports (piece-goods, cloth, wheat, &c.), £1,500,000. The ruinous misgovernment of the native prince led the British to assume the administration in 1831; but in 1881 Mysore was restored to the native dynasty. The famine years (1876–78) told with great severity.—The capital, MYSORE, situated amid picturesque scenery, 245 miles WSW. of Madras, is a prosperous, well-built town. On the south stands the fort, which encloses the rajah's palace, with a magnificent throne. Population above 70,000.

Mzensk, a town in the Russian government of Orel, 200 miles SSW. of Moscow. Pop. 15,067.

NAAS (*Nayce* or *Nay'as*), a garrison town of Kildare, 20 miles SW. of Dublin by rail. Once the capital of Leinster, it obtained charters from Henry V., Elizabeth, and James I., but was disfranchised at the Union. Pop. 3835.

Nabha, a Sikh principality of the Punjab, E. of Patiala; area, 928 sq. m. Pop. 298,200.

Nablus (*Na-bloos'*; corrupted from Gr. *Neapolis*; anc. *Shechem*), a town of Palestine, between Mounts Ebal and Gerizim. The Samaritans' religious centre, it was Justin Martyr's birthplace.

Nadder, a Wiltshire stream, flowing 18 miles E. to the Avon at Wilton.

Nadiad. See NARIAD.

Nad'iya, a town of Bengal, on the Bhagirathi River, 63 miles N. of Calcutta. Pop. 14,105.

Naga Hills, a mountainous district of British India, the south-eastern extremity of Assam, with an area of 5710 sq. m. and a pop. (1891) of 122,867 aboriginal Nagas and other semi-savages.

Nagar. See BEDNOR.

Nagasaki (*Nagasáh'kee*), a seaport of Kyūshū, Japan, for two centuries the only Japanese gate of communication with the outer world. Its harbour, famous for its beauty, is a narrow inlet about 3 miles long. Near its head is the low, fan-shaped island of Deshima, to which from 1637 to 1859 the Dutch traders were limited. The great Takashima coal-mine is on an island 8 miles to seaward. Nagasaki has a fine dockyard and patent slip. Pop. (1892) 60,581; (1905) 156,500.

Nagina (*Nagee'na*), a town in the United Provinces, 48 miles NW. of Moradabad. Pop. 20,503.

Nagoya, a town of the main island of Japan, 170 miles W. of Tokyo. It has a famous Buddhist temple, and is the most important pottery centre in Japan. Pop. (1904) 288,700.

Nagpur (*Nagpore*), capital of the Central Provinces of British India, 450 miles ENE. of Bombay by rail. Pop. (1872) 84,441; (1901) 127,734.

Nahant, a summer-resort of Massachusetts Bay, 12 miles NE. of Boston. Pop. 1190.

Naihati (*Nyhat'ee*), a town of Bengal, 23½ miles NW. of Calcutta by rail. Pop. 45,293.

Nailsworth, a Gloucestershire town, 6 miles SE. of Stonehouse, with woollen manufactures. Pop. 3030.

Naini Tal (*Ny'nee Tal*), the summer-resort and sanatorium of the United Provinces of India, nestles between spurs of the Himalaya, beside a beautiful lake 6409 feet above sea-level, 70 miles N. of Bareilly. By a landslip here in 1880, 150 lives were lost. Pop. 12,500, but much more in the season (September).

Nairnshire, the fourth smallest county of Scotland, is washed on the north for 10 miles by the Moray Firth, and elsewhere bounded by Elgin and Inverness shires. Till 1891 it consisted of a main body, with a maximum length of 18 miles, a mean breadth of 11, and an area of 169 sq. m., and also of five detached portions situated in Elgin, Inverness, and Ross shires, which, having a total area of 31 sq. m., were

annexed to Nairnshire in 1476, but disjoined therefrom by the Boundary Commissioners in 1891. The chief rivers are the Nairn and the Findhorn, the former rising in Inverness-shire, and flowing 38 miles north-eastward to the Moray Firth. The surface has a generally southward ascent from the fertile and well-wooded 'laigh of Moray' near the coast, till at Carn Glas on the southern boundary it attains 2162 feet. Loch Loy (1⅛ by ¼ mile) is the largest of seven small lakes. Less than one-fifth of the entire area is in cultivation. The chief antiquities are Kilravock (1400) and Cawdor Castle (q.v.); at Auldearn, near Nairn, Montrose won his fourth victory. With Elginshire the county returns one member; and with Inverness, &c. Nairn town returns another. Pop. (1801) 8322; (1841) 9217; (1881) 10,455; (1901) 9291—1335 Gaelic-speaking.

Nairn, the county town, stands on the west bank of the river Nairn at its mouth in the Moray Firth, 16 miles by rail ENE. of Inverness. A pleasant little watering-place, with a small harbour and golf-links, it was made a royal burgh by William the Lion. Grant, the African traveller, was a native. Pop. 5000.

Naivasha, Lake, an equatorial lake in British East Africa, SW. of Mount Kenia.

Nakhichevan, or Nahitchevan, a town of Russian Armenia (Transcaucasia), near the Persian frontier, 100 miles SE. of Erivan. Pop. 12,000.

Namaqualand, or Namaland, a region north of Cape Colony, extending from the Orange River to Damaraland (q.v.). Since 1885 a German possession, with the exception of the British territory of Walvisch Bay (q.v.), it has an area estimated at 460,000 sq. m. It is mainly a sterile and barren region, and along a coast-line of upwards of 400 miles does not present a single running stream; but a few little bays along the coast, such as Angra-Pequeña (q.v.) and Walvisch Bay, afford safe anchorages. The Rhenish Mission has several stations with over 2500 converts. The country is named from the natives, the Namaquas, a tribe of Hottentots. —Little Namaqualand is a barren district of Cape Colony (q.v.), south of the Lower Orange River. Much copper is mined here.

Namur (*Namür'*; Flem. *Namen*), a city of Belgium, at the confluence of the Sambre with the Meuse, 35 miles by rail SE. of Brussels. With the exception of the picturesque citadel (1784), the old fortifications have been razed since 1866, their place being taken by a cordon of seven forts. The town itself has suffered so much by war that it offers little of interest—the cathedral, completed in 1772, with the grave of Don John of Austria; the Jesuit church of St Loup (1653), a large military school, an antiquarian museum, monuments of Leopold I. and the geologist Omalius d'Halloy (1783–1875), &c. Namur is noted for its cutlery, and also manufactures firearms, leather, paper, and tobacco. Population, 32,700.—The province of Namur, on the French frontier, lying between Hainault and Luxembourg, has an area of 1414 sq. m. Pop. 350,000.

Nanaimo (*Nanÿ'mo*), a town on the east coast of Vancouver Island, 74 miles by rail NNW. of Victoria. There are large coal-mines in the district, which has a pop. of 6600.

Nancy (*Non'see*), a beautiful French town, capital of Meurthe-et-Moselle, lies on the river Meurthe, at the foot of vine-clad hills, 220 miles by rail E. of Paris and 94 W. of Strasburg. It owes much of its architectural adornment to Stanislas Leszcinski, who, after abdicating the crown of Poland in 1735, resided here as Duke of Lorraine till his death in 1766. His statue (1831) adorns the Place Stanislas, the principal square, which is surrounded by the hôtel-de-ville, the bishop's palace, and the theatre. Other noteworthy features are the cathedral (1742); the churches Des Cordeliers and Notre Dame de Bon Secours (1738), St Epvre (1875); the 16th-century ducal palace, with the Lorraine museum; statues of General Drouot (1853) and Thiers (1879); and half-a-dozen gates. The institutions include a university, a lyceum, and a library of 40,000 volumes. Nancy, which has grown in importance since the German annexation of Alsace-Lorraine, manufactures cotton and woollen goods, artificial flowers, iron, tobacco, &c.; but its staple industry is embroidery on cambric and muslin. Pop. (1872) 52,565; (1901) 90,539. The capital of the duchy of Lorraine (q.v.), it was the scene of the death of Charles the Bold (1477), and the birthplace of Callot and Claude Lorraine.

Nanda Devi. See Himalaya.

Nandidrug. See Nundydroog.

Nanking, capital of the province of Kiangsu, formerly the capital of China, on the Yangtsze River, 130 miles from its mouth. Its name signifies the Southern Capital. Since the removal of the seat of government to Peking (Northern Capital) in the 15th century, the official name has been Kiangning. From 1853 to 1864 it was the capital of the Taiping rebels, who destroyed nearly all the magnificent public buildings for which the city was once famous. Till then the walls, 50 to 70 feet high, enclosed an area nearly 20 miles in circumference. The most memorable of the ruined buildings were the Porcelain Tower (1430), the summer palace, and the tombs of the kings, with remarkable sepulchral statues. Since its recapture by the Chinese imperialists, Nanking shows few signs of recovery. Although the manufacture of 'nankeen' (hence named), and of satin, has been revived, its once famous pottery, artificial flowers, and paper now are hardly produced. The government has established an arsenal on the European model. In 1842 Nanking was captured by the British. Pop. 150,000.

Nantes (*Non't*), eighth largest city of France, capital of Loire-Inférieure, lies on the right bank of the tidal Loire, 35 miles from the sea, and 248 by rail SW. of Paris. The old town having been demolished between 1865 and 1870, Nantes is one of the handsomest cities in all France, with its noble river, quays, bridges, shady boulevards, squares, and statues. The unfinished cathedral (1434–1852) contains Colomb's splendid monument (1507) to the last Duke and Duchess of Brittany, and another (1879) to General Lamoricière. The ducal castle, founded in 938, and rebuilt in 1466, was the occasional residence of Charles VIII. and most of his successors, and the place where, on 15th April 1598, Henry IV. signed the famous Edict of Nantes. Other noteworthy buildings are the splendid church of St Nicholas (1854), the palais-de-justice (1853), the theatre (1787), and the post-office (1884), besides a museum, a picture-gallery, and a library of 50,000 volumes. Between 1831 and 1887 £180,000 was expended on harbour-works, but the rise since 1845 of the port of St Nazaire, near the mouth of the Loire, and the increasing difficulty in the navigation of the river, have reduced the commercial importance of Nantes; to restore which is the object of the ship-canal (1891) between the

two places. The chief exports are hardware, cereals, and preserved provisions, the chief imports sugar, iron, cocoa, and wines. Industries are shipbuilding (decayed), sardine-preparing, and the manufacture of sugar, leather, iron, nets, soap, machinery, &c.; whilst 10 miles below Nantes is the vast government steam-engine factory of Indret, employing from 2000 to 3000 hands, and familiar to readers of Daudet's *Jack*. Pop. of Nantes (1872) 112,947; (1886) 120,106; (1901) 123,242. The *Portus Namnetum* of the Romans, and the former capital of Brittany, Nantes witnessed the 'noyades' of the execrable Carrier and the fall of the Vendéan leader Cathélineau (1793). Fouché and Jules Verne were natives.

Nanticoke, a mining borough of Pennsylvania, in the Wyoming Valley, 24 miles SW. of Scranton. Pop. 13,000.

Nantucket, an island (15 miles long) off the SE. coast of Massachusetts. On the N. shore is Nantucket town (pop. 3027), with a nearly landlocked harbour. Once a great seat of the whale-fishery, it is now mainly a summer-resort.

Nantwich, a market-town of Cheshire, on the Weaver, 4 miles SW. of Crewe. It has some quaint old timber houses; a fine cruciform parish church, with a central octagonal tower, 110 feet high; a Gothic town-hall (1858); a market-hall (1867); a grammar-school (1611); and brine-baths (1883). The *Halen Gwyn* ('white salt town') of the Welsh, Nantwich was once the second largest town in Cheshire, the seat of 300 salt-works in Leland's day, since when the industry has gradually quite died out. Boot and shoe making now is the principal industry. A great fire (1583), and its siege by the royalists under Lord Byron (1644) are the chief events in the history of Nantwich. Pop. (1851) 5424; (1901) 7722. See works by Platt (1818) and Hall (1885).

Napier, chief port and city of the provincial district of Hawke's Bay, New Zealand, on the east coast of the North Island. Port Ahuriri (or Scinde Island) is within the municipal boundary. Timber, wool, and tinned and frozen meat are exported. Napier is the seat of the bishop of Waiapu. Pop. 9341.

Naples (*Nay'pels;* Gr. and Lat. *Neapolis*, Ital. *Napoli*), till 1860 the capital of the kingdom of Naples, is the largest of Italian cities, and, with the doubtful exception of Constantinople, the most beautifully situated in Europe, 161 miles by rail SE. of Rome. The attractiveness of Naples, due not only to its site, but to its delightful climate, has inspired the proverb, 'See Naples and die.' Its charms have remained proof against defective drainage, impure water-supply, and the fever preserves of its poorer quarters, in course of removal since 1889. The impetus to this work was given by the cholera outbreak in September 1884, when in one night nearly 2000 people were attacked, and half of them died. The new drainage-works carry the sewage to Cumæ, thus relieving the sea-margin of the liquid poison that used to stain the water black. An aqueduct opened in 1885 furnishes pure drinking-water to every part of the city. More recent still are a new harbour, solid embankments, and commodious promenades, new streets cut through the more populous quarters, and a fine embankment carried along the sea-front.

Naples occupies the base and flanks of a hill-range rising, amphitheatre-wise, from the sea, and divided into two unequal parts by the Capodimonte, S. Elmo, and Pizzofalcone heights. The most ancient and populous part of the city lies in the eastern crescent, and is intersected from north to south by the historic and densely peopled Via Toledo (now Via di Roma). A fine quay extends eastward to the Castel del Carmine. Westward runs the less ancient city, smaller in extent, but freer as to air and prospect. Along the sea-margin extend the royal gardens and the Riviera di Chiaja. Naples is three miles long and two broad. It has a modern look, but in spite of external change still presents the same noisy, vivacious, mercurial life. Its National Museum is becoming daily richer in archæological treasure-trove from Pompeii, while its splendid aquarium teems with typical specimens of the flora and fauna of the Mediterranean. Of architectural interest Naples has little. Besides her five forts and four gates of mediæval construction, she has upwards of 300 churches, including the archiepiscopal cathedral (1272–1316) of St Januarius, whose blood is said to liquefy in the phials containing it on three yearly festivals. The university (1224), with nearly 100 teachers and 5150 students, the royal palace, the catacombs, and, still more, the law-courts are worth visiting. The National Library (1804) has 375,000 books and 8000 MSS.; the University Library (1812), 150,000 books; and the Brancacciana (1673), 150,000 books and 3000 MSS. The San Carlo Theatre (chiefly for opera) is one of the largest in Italy, though much less popular than the San Carlino. Naples is one of the busiest ports of the kingdom, exporting wine and olive-oil, chemicals and perfumery, live animals and animal products, hemp and flax, cereals, curriery, &c.; and importing cereals, metals, cottons, woollens, earthenware, glass, curriery, silks, groceries, specie, hemp and flax, dyes, chemicals, &c. She trades principally with Britain and France. Naples has many employments but few industries, and these insignificant, consisting mainly of woollen, silk, and linen manufactures, gloves, soap, perfumery, jewellery, earthenware, hats, and carriages. Macaroni is largely produced on the Neapolitan seaboard. Fishing supports many of the inhabitants. The neighbourhood is the market-garden of Italy. Pop. (1881) 463,172; (1901) 563,540.

Naples owes its foundation to the two Greek settlements of *Palæopolis* and *Neapolis* ('Old and New Town'), combined in Parthenope. In 328 B.C. it was subdued by Rome, and under the empire became a fashionable resort. It had been held successively by Normans and Hohenstaufens, when the popes conferred the sovereignty of Naples on Charles of Anjou. The Angevine dynasty, expiring in 1435, was succeeded by that of Aragon, which had ruled Sicily from the time of the Sicilian Vespers (1282). The territory of Naples (great part of south Italy) was united to Sicily, forming the kingdom of the Two Sicilies, and till 1707 was governed by Spanish viceroys. Naples was wrested then from Spain by Austria, but in 1735 was given to Don Carlos, third son of Philip V. of Spain, who founded the Bourbon dynasty. In 1789 the troops of the French Republic invaded Naples and converted it into the Parthenopean Republic (1799). A second invasion by Napoleon (1806) ended in the proclamation of his brother, Joseph, as king of Naples; and, when Joseph assumed the Spanish crown in 1808, that of Naples was awarded to Joachim Murat. On the defeat and execution of Murat in 1815 the Bourbon monarch, Ferdinand IV., was restored. The insurrectionary movements of 1821 and 1848 were the forerunners of

the overthrow of the Bourbon rule by Garibaldi and the Sardinians, and the incorporation of Naples in the kingdom of Italy (1861).

Narbada. See NERBUDDA.

Narberth, one of the Pembroke boroughs, 11½ miles NE. of Pembroke. Pop. 1071.

Narbonne (*Narbonn'*), a town in the French dep. of Aude, on the La Robine branch of the Canal du Midi, 8 miles from the Mediterranean, and 93 by rail ESE. of Toulouse. The removal since 1865 of the fortifications has been an improvement, but the place remains dirty and unattractive, with only three noteworthy buildings. These are the Romanesque church of St Paul (1229); the quondam cathedral of St Just (1272–1332), only the fine Gothic choir of which, 131 feet high, has been completed; and the former archbishop's palace, now the hôtel-de-ville, in one of whose three old towers Louis XIII. in 1642 signed the order to arrest Cinq Mars, and in which are a museum, library, and picture-gallery. The white heather-honey of Narbonne maintains its ancient celebrity; the wine is chiefly used for blending purposes. Pop. 28,200; (1901) 27,185. Narbonne was the earliest Roman colony (118 B.C.) beyond the Alps. Varro and Montfaucon were natives.

Nariad, a town of Bombay, 29 miles SE. of Ahmadabad by rail. Pop. 31,500.

Narragansett Bay. See RHODE ISLAND.

Narva, a Russian town, 101 miles WSW. of St Petersburg, on the Narova, 10 miles from its mouth in the Gulf of Finland. Charles XII. won a great victory here in 1700. Pop. 16,600.

Narvik, a Norwegian port opposite the Lofoten Islands, shipping iron ore brought by rail from the mines of Gellivara in Sweden. Pop. 5000.

Naseby, a Northamptonshire parish, 7 miles SW. of Market-Harborough. Here, on 14th June 1645, 7500 royalists under Charles I. and Prince Rupert were totally defeated by 14,000 parliamentarians under Fairfax and Cromwell.

Nash'ua, a city of New Hampshire, 40 miles by rail NW. of Boston, at the junction of the Merrimac and Nashua rivers. The falls of the latter, rendered available by a canal 3 miles long, supply motive-power to cotton-factories and ironworks, paper and carpet mills, &c. Pop. 25,000.

Nashville, capital and second largest city of Tennessee, on the Cumberland River, 200 miles above the Ohio, and 185 by rail SSW. of Louisville. The city, which is a great railway centre, is built mainly on the left bank of the river, which is crossed by a suspension bridge and a railway drawbridge to the suburb of Edgefield. Nashville is a handsome, well-built town, with an imposing state capitol of limestone ($1,500,000), a penitentiary (400 cells), a large lunatic asylum, the Nashville University (1806), Vanderbilt University (Methodist Episcopal South, 1875), Central Tennessee College (for coloured Methodists, 1866), Fisk University (Congregationalist, 1867), Roger Williams University (Baptist), the state normal college, &c. The city has a large wholesale trade, the staples being cotton and tobacco; while its manufactures include cotton, flour, oil, paper, furniture, timber, leather, iron, and spirits. Founded in 1780, Nashville became the legal capital in 1843. In December 1864 the Confederates under Hood were completely defeated here by General Thomas. Pop. (1870) 25,865; (1880) 43,350; (1900) 80,865.

Nasik, a town of Bombay, on the Godavari, 31 miles from its source, 100 miles NE. of Bombay, is a great Hindu place of pilgrimage. Pop. 21,490.

Nasirabad, capital of Maimansingh district, Eastern Bengal, 75 miles N. of Dacca. Pop. 20,500.

Nassau (*Nass'ow*), formerly a German duchy, now the Wiesbaden district of Hesse-Nassau (q.v.). The reigning duke sided against Prussia in 1866, and his duchy was incorporated with Prussia; on the extinction of the male line of the Orange branch by the death of William III. of Holland, in 1890, the Duke of Nassau became Grand-duke of Luxemburg.

Nassau, on New Providence, is the capital of the Bahamas (q.v.), a bishop's see, and a great winter-resort of American invalids. Pop. 11,000.

Natal, a British colony on the SE. coast of Africa, formerly part of the Cape settlement, was erected into a separate colony in 1856. Zululand (10,461 sq. m.) was added in 1897, and after the Boer war (1902) part of the Transvaal (Utrecht, Vryheid, and part of Wakkerstroom districts, in all 6970 sq. m.) was also added, making a total of 35,306 square miles, with a seaboard of about 360 miles, and extending inland to the Drakensberg or Qwathlamba Mountains. Durban, its port and largest town, lies 800 miles ENE. of the Cape of Good Hope. The coast-region, extending for 30 miles inland, is highly fertile, the climate being subtropical and healthy. In 1856 the cultivation of the sugar-cane was introduced on the coast, and besides supplying all South Africa, the colony exports sugar to England. The immigration of Indian coolies for sugar culture began in 1863, and in 1891 there were 35,000 coolies in the colony with their attendant traders. The Assam tea-plant was successfully introduced in 1877. Coffee and tobacco have been reared, as have also indigo, arrowroot, and ginger. All tropical fruits thrive well. The midland terrace is more fit for the cereals and usual European crops; while on the higher plateaus along the foot of the mountains are immense tracts of the finest pasturage for cattle and sheep. The climate is very healthy; the thermometer ranges between 90° and 38° F., but the heat even in summer is seldom oppressive. The mean annual temperature at Pietermaritzburg, the capital, is 64·71°. The winter begins in April and ends in September. In summer thunder-storms are very frequent and severe in the uplands. The annual rainfall averages nearly 40 inches, the greatest fall being in summer. The colony has one admirable harbour in Durban (q.v.) or Port Natal. The Tugela, Buffalo, Umkomanzi, Umgeni, Umzimkulu, and Mooi rivers have permanent streams, and though not navigable, are often available for irrigating purposes. The area of the coal-measures is estimated at 1400 sq. m. Copper has been found, and much is hoped from the iron near the coal. The colony is also believed to be rich in asbestos, mica, and plumbago, and some gold has been obtained. Great forests of fine timber abound in the mountain-passes. A railway runs through the colony to the Orange Colony and Transvaal. The government is now representative, the first colonial ministry being constituted in the end of 1893. The law is a modification of old Dutch law. Natal's chief exports are bullion, wool, sugar, tea, and coal. The value of exports by sea in 1903 was £3,302,818 (besides £8,007,673 by land, principally to the Transvaal), and the imports by sea, £16,221,617. In 1903 the revenue was £4,334,175, and expenditure £5,039,003. The trade is mainly with the

mother-country, also with Australia, India, and North and South America. In 1876 the pop. numbered 326,957 (20,490 whites); in 1904, 1,108,754, including 97,109 whites, 100,918 Indian coolies, and 895,641 natives. Eland and hartebeest are the only big game left; the hippopotamus and alligator are found in some of the rivers. Snakes are plentiful.

Natal was discovered by Vasco de Gama in 1497, on Christmas Day (hence its name). A large body of discontented Boers from Cape Colony settled in the country in 1837, but after a short struggle and long negotiations with the Cape authorities, accepted British rule, the malcontents migrating to Transvaal. Natal was annexed in 1843, made part of Cape Colony in 1844, and constituted a distinct colony in 1855. In 1865 the Colenso case threw the Anglican church into embarrassments. In 1873 the chief Langalibalele was suppressed; and Natal suffered severely in connection with the Zulu war (1879), the Transvaal war (1881), and the Boer war (1899–1902).

See books by Brooks (1869), Peace, Noble, and Bird (1889), others quoted at CAPE COLONY, and the blue-books and almanacs.

Natal, a seaport of Brazil, capital of the province of Rio Grande do Norte, at the mouth of the river of that name. Pop. 10,000.

Natchez, capital of Adams county, Mississippi, on the east bank of the Mississippi, 214 miles by rail NNW. of New Orleans. The public buildings include a Roman Catholic cathedral and a U. S. marine hospital. Natchez, settled by the French in 1716, was named from an Indian tribe. Pop. 12,250.

Natick, a town of Massachusetts, on Charles River, 18 miles by rail WSW. of Boston. It makes shoes, baseballs, chairs, &c. Pop. 9518.

National Parks. See YELLOWSTONE, and YOSEMITE. Others in the States are the Sequoia National Park, and the General Grant National Park, both in California, and the Hot Springs Reservation in Arkansas. In Canada a domain 26 miles by 10 in extent has been set aside as a national park at Banff in Alberta (by rail 562 miles NE. of Vancouver); it embraces one of the most beautiful sections of the Rocky Mountains, and contains hot sulphur-springs. Roger's Pass, 135 miles to the west, is also reserved as a government park. See besides the article NIAGARA.

Natron Lakes. See NITRIAN DESERT.

Nau'cratis, an ancient city of Egypt, in the Nile delta, 47 miles SE. of Alexandria.

Naugatuck', in Connecticut, on the Naugatuck River, 22 miles by rail NNW. of New Haven, manufactures gloves, rubber goods, cutlery, and iron-wares. Pop. 10,550.

Nauheim, or BAD-NAUHEIM, in Hesse-Darmstadt and near the Taunus Mountains, 24 miles N. of Frankfort. Its hot, saline, and chalybeate springs are impregnated with carbonic acid. Pop. 5000.

Naumburg (*Nowm'boorg*), a quaint old town of Prussian Saxony, on the Saale, in an amphitheatre of vine-clad hills, 30 miles by rail SW. of Leipzig. Of its six churches, the triple-towered cathedral (1207–42) is a noble Romanesque and Gothic structure. The manufactures include ivory carvings, combs, hosiery, wine, &c. The yearly 'cherry feast' commemorates the raising of the siege of Naumburg by the Hussite leader Procop in response to the supplication of the children (28th July 1432); but recent historians cast doubt on the whole episode. The seat of a bishopric (1059–1564), Naumburg suffered much in the Thirty Years' War; in 1814 it came to Prussia. Pop. 28,200.

Nauplia (*Now'plee-a*), a fortified seaport in the Morea, Greece, at the N. end of the Gulf of Argos or Nauplia, 25 miles S. of Corinth. Pop. 10,880.

Naushara, or NOWSHERA, a town of the native state of Bahawalpur (q.v.), under the Punjab, 20 miles from the left bank of the Indus, on the railway between Mooltan and Karachi. Pop. 15,000.

Nauvoo' (from a Heb. word for 'beautiful'), a village of Illinois, on the east bank of the Mississippi River, 14 miles above Keokuk. It was built by the Mormons in 1840, and soon contained a pop. of 15,000. Its principal feature was a great temple of white limestone (1841–45); but it had also mills and factories, and the beginnings of a university. After the expulsion of the Mormons in 1846, the temple was half destroyed by fire in 1848, and further ruined by a tornado in 1850. The town was occupied by a French Socialist community. Pop. 1350.

Navan (*Nah'van*), a market-town in Meath, at the junction of the Boyne and Blackwater, 16 miles W. of Drogheda by rail. Pop. 3863.

Navarino (*Navaree'no;* officially *Pylos*), on a bay on the south-west coast of the Morea in Greece, contains only 1462 inhabitants, but has an excellent deep harbour. The Bay of Navarino was the scene of a great sea-victory of the Athenians over the Spartans (425 B.C.); and on the 20th October 1827 it saw the annihilation of the Turkish and Egyptian navies by the British, French, and Russian fleets.

Navarre (Basque *Nava*, 'a mountain plain,' and *erri*, 'country'), one of the kingdoms which arose in the Pyrenees after the downfall of the Goths, but since 1512 divided into Spanish Navarra, and French or Basse-Navarre (now Basses Pyrénées). Spanish Navarra, by far the greater division, has an area of 6046 sq. m.; pop. 304,151, speaking Basque in the north.

Naver, a Sutherland stream, flowing 19 miles N. by E. to Torrisdale Bay out of Loch Naver ($6\frac{1}{4}$ miles × $\frac{1}{2}$ mile).

Navigators' Islands. See SAMOA.

Nawanagar, a seaport of India, and capital of a Kathiawar state (area, 1379 sq. m.; pop. 316,147), stands on the Gulf of Cutch, 310 miles NW. of Bombay. Pop. 58,530.

Naworth Castle. See LANERCOST.

Naxos, the largest and most fertile of the Cyclades, is situated in the Ægean, midway between Greece and Asia Minor. It is 20 miles in length, and has a pop. of 25,880. The shores are steep, and the island is traversed by a ridge of mountains, which culminate in Dia (3289 feet). The wine of Naxos was famous in ancient as it is in modern times, hence the island was celebrated in the legends of Dionysus and Ariadne. It was Turkish from 1566 till Greece became a kingdom. Naxos, the capital (pop. 2000), is the seat of a Greek bishop and a Latin archbishop.

Nazareth, the home of Jesus, anciently in the district of Galilee, 21 miles SE. of Acre, is still a small but flourishing town of Palestine. The principal building is the Latin convent, on the supposed scene of the Annunciation. Pop. 10,000, of whom 6500 are Christians (mostly Roman Catholics and Greek Catholics) and 3500 Moslems.

Naze, THE, or LINDESNAES, the southernmost headland of Norway (q.v.), near the entrance of the Skager Rack, with a lighthouse.—A head-

land of Essex, 5 miles S. of Harwich. Naze means 'nose' or 'promontory.'

Neagh, Lough (*Lohh Nay*), the largest lake of the British Islands, in Ulster, Ireland, is surrounded by the counties of Armagh, Tyrone, Londonderry, Antrim, and Down. It is 16 miles in length and 10 in average breadth, contains 98,255 acres, is 102 feet in greatest depth, and is 48 feet above sea-level. The chief of its numerous feeders are the Upper Bann, Blackwater, and Callan; and its surplus waters are carried off northward to the North Channel by the Lower Bann. The southern shores are low, marshy, and dreary. Fish abound—trout, char, and pullen.

Neanderthal (*Ne-an'der-tal*), a romantic valley between Düsseldorf and Elberfeld in Rhenish Prussia. In a limestone cave here was found in 1857 the skeleton of a prehistoric man.

Neath, a parliamentary and municipal borough and river-port of Glamorganshire, on a navigable river of the same name, 8 miles ENE. of Swansea by rail. It is believed to stand on the site of the Roman *Nidum;* and near it are the remains of a castle burned in 1231, and ruins of Neath Abbey, described by Leland as 'the fairest abbey in all Wales,' but now sadly decayed and begrimed by smoke and coal-dust. Neath has copper and tin-plate works, iron-foundries, and chemical works. It is one of the Swansea district boroughs. Pop. (1851) 5831; (1901) 13,720.

Nebraska, a central state of the American Union, the eleventh in area, lies between South Dakota, Iowa (separated by the Missouri River), Kansas, Colorado, and Wyoming. Area, 76,855 sq. m. The surface is chiefly an elevated, undulating prairie; it is very level in the eastern and southern portions, but in the north and west the 'Bad Lands' extend into the state, while north of the Niobrarah River there are great sandhills. The average elevation of the state rises from about 1200 feet in the east to 6000 feet towards the western border. The principal rivers, the Platte, Niobrarah, and Republican, all flow east. The atmosphere is dry and invigorating; great extremes of heat and cold are sometimes experienced. Wolves, foxes, skunks, rabbits, &c. abound. The soil is mostly a rich black mould, 2 to 8 feet deep. The staple crop is maize. Tobacco and sugar-beet also are cultivated. The manufactures include agricultural implements, canned provisions, vitrified brick, woollen clothing, soap, and beet-sugar. Pop. (1860) 28,841; (1880) 452,402; (1900) 1,066,300. The principal cities are Omaha, Lincoln (the capital), Beatrice, Hastings, and Nebraska City. Nebraska, included in the Louisiana Purchase, was organised in 1854, with an area of 351,558 sq. m. But of this vast area great portions were afterwards carved out for Colorado, Dakota, and Idaho. Nebraska became a state in 1867.

Nebraska City, capital of Otoe county, Nebraska, on the west bank of the Missouri, 74 miles below Omaha (44 by rail). It contains the Nebraska College (Episcopal, 1863), mills and factories, &c. Pop. 7500.

Nebraska River. See Platte.

Neches River (*Netch'ez*), rises in eastern Texas, and flows 350 miles SSE. to Sabine Lake, its waters passing thence into the Gulf of Mexico.

Neckar, the principal river of Würtemberg, rises on the eastern declivity of the Black Forest, and winding 250 miles, joins the Rhine at Mannheim—the other towns on its banks being Tübingen, Heilbronn, and Heidelberg. From Cannstadt, about midway, the Neckar is navigable. Fair wines are grown on its banks.

Nedjd. See Arabia.

Needham Market, a Suffolk town, on the Gipping, 3 miles SE. of Stowmarket. Pop. 1313.

Needles, a group of chalk rocks off the W. end of the Isle of Wight, 4¾ miles SW. of Yarmouth. The westernmost bears a lighthouse.

Needwood Forest, a former royal forest in Staffordshire, along the Trent.

Neerwinden (*Nayr'winden*), a small village in the north-west corner of the Belgian province of Liége. Here the French under Luxembourg defeated the English under William III. (29th July 1693), and here under Dumouriez they were defeated by the allies (18th March 1793).

Negapatam', a seaport on the Coromandel coast, 180 miles S. by W. of Madras city. Originally Portuguese, it was taken by the Dutch in 1660, and by the English in 1781. It exports cottons, live-stock, ghi, and imports spices, piece-goods, coal, gunny bags. Pop. 57,221.

Negropont. See Eubœa.

Neidpath, a ruined castle, on the Tweed, 1 mile W. of Peebles.

Neilgherry Hills (*Neelgerry, g* hard; properly *Nilgiri;* Sansk. *nila*, 'blue,' and *giri*, 'mountain'), a mountainous district in the south of India, rising abruptly from the plains to the height of 6000 feet, though individual peaks shoot up to 8760 feet. They have a delightfully cool climate, and are much resorted to by invalided Europeans, the principal station being Ootacamund. See a work by H. B. Grigg (1880).

Neilston, a Renfrewshire town, on the Levern, 2 miles SW. of Barrhead. Pop. 2713.

Neisse (*Nice-seh*), a fortified town of Prussian Silesia, on the Neisse, an affluent of the Oder, 50 miles SE. of Breslau. It manufactures arms, linen, and chemicals, and has great wool-markets. Emin Pasha was born here. Pop. 22,444.

Nejd. See Arabia.

Nellore, a town of India, on the Pennar, 107 miles N. of Madras. Pop. 32,336.

Nelson, a manufacturing town of Lancashire, 3½ miles NNE. of Burnley, made a municipal borough in 1890. Pop. (1871) 10,381; (1901) 32,816.

Nelson, the capital of a provincial district in New Zealand, on a harbour at the north end of South Island, where the Maitai enters Blind Bay. Founded in 1841, it has a cathedral, museum, and manufactures of cloth, leather, soap, and jam. Pop. 7200; with suburbs, over 12,000.

Nelson River issues from the north end of Lake Winnipeg in Canada, and, after a north-easterly course of 400 miles through Keewatin, falls into Hudson Bay (q.v.). It is navigable for 127 miles from its mouth, though only some 70 or 80 miles for large steamers.

Neme'a, anciently the name of a well-watered valley of Argolis, in the Peloponnesus.

Nemi (*Nay'mee*), Lake of, an extinct crater, 20 miles S. of Rome, accounted for its beauty the gem of the Alban Mountains. There was here a famous temple of Diana.

Nemours (*Nemoor'*), an ancient town of 4507 inhabitants in the French dep. of Seine-et-Marne, 40 miles SE. of Paris by rail.

Nen, a river of England, rising near Naseby, and flowing 70 miles NE. to the Wash, past Northampton, Oundle, Peterborough, &c.

Nenagh (*Nay'na*), a Tipperary town, 28 miles NE. of Limerick by rail. Its Norman keep is called Nenagh Round. Pop. 4702.

Nepal (*Ne-pawl'*), a native kingdom of India, on the southern slope of the Himalayas, between Tibet and Bengal. It is 512 miles in length, by 70 to 150 in breadth. Area, 54,000 sq. m.; pop. estimated by native authorities at 5,500,000, more probably 2,500,000. The northern parts of the state embrace the main range of the Himalayas, with Everest, Dhawalagiri, &c. On the south of the state lies the Terai. The intervening territory consists of mountain-ridges, embracing valleys drained by the Kurnali, Gandak, Kosi, &c. The climate varies greatly according to altitude; the principal valley, in which stands the capital Khatmandu (q.v.), has a climate like that of southern Europe. The soil is very fertile. The hillsides are terraced and the land is irrigated. Copper, iron, sulphur, &c., are little worked. The forests contain valuable timber trees. The valleys are inhabited by numerous different hill-tribes, partly aboriginal, partly of Mongolian or Chinese descent; but the dominant race are the Goorkhas, whose ancestors came from Rajputana in the 12th century, though it was not until 1769 that they made themselves masters of Nepal. In 1815 Sir David Ochterlony defeated the Goorkha armies in the west; and in 1816 a British force, 33,000 strong, within three days' march of Khatmandu, compelled the Goorkhas to sign a treaty of peace: they have since been helpful, especially during the mutiny.

Nerbudda, or NARBADA, a river of India, rises on the Amarkantak plateau, 3493 feet above sea-level, and flows west, through the Central Provinces, past Jabalpur, through the great depression between the Vindhya Mountains on the north and the Satpura Mountains on the south, and reaches the Gulf of Cambay half-way between Baroda and Surat. The river, a sacred stream, has a total length of 800 miles, and is navigable to Broach, 30 miles from its mouth.

Nerchinsk. See NERTCHINSK.

Néris-les-Bains. See MONTLUÇON.

Nertchinsk, a mining-town of eastern Siberia, in the Trans-Baikal Territory, on the Nertcha, a tributary of the Shilka (a head-stream of the Amur), 875 miles E. of Irkutsk. Pop. 6750.—NERTCHINSKIY-ZAVOD, 180 miles SE., on a tributary of the Argun, is also a mining centre, many of the workers being convicts. Pop. 5000.

Ness, LOCH, a long, narrow lake of Inverness-shire, the second largest in Scotland, 6½ miles SW. of Inverness. Lying 50 feet above sea-level, it extends 22½ miles north-north-eastward, and has an average breadth of 1 mile, with an area of 19 sq. m. It receives the Morriston, Oich, Foyers (q.v.), and other streams, and sends off the river Ness 7 miles to the Moray Firth. It lies in the valley of Glenmore, on the line of the Caledonian Canal (q.v.), and is enclosed by steep mountains—the highest, Mealfourvonie (2284 feet). Owing to its depth (in places 780 feet) it never freezes much. See FORT AUGUSTUS.

Neston and Parkgate, a town on the Dee estuary, 12½ miles NW. of Chester. Pop. 4577.

Netherlands, a triangular region between France, Germany, and the sea, lying mainly in the basins of the Scheldt, the Meuse, and the lower Rhine, and now divided between the kingdoms of Holland (q.v.) and Belgium (q.v.).

Nethou. See PYRENEES.

Netley, a place on the east side of Southampton Water, 3 miles SE. of Southampton, with a ruined Cistercian abbey, founded in the time of Henry III., and the Royal Victoria Military Hospital (for 878 patients), the foundation-stone of which was laid by Queen Victoria on 19th May 1856.

Neu-Brandenburg (*Noy-Brandenboorg'*), a town of Mecklenburg-Strelitz, on Lake Tollens, 20 miles NNE. of Neu-Strelitz by rail. Pop. 10,550.

Neuburg (*Noyboorg*), an ancient town of Bavaria, on the Danube's right bank, 29 miles NNE. of Augsburg. Pop. 8485.

Neuchâtel, or NEUFCHÂTEL (*Nuh-sha-tel'*; Ger. *Neuenburg*), a canton in the west of Switzerland, between Lake Neuchâtel and the French frontier. Most of its streams flow into the Rhine; several are feeders of the Lake of Neuchâtel, which, lying 1420 feet above sea-level, and 472 feet deep, is 25 miles long by from 3 to 6 wide. The Thiele carries its waters into the lake of Bienne, and thence into the river Aar. Pop. (1870) 97,284; (1900) 126,279, of whom three-fourths speak French, and four-fifths are Protestants. The speciality of the canton is watch-making, which occupies 20,000 persons, mainly in their own homes. Neuchâtel was associated with Prussia from 1707 till 1806, when Napoleon bestowed it upon General Berthier; in 1814 it was restored to the House of Brandenburg. A republican constitution was adopted in 1848; and there was civil war in 1856. The connection with Prussia was dissolved in 1857, and Neuchâtel became a member of the Swiss Confederation.

NEUCHÂTEL, chief town of the canton, occupies a magnificent site on the north-west shore of the Lake of Neuchâtel, 85 miles by rail NNE. of Geneva. It is noted for its many charitable, educational, and artistic institutions, and has a château (restored 1866), a college (1828), a statue of Farel (1875), &c. It manufactures watches, jewellery, &c. Pop. (1870) 13,321; (1904) 22,012.—The famous Neufchâtel cream-cheeses are made at NEUFCHÂTEL-EN-BRAY, a small Norman town, 25 miles SE. of Dieppe by rail.

Neuilly (*Nuh-ee-yee'*), or NEUILLY-SUR-SEINE, a town in the French dep. of Seine, N. of the Bois de Boulogne, and practically a suburb of Paris. Here, near the Seine, and in a beautiful park, stood Louis-Philippe's favourite Château de Neuilly, built by Louis XV., and burned at the revolution of 1848. Pop. 39,444.

Neu-Mecklenburg. See NEW IRELAND.

Neumünster (*Noymünster*), a town of Holstein, 20 miles by rail S. by W. of Kiel, with cloth-mills, dyeworks, breweries, &c. Pop. 13,659.

Neu-Pommern. See NEW BRITAIN.

Neusatz (*Noy-zatz*), or UJ VIDÉK, a town of Hungary, on the Danube's left bank, opposite Peterwardein (q.v.). Pop. 24,717.

Neusiedler Lake (*Noyzeed'ler*), a shallow, brackish lake on the north-west frontier of Hungary, 22 miles SE. of Vienna, which has lost much of its former area (133 sq. m.) by draining.

Neuss (*Noyss*), a town of Rhenish Prussia, near the left bank of the Rhine, 4 miles W. of Düsseldorf by rail. Its church of St Quirinus was founded in 1209. Neuss has ironworks, foundries, flour and iron mills, and manufactures of cottons, woollens, leather, paper, chicory, &c. Pop. close on 30,000.

Neustadt (*Noy-stat*), a town of Prussian Silesia, 25 miles SW. of Oppeln. It manufactures woollen and linen fabrics and carpets. Pop. 26,093.—(2) NEUSTADT, or WIENER-NEUSTADT, one of the most

beautiful towns of Lower Austria, 32 miles S. of Vienna by rail. It is overlooked by the old castle of the Dukes of Babenberg, now a military academy, whose fine Gothic chapel (1460), rich in painted glass, is the burial-place of Maximilian I. Locomotives and machinery, wire, bells, pottery, starch, leather, and ribbons are manufactured. The city, called 'the Ever-faithful,' was founded in 1192, and rebuilt after a great fire in 1834. Pop. 29,040.—(3) NEUSTADT-AN-DER-HARDT, a town of Rhenish Bavaria, at the foot of the Hardt Mountains, 20 miles W. of Spires. It manufactures paper, cloth, soap, wine, &c. Pop. 18,255.

Neustrelitz (*Noy-stray'litz*), capital of the grand-duchy of Mecklenburg-Strelitz, in a hilly district, between two lakes, 62 miles NNW. of Berlin. Founded in 1733, it is built in the form of an eight-rayed star, and contains the ducal palace, with magnificent gardens. Pop. 11,540.

Neustria, the portion of the Frank empire containing Soissons, Paris, Orleans, and Tours.

Neuwied (*Noy'veed*), a town of Prussia, on the Rhine's right bank, 8 miles below Coblenz, was capital of the principality of Wied; the castle has a beautiful garden, with many Roman antiquities. The town contains a great institute of the Moravian Brethren. Pop. 11,650.

Neva, a river of Russia, flows westward from the south-west corner of Lake Ladoga to the Bay of Cronstadt, in the Gulf of Finland, passing through St Petersburg, and carries to the sea an enormous volume of water (greater than that of the Rhine) from the lakes Ladoga, Onega, Ilmen, &c. Its total length, with windings, is about 40 miles; its width varies from 4000 feet to 180; and in places the navigation is embarrassed by reefs and rapids. It is frozen on an average from November 25 to April 21.

Nevada (*Nevah'da*), one of the Pacific states of the American Union, is bounded by Oregon, Idaho, Utah, Arizona, and California. Its greatest length from north to south is a little less than 500 miles, and its greatest width more than 300 miles. In area (110,700 sq. m.) it is the fourth largest state of the Union; in population it is the lowest of all the states and territories—(1870) 42,491; (1880) 62,266; (1900) 42,335. Nearly the whole of Nevada is included in the Great Basin (q.v.), once occupied by a vast inland sea, whose deepest depressions are yet marked by Walker, Humboldt, Carson, Pyramid, and Winnemucca lakes, and by other 'sinks' and *playas*, while the ancient shore-lines are clearly visible in places. The climate, now nearly rainless, was once moist; the soil of the Great Basin is now almost totally unfit for agriculture. At present Nevada is a high plateau with an average altitude of 4000 feet, crossed by numerous ranges of mountains, separated by valleys from 5 to 20 miles in width. Some of these valleys are barren and desolate; others, through which the rivers flow, have areas of arable land. The mineral production of Nevada, especially of silver, has been enormous in the past; and mining is still the chief interest. Nevada lies almost wholly in the great basin of interior drainage, where none of the water reaches the sea. The Humboldt River pursues a winding course of 350 miles. There are numerous hot springs. The atmosphere is dry, the temperature subject to extremes, and the rainfall exceedingly light. The Mormons established a few temporary camps in 1848, and in 1850 a settlement was made at Genoa; but the real history of the state begins with the discovery of silver in 1859. Nevada was separated from Utah in 1861, and in 1864 was admitted a state. The larger towns are Reno, Virginia City, and Carson (the capital).

Never Never Country, a name given to part of the central Australian desert, north of Lake Eyre, mainly in the state of South Australia, but including part of western Queensland.

Nevers (*Neh-vayr'*), capital of the French dep. of Nièvre, and formerly of the province of Nivernais, is picturesquely seated on a hillside at the influx of the Nièvre to the Loire, 159 miles by rail SSE. of Paris. The *Noviodunum* of Cæsar, it has been the seat of a bishop since 506; its beautiful cathedral belongs mainly to the 13th century. The industries comprise the manufacture of cannon, iron cables and chains, porcelain (introduced by Italians about 1565), &c. Pop. 25,600.

Neviansk, a town in the Russian government of Perm, 50 miles N. of Ekaterinburg by rail, stands on the Siberian side of the Ural Mountains, and on a tributary of the Tobol. The district is rich in gold and iron. Pop. 16,066.

Neville's Cross, 1¼ mile SW. of Durham, the scene of the defeat and capture of David Bruce, 17th October 1346.

Nevin, a Carnarvonshire fishing-town on Carnarvon Bay, 5 miles NW. of Pwllheli. It is one of the six Carnarvon boroughs. Pop. 1798.

Nevis, one of the British Leeward Islands, 2 miles SE. of St Kitts, with which it is administratively connected. It is circular in form, rises in the centre to a wooded ancient crater (3200 feet), and has an area of 50 sq. m. Sugar is the principal crop, and limes and oranges are grown. Pop. (1881) 11,864; (1903) 13,300. The capital is the port of Charlestown (pop. 1500). Nevis was discovered by Columbus in 1498, colonised by England in 1628, and long a great slave-mart. It has suffered much from hurricanes and earthquakes.

Nevis, BEN. See BEN NEVIS.

Nevis, LOCH, a sea-inlet of West Inverness-shire, 14 miles long and 1 to 4 miles broad.

Newabbey, a Kirkcudbrightshire parish, 8 miles S. of Dumfries, with the beautiful ruins of New or Sweetheart Abbey, founded for Cistercians by Devorguila in 1275.

New Albany, capital of Floyd county, Indiana, on the north bank of the Ohio River, nearly opposite Louisville, and 317 miles by rail S. by E. of Chicago, 267 E. of St Louis. It contains iron and brass foundries, rolling-mills, potteries and brick-yards, flour, woollen, cotton, and planing mills, &c.; while its plate-glass works are the largest in the United States. Pop. (1880) 16,423; (1900) 20,630.

New Almaden. See ALMADEN.

New Amsterdam. See NEW YORK, ST PAUL.

Newark, a ruined tower of Selkirkshire, on the right bank of Yarrow Water, 4¼ miles WNW. of Selkirk town. It figures in the *Lay of the Last Minstrel.* See also PORT-GLASGOW.

New'ark, (1) the capital of Essex county, New Jersey, on the Passaic River, 9 miles by rail W. of New York. A handsome city, with parks and elm-shaded streets, it has a city-hall, court-house, public library, nearly 150 churches, and 400 industrial establishments, producing brass and iron work, hardware and machinery, carriages, trunks, saddlery, boots, hats, clothing, jewellery, &c. The line of docks is over a mile long. Newark was settled in 1666 by a colony from Connecticut, and received a city charter in 1836. Pop. (1850) 38,983; (1890) 181,830; (1900) 246,070.—(2) Capital

of Licking county, Ohio, on the Licking River (here crossed by four iron bridges), 33 miles by rail E. by N. of Columbus. Stoves, boilers, machinery, wagons, flour, woollens, and glass-ware are manufactured. Pop. (1880) 9600; (1900) 18,160.

Newark-upon-Trent, a town of Notts, on a navigable branch of the Trent, 18 miles by rail NE. of Nottingham, and 120 N. by W. of London. It is approached from the north by a causeway, 1½ mile long, constructed by Smeaton in 1770, and carried over the flat island formed by the Trent on the west and the Newark branch on the east. The fine parish church, built mainly between 1350 and 1489, has an octagonal spire 223 feet high. Other edifices are the town-hall (1805), corn exchange (1848), hospital (1881), coffee-palace (1882), free library (1882), and grammar-school, founded by Archdeacon Magnus in 1529. Newark has a very important corn-market and great malting industries, besides iron and brass foundries, manufactures of boilers and agricultural implements, and plaster of Paris works. Incorporated by Edward VI., it returned two members to parliament till 1885. Pop. (1851) 11,230; (1901) 14,992. A British town and Roman station, Newark in Saxon times became the seat of a castle, which was rebuilt in 1125 by Alexander, Bishop of Lincoln (hence the name *New Work*), and was long known as the 'key of the north.' King John died in it (1216); and in the Great Rebellion it stood three sieges, in the second of which it was relieved by Prince Rupert (1644), whilst in the third it was surrendered to the Scots by order of Charles I., who had just delivered himself up (5th May 1646). It was then dismantled, and is now represented only by a very picturesque ruin in a public garden. See works by Shilton (1820) and Cornelius Brown (1879).

Newbattle Abbey, Midlothian, 1 mile S. by W. of Dalkeith, the seat of the Marquis of Lothian, on the site of a Cistercian monastery (1140). Andrew Cant and Robert Leighton were ministers of Newbattle.

New Bedford, a city and port of entry of Massachusetts, is on the Acushnet estuary (here crossed by a bridge 4000 feet long), 3 miles N. of Buzzard's Bay and 56 by rail S. of Boston. The public buildings include a city-hall of granite, a custom-house, a public library, and a fine high school ($126,000). There is a broad drive (4 miles) round Clark's Point, where there is a granite fort. For a century (1755–1854) New Bedford was the chief centre of the American whale-fisheries, sending out more than 400 whaling-vessels. Besides several great cotton-mills, it has foundries, oil-refineries, and manufactories of drills, cordage, boots, flour, glass, plated ware, carriages, candles, &c. Pop. (1880) 26,845; (1900) 62,442.

Newbern, capital of Craven county, North Carolina, at the junction of the navigable Neuse and the Trent (here crossed by a long bridge), 107 miles by rail SE. of Raleigh. It manufactures railroad-cars, cotton-seed oil, and wood-pulp, and does oyster-canning. Pop. 9843.

Newbiggin, a Northumberland watering-place, 7¾ miles E. by N. of Morpeth. Pop. 2032.

New Brighton, a Cheshire watering-place, 4 miles N. of Birkenhead. Pop. 4366.

New Brighton, since 1898 part of Richmond, one of the five boroughs of New York city, on the NE. shore of Staten Island.—There is another New Brighton in the coal district of Pennsylvania, 30 miles NW. of Pittsburgh. Pop. 7100.

New Britain, a town of Connecticut, 9 miles SW. of Hartford, producing hardware, cutlery, locks, jewellery, hooks and eyes, hosiery, &c. It has two parks, the state armoury, and a normal school. Pop. 26,800.

New Britain, by Germans called NEU-POMMERN, an island of the Western Pacific, a member of the German Bismarck Archipelago (q.v.), separated from the north-east coast of New Guinea by the Dampier Strait. In the forest-clad interior there are several volcanoes, active and quiescent, the highest being the Father (3900 feet). The climate is hot and moist. Cocoa-nuts, yams, bananas, bread-fruit, betel-nuts, and similar fruits are the chief products. The natives are Melanesian cannibals. Area, 9600 sq. m.

New Brunswick, an eastern province of Canada, washed on the E. by the Gulf of St Lawrence, and on the S. by the Bay of Fundy. It has an area of 27,322 sq. m.—rather smaller than Scotland. Its coast-line, with many fine harbours, is 500 miles in length, interrupted only at the point of juncture with Nova Scotia, where an isthmus 11 miles broad connects the two provinces. The surface is generally undulating. There are low hills skirting the Bay of Fundy and the rivers of St John and Restigouche. These two rivers are 450 and over 200 miles long; the Miramichi River is 220. The lakes are numerous but small, the largest being Grand Lake, 30 miles long and 3 to 7 miles wide, communicating with the St John River. Pop. (1881) 321,233; (1901) 331,120, of whom nearly one-third were Catholics. The principal towns are St John (with Portland, 40,711), Fredericton (the capital), and Moncton. The climate is subject to extremes, ranging between 80° and — 15°. Except in a strip of country adjacent to the Bay of Fundy, the soil is very fertile, and every kind of grain and roots produced in England is grown, as well as others; live-stock is raised. The province, which has cheap coal, manufactures sawn lumber, leather, cotton and woollen goods, wooden-ware, paper, iron-castings, nails, mill machinery, bolts and nuts, railway engines and carriages. A number of mines are worked. Shipbuilding is prosecuted. Timber is the chief export. Land is cheap, and sport excellent. New Brunswick, as a part of Nova Scotia, was ceded by France to Great Britain in 1713, but the boundaries were not settled until 1763. The first British settlers emigrated from Scotland to the Miramichi district in 1764; and in 1783, at the close of the American revolution, a large body of the loyalists from the United States settled near St John.

New Brunswick, capital of Middlesex county, New Jersey, is at the head of navigation on the Raritan River, 31 miles by rail SW. of New York. It contains a Roman Catholic cathedral, and is the seat of Rutger's College (1771), connected with which is the theological seminary of the Dutch Reformed Church, as well as an observatory and a state agricultural college and model farm. New Brunswick is noted for its great india-rubber factories, and has also iron and brass foundries, and manufactories of hosiery, lamps, needles, paper-hangings, &c. Pop. 20,000.

Newburgh, a city of Orange county, New York, is on the west bank of the Hudson (here 1¼ mile wide), 57 miles by rail N. of New York, amid the grand scenery of the Highlands. Its handsome edifices, villas, and gardens, rising 300 feet from the river, command a noble prospect. The city has, besides foundries, boiler-works, shipyards, and powder-mills, manufactures of woollen and cotton goods and carpets, leather,

flour, soap, oilcloth, brushes, paints, plaster, tiles, &c. Butter, grain, flour, and coal are shipped. Newburg saw the disbandment of the American army, 23d June 1783; and 'Washington's Headquarters' is preserved as the property of the state. Pop. 27,000.

New'burgh, a royal burgh of Fife, near the Firth of Tay, 11 miles ESE. of Perth. It arose in connection with the neighbouring Benedictine abbey of Lindores (*c.* 1196); and in its vicinity also is the famous Cross Macduff. Pop. 1985. See A. Laing's *Lindores and Newburgh* (1876).

New'bury, a thriving market-town of Berkshire, on the 'swift' Kennet, 17 miles W. by S. of Reading and 55 from London. Its gray old church, restored in 1867 at a cost of £15,000, is a fine Perpendicular edifice, with a noble tower added in 1510 by John Winchcombe or Smallwoode, otherwise 'Jack of Newbury,' a famous clothier, who sent a hundred of his own men to fight at Flodden. The large Italian corn exchange was built in 1862, in which year was started a great yearly wool-market; and still more recent are the handsome municipal offices and the new grammar-school, though this claims King John for its founder (1216). Newbury—'new' only as distinguished from the old Roman station of *Spinæ* (now Speen)—besides has many ancient and wealthy charities. It was incorporated by Elizabeth in 1596, and the borough boundary was extended in 1878. Pop. (1801) 4275; (1851) 6574; (1901) 11,061. Two hard-fought battles took place here in the Great Rebellion—the one between Charles and Essex, on 20th September 1643; the other between Charles and Manchester, on 27th October 1644. The advantage of the first was, on the whole, on the side of the king, but it cost the lives of Lords Falkland, Carnarvon, and Sunderland, to whom a memorial was erected in 1878. The second would have been a decisive royalist defeat but for Manchester's hesitancy.

See the *History of Newbury* (1839), a work on the two battles by W. Money (1881), and his *History of Newbury* (Oxford, 1887).

New'buryport', a city and port of entry of Massachusetts, on the Merrimac's S. bank, 3 miles from its mouth, and 37 by rail NE. of Boston. It has a long, shady High Street, with a six-acre pond, and manufactories of cottons, shoes, combs, hats, pumps, &c. Here Whitefield (died 1770) is buried. Pop. 15,947.

New Caledonia, a South Pacific island, belonging to France, and lying midway between the Fiji Islands and Queensland; on it the Loyalty Islands and Isle of Pines are dependent. Surrounded by coral-reefs, it is 240 miles in length, 25 in average breadth, and 6450 sq. m. in area. The interior is greatly broken by irregular mountain-chains (highest point, Mount Humboldt, 5380 feet). Noumea, the capital (4601 inhabitants), is on the south-west coast. The minerals include nickel, copper, cobalt, antimony, chrome, &c. Wines and spirits, flour, drapery, groceries, ironmongery, machinery, coal, &c. are imported, and nickel, cobalt, and other metals, preserved meat, copra, coffee, &c. exported. Every year about 130 vessels of 75,000 tons visit the island, one-half being British. The total pop. in 1901 numbered 51,415, including—aborigines, 26,106; free Europeans, 12,253; convicts, 6326; liberated convicts, 3730. The island was discovered by Captain Cook in 1774, and was annexed by France in 1853. She began to use it as a convict station, and after 1871 sent out great numbers of Communists.

New Castile. See CASTILE.

Newcastle, (1) a watering-place in Down, 11 miles SW. of Downpatrick. Pop. 1553.—(2) A town, 27 miles SW. of Limerick. Pop. 2600.

New Castle, capital of Lawrence county, Pennsylvania, on the Shenango River, 50 miles by rail NNW. of Pittsburgh, has rolling-mills, foundries, and nail-factories. Pop. 28,350.

Newcastle, a port of New South Wales, 75 miles NE. of Sydney by rail, at the mouth of the Hunter River. Coal and wool are the main exports. The harbour is defended by a fort. Pop. (1881) 15,595; (1901) with suburbs, 53,740.

Newcastle Emlyn, a Carmarthenshire town, on the Teifi, 26 miles NNW. of Carmarthen. Pop. 855.

Newcastleton, a Roxburghshire village, on Liddel Water, 21¼ miles S. by W. of Hawick. Pop. 820.

Newcastle-under-Lyme, a parliamentary and municipal borough of Staffordshire, on the Lyme brook, and in what used to be the Lyme Forest, 16 miles NNW. of Stafford and 147 by rail NW. by N. of London. Pop. (1801) 4604; (1901) 19,914. Amongst new public buildings are the town-hall (1890) and the high school (1876). The high school was reconstructed in 1874; its distinctive features are the study of natural science and modern languages. The parish church, Early English and Decorated, was rebuilt in 1876 from designs of Sir Gilbert Scott, and has a quaint old square tower of red sandstone, and a fine peal of bells. Brewing, malting, and the making of paper and army clothing (formerly hats) are industries, whilst the district is noted for its potteries and coal-mines. Of the castle all traces have disappeared. The town now returns only one M.P. (two from 1353 till 1885).

Newcastle-upon-Tyne, a city and county, on the north bank of the Tyne, 275 miles from London, 117 from Edinburgh, and 10 from the German Ocean. It is the seat of a bishopric founded in 1882, and it returns two members to parliament. Pop. (1801) 28,294; (1841) 71,850; (1881) 145,359; (1901) 215,328. The city, built for the most part on steep slopes and gently rising ground, abounds in contrasts, such as the grim old keep and the High Level Bridge; the modern Grey Street and the ancient Side; the stately stone buildings erected by Grainger and the half-timbered Elizabethan houses with projecting stories and latticed casements; the Elswick Works, a mile in extent, and Jesmond Dene, one of the loveliest ravines in the country; the closely-packed hillsides and the rolling expanse of common called the Town Moor. The church of St Nicholas, now the cathedral, said to have been founded in 1091, was destroyed by fire in 1216. The present building belongs to the Decorated and Perpendicular periods; the nave and transepts dating from 1359, the chancel from 1368, and the tower with its beautiful architectural crown from about 1435. The reredos was erected in 1888. There is also a Roman Catholic cathedral (1844), from designs by Pugin.

The central part of Newcastle with its stately and ornate buildings is a monument to the genius of Richard Grainger (1798–1861). Grey Street and Grainger Street, built in 1834–38, are the finest thoroughfares in the city. Monuments have been erected to Earl Grey (1838) and George Stephenson (1862). With the town-hall (1863) are associated the corporation offices and the corn-market. Other public buildings are the guildhall (1658)

and exchange on the Sandhill, the Moot Hall (1810), the general post-office (1876), the central police-courts (1874), the jail (1823–28), the Wood Memorial Hall (1870), the Trinity House (chapel, *c.* 1651; hall, 1721; almshouse, &c., 1782–95), the Central Exchange News-room and Art Gallery (1838), the Assembly Rooms (1774–76), the (branch) Bank of England (1834), the Royal Arcade (1831–32), the Butchers' Market (1835), and the barracks (1806). There are two theatres. The museum of the Natural History Society (1883–84, costing £42,000), contains collections of British birds, fossils from the coal-measures, and a unique series of Bewick's drawings. The Literary and Philosophical Society (1793) has a library of about 40,000 volumes. The public library (1881) contains over 70,000 volumes. The College of Medicine (1851) and the College of Science (1871) are both affiliated to the university of Durham: the College buildings were opened in 1888, and have since been greatly extended. The Royal Free Grammar-school, founded in 1525, has since 1870 occupied new premises. Among benevolent institutions are the Royal Infirmary (1751), the Jesus Hospital (1681), the Keelmen's Hospital (1701), the Trinity Almshouses (incorporated 1492), the Northern Counties Institution for the Deaf and Dumb (1861), the Fleming Memorial Hospital (1887), and the Northern Counties Orphan Institution (1876). The Central Station in Neville Street (1850: remodelled 1893–94) is a great railway terminus. The public pleasure-grounds of Newcastle are the Town Moor (987 acres), Castle Leazes, and Nuns Moor, the Leazes, Elswick, Brandling, Heaton, and Armstrong Parks, the Cruddas recreation-ground, and Jesmond Dene. For the Armstrong Park and Jesmond Dene, Newcastle is indebted to Lord Armstrong.

Newcastle is connected with Gateshead by three bridges: (1) the High Level Bridge, erected in 1846–49 from the plans of Robert Stephenson and T. E. Harrison, at a cost of £491,153; it is 1337 feet long, and consists of six cast-iron arches, which, springing from piers of solid masonry, support a railway at a height of 112 feet and a roadway at a height of 83 feet above high-water. (2) The Swing Bridge, erected 1868–76, at a cost of £233,000, on the site of the Roman, mediæval, and 18th-century bridges; the movable portion, which weighs 1450 tons and is 281 feet long, is worked by hydraulic machinery. (3) The Redheugh Suspension Bridge, erected 1868–71, at a cost of £35,000, is 1453 feet in length. The port of Newcastle is a very ancient and important one. Since 1840 some 100 million tons of stuff have been dredged from the bed of the river, which is now navigable by large vessels to Elswick. The quay is about 1540 yards in length. Since the 13th century the chief trade of Newcastle has been in coal. In shipbuilding, the river Tyne is second to the Clyde. The principal manufactures of Newcastle are locomotive and marine engines, machinery, heavy ordnance, carriages and harness, white and red lead, sheet and pipe lead, glass of various kinds, earthenware, chemical manures, alkali, cement, bricks, tiles, fireclay goods, colours, shovels, grindstones, wire rope, nails, sails, &c. The works of Sir W. G. Armstrong, Mitchell, & Co., founded in 1847, comprise blast-furnaces, engine-shops, foundries, and steel-works. Since the amalgamation of the original firm with that of C. Mitchell & Co., in 1882, several war-ships have been completed at Elswick, the largest the ill-fated *Victoria*. Newcastle is the birthplace of Lords Eldon and Collingwood, Mark Akenside, Hutton the mathematician, and Lord Armstrong. Under the Romans the high ground overlooking the river near the castle was the site of the military station of Pons Ælii. At the time of the Conquest it was a monastic settlement, known as Monkchester. Robert Curthose in 1080 constructed a fortress here; but the present Norman keep was built between 1172 and 1177 at a cost of £911, 10s. 9d. In 1644 Newcastle, which had declared for the king, was besieged for ten months by the Scots under General Leslie. Tragic events were the visitations of the Asiatic cholera in 1831 and 1853, and the great fire of 1854. See works by Gray (1649), Bourne (1736), Mackenzie (1827), Welford (3 vols. 1884–87), Charleton (1885), and Boyle (1890).

New-chwang, the port of Manchuria, and a treaty port since 1858, stands on the river Liao, 20 miles from its mouth and 120 from Mukden. Vessels are, however, obliged to load and discharge at Ying-tzu, at the mouth of the river, now called also by the name of the old city farther up, a greatly decayed place. Ying-tzu imports cotton, woollen, and silk goods, sugar, paper, metals, opium, tobacco, &c., and exports beans, silk, ginseng, skins, and horns. The port is closed four or five months with ice. Pop. 60,000.

New Cumnock. See CUMNOCK.

New England, the six Eastern States of the United States of America—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut—embracing an area of 65,000 sq. m. The people, distinctively known as Yankees, are celebrated for industry and enterprise. The joint pop. is now about 6,000,000.

New'ent, an old market-town 8 miles NW. of Gloucester. Pop. of parish, 2500.

Newera Elia, better NUWARA ELIYA, the sanatorium of Ceylon, near Mt. Pedrotallagalla, on a plain 6240 feet above the sea. Pop. 6000.

New Forest, a triangular district of south-west Hampshire, 9 miles SW. of Southampton, bounded by the river Avon, the Solent and English Channel, and Southampton Water. It measures 14 by 16 miles, and has an area of 144 sq. m., or 92,365 acres, of which, however, only 64,232 belong to the crown demesnes. The name dates from 1079, when the Conqueror here made a 'mickle deerfrith,' and cleared away several hamlets. This afforestation, enforced by the savage 'Forest laws,' was regarded as an act of the greatest cruelty; and the violent deaths here of two of his sons, Richard and William Rufus, were looked on as special judgments. The deer were removed under an act of parliament (1851); and under another of 1877 the New Forest now is managed by the court of Verderers as a public pleasure-ground and cattle-farm. Enclosed plantations occupy one-fourth of the entire area, the rest being open woodland, bog, and heath. The chief trees are oaks and beech. The former once supplied timber for the navy; the beech-mast still feeds large herds of swine. There is also a herd of small, rough-coated ponies. The hollies, the rhododendrons, and therewith the general absence of underwood, give a beautiful park-like aspect to the forest, within which or on whose verge are Lyndhurst, Beaulieu, and Lymington.

See Gilpin's *Forest Scenery* (ed. by Heath, 1879); Blackmore's *Cradock Nowell* (1866); and J. R. Wise's *New Forest* (1863; 4th or 'Artist's ed.,' 1883).

Newfoundland (*New'fundland'*), a British island colony in North America, not yet incorporated with the Dominion of Canada, lies at the mouth of the Gulf of St Lawrence, separated from

Labrador on the north by the Straits of Belle Isle (q.v., 11 miles broad). It is 370 miles in length and 290 miles in breadth, and has an area of 40,200 sq. m. Pop. (1874) 168,958; (1901) 220,249. By the Anglo-French agreement of 1904, the French withdrew their troublesome claim to certain exclusive rights 'on the French Shore,' till then a source of trouble and a hindrance to its development. The fishermen number 35,000, and 21,000 women and children cure fish. The island presents a wild and sterile appearance. The mountains in the Avalon Peninsula to the SE. (connected with the rest of the island by an isthmus only 3 miles in width) rise to over 2000 feet. The number of the lakes and 'ponds' is remarkable, and about one-third of the whole surface is covered with fresh water. The coast-line is everywhere deeply indented with excellent harbours. There is considerable cultivation along the seaboard of the settled districts, but the best land and timber are in the river-valleys and upon the west coast. Now about 1,000,000 bushels of potatoes are produced annually, and turnips, hay, carrots, clover, barley, and oats are cultivated with success. The chief seat of copper-mining is around the shore of Notre Dame Bay. Gold has been found. Rich deposits of lead ore exist. Gypsum, marble, and roofing-slate are found in abundance. Coal and iron exist side by side near the west coast. Cod, herring, and salmon are the most important fish. The annual value of the cod-fishery is over $6,000,000, and of lobster-canning $500,000; seal-fishing is also important. There are over 660 miles of railway, 2450 miles of postal and district roads, and 2100 miles of telegraph.

Newfoundland was discovered in 1497 by John Cabot, and visited by the Portuguese Cortereal in 1500; by 1578, 400 vessels, 50 of them English, were engaged in the fisheries here. In 1583 Sir Humphrey Gilbert took possession of the island for Queen Elizabeth; in 1621 Sir George Calvert (afterwards Lord Baltimore) settled in the Avalon peninsula. In 1713 the island was ceded to Britain, while the French retained the right, extended in 1783, to catch and dry fish on a defined part of the coast. The government, established in 1855, consists of the governor, an executive council of 7 members, a legislative council of 15 (appointed by the crown), and a general assembly of 36 (elected). In 1894–95 Newfoundland suffered from a great political and commercial crisis. See works by Auspach (1827), Little (1855), Fraser Rae (1881), Murray, Howley, Harvey, Prowse, Willson, and Smith (1901).

New Galloway, a royal (till 1885 also parliamentary) burgh of Kirkcudbrightshire, 25 miles W. of Dumfries. Close by was born Mr S. R. Crockett, the novelist. Pop. 374.

New Granada. See COLOMBIA.

New Guinea, the largest island next after the Australian continent, from which it is separated by the shallow island-studded Torres Strait, 80 to 90 miles wide at its narrowest part. The two regions at one time formed continuous land, and an upheaval of less than sixty fathoms would again unite them. Elsewhere the mainland is washed by deep waters ranging from 500 to 1300 fathoms. The island stretches 1500 miles NW. and SE. from Cape Goede Hoop, just south of the equator, to South Cape; its width varies from under 20 miles to 480 miles at 141° E. long. It forms a large central mass from which two peninsulas project south-east and north-west, and has a total area roughly estimated at 320,000 sq. m., or six times as large as England. It is essentially mountainous, being traversed by lofty ranges, rising in some places 2000 or 3000 feet above the snow-line. These ranges develop in the broader central parts two or more parallel chains with a general south-easterly trend. Thus, the Arfak Hills of the north-west peninsula (10,000 feet) are continued in the central region by the Charles-Louis range (over 14,000 feet), with many peaks of 18,000 and even 20,000 feet. The northern coast-range is known as the Finisterre Mountains (11,500 feet). Between these two chains run the Bismarck and Krätke ranges (10,000 feet). All these mountain-ranges converge in the south-east peninsula in a single lofty chain which traverses the whole of British New Guinea, the various sections of which take the names of the Albert Victor, Yule, Owen Stanley, and Lorne ranges. The prevailing formations appear to be very old plutonic and sedimentary rocks. There are numerous indications of gold. Earthquakes are frequent in some places, but no active volcanoes appear to exist, although there are several recent craters. The three largest rivers appear to be the Amberno (Mamberan, or 'Great River') in Dutch, the Empress Augusta in German, and the Fly in British territory. In the rainy season the Empress Augusta is navigable for many miles by large vessels; the Markham also gives access to the interior. The Fly, discovered in 1845 by Blackwood, was ascended in a steam-launch in 1889 for over 600 miles by Sir W. Macgregor. The tides ascend the Fly for 150 miles. The Douglas, Centenary, Stanhope, and Queen's Jubilee all converge in a common delta about the head of the Gulf of Papua. The east side of that gulf is joined by other navigable streams from the Owen Stanley range.

The whole of New Guinea lies within the track of the south-east trade-winds, followed by the north-west monsoons, whose rain-bearing clouds are condensed on the cold alpine slopes of the island. The consequent large rain or snow fall, combined with an average high temperature of from 85° to 90° F., results in a hot, moist climate on all the low-lying coast-lands and fluvial valleys —hence fever is endemic. But some of the uplands beyond the fever zone may be found adapted for the establishment of health-resorts for officials, traders, and missionaries. New Guinea is almost everywhere clothed with a rich and highly diversified flora. Sir W. Macgregor's party in 1889, after passing successively through the domains of tropical plants, such as the cocoa-nut, sago, banana, mango, taro, and sugar-cane, and of such temperate or sub-tropical growths as the cedar, oak, fig, acacia, pine, and tree-fern, were gladdened on the higher slopes by the sight of the wild strawberry, forget-me-not, daisy, buttercup, and other familiar British plants; while towards the summits these were succeeded by a true alpine flora, in which Himalayan, Bornean, New Zealand, and sub-antarctic forms were all numerously represented. In New Guinea the Asiatic and Malayan floras are far more richly represented than the Australian. On the other hand, the New Guinea fauna is closely related to that of Australia, as is seen in the almost total absence of placental mammals, and the presence of over thirty species of marsupials (such as the cuscus and kangaroo) and the bower-bird. The spiny ant-eater is allied to the Australian echidna, and like it oviparous. Of the bird of Paradise, a typical New Guinea bird, many varieties occur, and many gorgeous parrots, cockatoos, pigeons, &c. Reptiles are numerous. Between the Aus-

tralians and Papuans, who form the great bulk of the New Guinea population, there is little in common except the dark colour, considerably darker, however, in the latter than in the former. But the New Guinea natives seem to combine at least four ethnical elements: *Papuan* proper, diffused over the whole region; *Negrito; Eastern Polynesian;* and *Malay*. Through the mingling of these elements small tribal groups speak a surprising number of distinct languages. Cannibalism is very prevalent; some tribes are predatory; but many others are peaceful, industrious, and keen traders, displaying remarkable skill in the arts of pottery, wood-carving, and husbandry.

New Guinea appears to have been first sighted by D'Abreu in 1511; it received its present name in 1546 from Retez (Roda), who was struck by the resemblance of its inhabitants to those of the Guinea coast. In 1793 the East India Company occupied the island of Manassari in Geelvink Bay. In 1848 the Dutch proclaimed their sovereignty over the western half of the island as far as 141° E. long., and this meridian was accordingly taken as the western boundary of the eastern half in 1884, when that section was divided between Great Britain and Germany. The boundary between the northern or German and the southern or British division coincides with the main water-parting. The areas and populations of the three territories are thus roughly estimated:

	Area in sq. m.	Population.
Dutch New Guinea	158,000	200,000
British „	90,000	350,000
German „	70,000	100,000
Total	318,000	650,000

In the Dutch section there are no towns or administrative centres. German New Guinea, officially known as Kaiser Wilhelm's Land, is a protectorate administered by the German New Guinea Company, and yields for export tobacco, areca, sago, bamboo, ebony, and other woods. British New Guinea, which includes the D'Entrecasteaux and Louisiade Archipelagoes, was administered as a protectorate till 1888, when the sovereignty of Britain was proclaimed. It was made over to the Australian Commonwealth in 1902, who agreed to contribute £20,000 annually for its administration. The territory is divided into four districts, the chief station being Port Moresby. The revenue does not yet cover the expenditure; and the exports, chiefly gold, pearl-shells, bêche-de-mer, and copra, rose in 1897–1901 from £19,320 to £50,000 a year.

See, besides A. R. Wallace's *Malay Archipelago* (1869; new ed. 1894) and A. H. Keane's *Eastern Geography* (1887), works by D'Albertis (1881), Chalmers and Gill (1885 and 1887), Lindt (1887), Guillemard (1887), Strachan (1888), Bevan (1890), J. P. Thomson (1892), and Krieger (1900).

New Hampshire, the 'Granite State,' the most northerly of the thirteen original United States of North America, lies between the province of Quebec, Maine and (for 18 miles) the Atlantic Ocean, Massachusetts, and the *right* bank of the Connecticut River. Area, 9305 sq. m.—a fourth larger than Wales. The average elevation of the state is about 1200 feet, the highest point being Mount Washington (6293 feet), in the White Mountains; among the other peaks over 5000 feet high are those bearing the names of the successive presidents, Adams, Jefferson, Madison, and Monroe. The largest lake is Winnipiseogee (72 sq. m.); the principal rivers are the Connecticut, Merrimac, and Piscataqua. From Dover Point to its mouth the Piscataqua is about half a mile wide; and the volume and swiftness of its current at ebb-tide prevent the freezing of the water in Portsmouth harbour during the coldest winters. The Merrimac is said to turn more spindles and propel more shuttles than any other river in the world. The mean annual temperature at Concord is 46° F. There are still over a million acres of forest in the state. Of late New Hampshire has become very popular as a summer-resort, and the farmers, who owing to the rough and sterile soil could not compete in the great markets with those of the West, now find a new and important market brought to their very doors. But manufacturing is the leading industry in New Hampshire, the chief centres being Manchester (the largest city), Nashua, and Dover. Dartmouth college was founded in 1769. The earliest settlements were made in 1623 near Dover and Portsmouth. In 1641–79, 1689–92, and 1699–1741 New Hampshire was joined to the Massachusetts colony, but during the intervening dates and until 1775 it was under royal governors of its own. A provisional government was formed in 1776, a state constitution adopted in 1784; and New Hampshire was the ninth state (1788) to ratify the national constitution. Among the eminent men born here have been President Pierce, Daniel Webster, Lewis Cass, Salmon P. Chase, and Horace Greeley. Pop. (1840) 284,574; (1880) 346,991; (1900) 411,588.

New Hanover, one of the Bismarck Archipelago, lying off the north-east coast of New Guinea, with an area of 570 sq. m.

New Harmony, a village (pop. 1495) of Indiana, 28 miles by rail NW. of Evansville, was first settled in 1815 by a German community of religious socialists, called Harmonists. In 1824 the village was purchased by Robert Owen for his community, which failed after three years.

Newhaven, a Sussex seaport, at the mouth of the Ouse, 8½ miles E. of Brighton and 56 S. of London, noted for its steamboat traffic, particularly to Dieppe (5¼ hours). It has a large fort (1864–69) and a little Norman 12th-century church, with an east tower and small semicircular apse. Pop. (1851) 1358; (1901) 6772.

Newhaven, a fishing-village of Midlothian, on the south shore of the Firth of Forth, 1 mile WNW. of Leith, and 2 miles N. of Edinburgh. Dating from about 1490, it has a tidal harbour, reconstructed in 1876–77 at a cost of £10,000, and is famous for its fish dinners and fishwives. Pop. of parish (1841) 2103; (1901) 7636.

New Haven, the chief city and seaport of Connecticut, and capital of New Haven county, at the head of New Haven Bay, 4 miles from Long Island Sound, and 73 miles by rail ENE. of New York. Its broad streets are shaded with elms, and the public squares, parks, and gardens, with its handsome public and private edifices, make it one of the most beautiful of American cities. It has since 1718 been the seat of Yale College, founded in 1701 at Saybrook, and having over 325 professors and lecturers, 3000 students, and libraries of 380,000 volumes. New Haven also contains the Sheffield scientific school, and the Hopkins grammar-school (1660). The harbour has a jetty and a breakwater surmounted by a lighthouse, and the port has a large coasting trade. But New Haven is of more consequence as a manufacturing town, employing many thousands of hands in its large works, and producing hardware, wire, locks, clocks, cutlery, firearms, corsets, india-rubber goods, carriages, furniture, paper, matches, musical instruments, &c. New

Haven was settled in 1638 by a company from London, and the colony was not united to that of Connecticut until 1662; and till 1873 it was recognised as, jointly with Hartford, the capital of the state. It was incorporated as a town about 1665, and chartered as a city in 1784. Pop. (1850) 22,529; (1880) 62,882; (1900) 108,027.

New Heb'rides, a chain of islands in the Western Pacific, extending NNW. to SSE., and lying W. of Fiji and NE. of New Caledonia. There are in all some thirty islands (area, 5110 sq. m.), of which twenty are inhabited, the people, mostly of the Melanesian race, numbering about 70,000. There are active volcanoes, but the islands rest upon a coral foundation. The larger islands are Espiritu Santo (70 miles long by 40 wide), Mallicolo (56 by 20), Ambrym (22 by 17), Vaté or Sandwich (30 by 15), Erromango (30 by 22), Tanna (18 by 10), and Aneityum (35 miles in circumference). All are wooded, and some lofty, reaching 3000 feet. The seas swarm with fish. The people are savage cannibals of a low type, decreasing in number, who speak a great number of dialects. The southern islanders (Erromango to Aneityum) have been civilised by English and Scottish missionaries. This chain was discovered by the Portuguese Quiros in 1606, and was thoroughly explored by Cook in 1773. They are claimed by the British, though nothing is done to occupy them. The French have cast covetous eyes upon the group, but their attempts to annex it have encountered the strenuous opposition of the Australian colonies. Since 1863 many natives have been carried away to serve as labourers in Queensland, Fiji, and New Caledonia. See Dr J. Inglis' *In the New Hebrides* (1887).

New Holland. See AUSTRALIA.

New Ireland, now, as part of the German Bismarck Archipelago, called NEU-MECKLENBURG, a long, narrow island in the Pacific, lying NE. of New Guinea. Area, 4900 sq. m.; length, 300 miles; width, 15 miles. The hills rise to 6500 ft.

New Jersey, one of the thirteen original states of the American Union, is bounded by New York, the Hudson River, Staten Island Sound, Raritan Bay, the Atlantic, Delaware Bay, and the Delaware River. Its greatest length is 167 miles; its width from 32 to 69 miles; and its area 7577 sq. m.; it being the smallest of all the states save three, but ranking eighteenth in population. In the north-west are two portions of the Appalachian system. The Blue or Kittatinny Mountains (1400–1800 feet) extend along the Delaware from the Water Gap. The Navesink highlands, south of Sandy Hook, reach a height of 282 feet, and support two lighthouses. The central portion of the state is generally level and fertile; the southern part is in large measure sandy, covered with pine-woods, and marshy near the coast. The state is abundantly watered; its chief rivers, the Passaic, Raritan, Little and Great Egg Harbor, flow south-east into bays. The coast from Sandy Hook to Cape May is generally protected by peninsular or island beaches. About 60 per cent. of the total land area is included in farms. The chief products—mainly agricultural—are maize, oats, wheat, rye, hay, potatoes and sweet potatoes, cattle, butter, and milk. The leading mineral products are iron ore, limestone, zinc, and slate. Glass, pottery, machinery, leather, silk, and sugar are the chief manufactures. New Jersey has two canals, and some fifty railroads, with 3000 miles of length. Its south-west portion has Philadelphia for a market; its north-east section, including its two largest towns, is a suburb of New York. Its coast from Navesink to Squan is covered with villas, cottages, and hotels. Cape May, Long Branch, and Atlantic City are noted seaside resorts. Asbury Park, Ocean Grove, Seabright, &c. are growing places, crowded in summer. Newark and Jersey City are by far the largest cities; next come Paterson, Camden, Hoboken, Trenton, Elizabeth, New Brunswick, and Orange. Pop. (1800) 211,149; (1840) 373,306; (1880) 1,131,116; (1900) 1,883,669. In 1617 the Dutch settled at Bergen, near New York; in 1623 Cornelius May ascended the Delaware, and built a fort four miles below the site of Camden. In 1664 the territory was granted by Charles II. to the Duke of York. See the History by Raum (1880).

New Lanark. See LANARK.

New London, a port of entry of Connecticut, is on the right bank of the river Thames, 3 miles from Long Island Sound, 51 by rail E. of New Haven, and 126 NNE. of New York. The manufactures include woollens, sewing-silk, agricultural machinery, hardware, and crackers (*Anglicé*, biscuits); fruit-canning also is carried on. The harbour (30 feet deep) is one of the best in the States. On the left bank of the river is a U. S. navy yard. New London was settled in 1645, and in 1781 was burned by Benedict Arnold. Pop. 18,500.

Newlyn, a Cornish fishing-village and artists' headquarters, on Mount's Bay, 2 miles SW. of Penzance.

Newmarket, the 'racing capital of England,' lies on the border of Suffolk and Cambridgeshire, 14 miles ENE. of Cambridge and 69 NNE. of London. Twice almost destroyed by fire, in 1683 and 1700, it chiefly consists of one long street, and contains an unusual number of hotels and fine private houses, belonging to the great patrons of the turf. Principal edifices are the Jockey Club (1773); the adjoining Subscription Rooms (1844); the Proprietary Club (1882); the Rous Memorial Hospital (1883); with almshouses for eight jockeys and trainers or their widows; St Mary's Church, Perpendicular in style; and All Saints (1877). The town owes its prosperity to its horseraces, as old at least as 1605; and nearly half the male population are jockeys, trainers, or stablemen (Holcroft the dramatist was once one of their number). The race-ground, on Newmarket Heath, to the west, which is traversed by the Devil's Dyke, is owned partly by the Jockey Club, partly by the Duke of Rutland, and, with its soft elastic turf, is one of the very finest in the world. Of its ten courses, the longest is 4¼ miles in circuit. The training-ground bears a like character for excellence; and 400 horses are constantly in training. There are seven annual meetings, the principal events being the Two Thousand at Easter and the Cesarewitch in October. Pop. (1851) 3356; (1901) 10,688. See J. P. Hore's *History of Newmarket* (3 vols. 1886).

Newmarket, a town of County Cork, 8 miles NW. of Kanturk station. Pop. 966.

Newmarket-on-Fergus, a village of County Clare, 12 miles SE. of Ennis. Pop. 500.

New Mexico, a territory in the SW. of the United States, is bounded by Colorado, Oklahoma, Texas, Mexico, and Arizona. The area is 122,580 sq. m.—larger than that of Great Britain and Ireland—and the pop. (1880) 119,565; (1900) 195,310. The surface of New Mexico belongs to the great plateau upon which rests the Rocky Mountain system. From an altitude of 6000 to

6500 feet in the north it descends gradually to about 4000 feet along the Mexican border, and sinks to 3000 or 3500 in the Llano Estacado of the south-east. Except in the east the whole region is traversed by broken ranges of mountains having in general a north and south trend. In the northern central part the Santa Fé, Las Vegas, and Taos ranges form part of the main axis of the Rocky Mountains, with peaks over 12,000 feet high. Farther south, and east of the Rio Grande, are numerous broken ranges; and west of the Rio Grande the Sierra Madre rises above the level of the *mesa* (plateau). These mountains and the intervening *mesas* are cut by deep cañons. Among the mountains, especially in the north-east, are many 'parks' noted for their beauty and fertile soils. The precious metals are found in almost all parts of the territory. Some of the mines were rudely worked by the early Spaniards, who compelled the Pueblos to labour like slaves. Copper and iron occur in valuable deposits, and near Santa Fé are the famous turquoise mines. There are also fields of both bituminous and anthracite coal. Mineral and hot springs are numerous. The great mountain-divide causes the drainage of New Mexico to flow south to the Gulf of Mexico, and west to the Pacific Ocean. The Rio Grande traverses the central part of the territory and receives many tributaries. The Rio Pecos which joins it in Texas drains the south-eastern part. In the north-east are streams which unite to form the Canadian River, and in the west are the headwaters of the San Juan, Little Colorado, and Gila, all affluents of the Colorado. In the river-valleys the soil is fertile and produces excellent crops; and many acres in other sections may be successfully cultivated by irrigation. The climate is healthful, and on the whole remarkably uniform, and the atmosphere is very pure and dry. There are extensive forests on the mountains, and in the hilly regions of the western part of the territory, and on the pastoral plains nutritious grasses which support great numbers of cattle and sheep. Stock-raising is a leading industry; the herds need no housing in the winter.

After the Mexican war, part of the territory was acquired by the United States in 1848; additions were made by a later purchase from Mexico, and by a cession from Texas. The bulk of the pop., some 190,000, are Mexicans, or of Mexican descent, and there are 13,150 Indians. The territory when originally organised in 1850 included Arizona and parts of Colorado and California. The scheme for its incorporation in 1906 with Arizona (then to become a state of the Union) was successfully opposed both in and out of the Senate. The principal cities and towns are Santa Fé (the capital), Albuquerque, Las Vegas, Fernandez de Taos, and Socorro.

New Mills, a town of Derbyshire, on the Goyt, 8¼ miles ESE. of Stockport. It has manufactures of calico, cotton band, iron, &c. Pop. (1851) 4366; (1901) 7773.

Newmilns, a police-burgh of Ayrshire, on the Irvine, 7½ miles E. by S. of Kilmarnock. It manufactures lace and muslins. Pop. 4470.

Newnham, a town on the Severn, 11 miles SW. of Gloucester. Pop. 1184.

New Orleans (*Or'lee-anz;* but often *Or-leens'*), the chief city of Louisiana, and a great port and mart, is situated on both sides of the Mississippi River—the greater portion on the east bank—107 miles from its mouth, and 1190 miles SW. of New York. The city proper has a river frontage of 13 miles, and its western district, 'Algiers,' of 3 miles. The Mississippi makes two bends here, whence the city was called 'The Crescent City,' but it is now shaped like the letter S. The river is from 600 to 1000 yards wide, and 60 to 240 feet deep. The bar at its mouth was removed in 1874–79 by the Eads jetties in South Pass, and vessels of 30 feet now easily reach New Orleans. The city is the second in the United States for exports; next to Liverpool it is the greatest cotton market of the world. It is the terminus of three canals, and of six large railroads and three local lines, while thirty lines of steamships connect it with other American and foreign ports. Since 1875 it has made great progress in manufactures, particularly in cotton goods, cotton-seed oil, machinery, lumber, furniture, fertilisers, sugar-refining, rice-milling, beer, cigars, &c. The site is perfectly flat, and lies from 3 to 6 feet below the level of the Mississippi at high-water, being protected from overflow by levees or dykes of earth. Similar levees in the rear keep out the waters of Lake Pontchartrain. The soil is saturated with water, and cellars are impossible. Hence also in its cemeteries the dead are buried in mounds above the level of the ground. The climate is warm and damp, the mean temperature for the year being 69° F. The summer is tempered by winds from the Gulf, and is not oppressively warm. On account of its situation, the city is badly drained.

The imposing custom-house of granite cost $4,500,000; the cathedral of St Louis (1794) is a good sample of Creole-Spanish architecture. The archiepiscopal palace (1737) is the oldest building. Other noteworthy structures are the cotton exchange, U. S. mint, St Charles Hotel, Christ and St Patrick's churches, Tulane University (known as the University of Louisiana from 1834 to 1883), the affiliated Sophie Newcomb Memorial College (1887) for the higher education of girls, and the Jesuit College of the Immaculate Conception. The Howard Memorial (1888), Tulane, and Louisiana state libraries, all free, contain together 120,000 volumes. The Charity Hospital (1784) is the largest institution of its kind in the States, with accommodation for 800 to 1000 persons. There are several parks little improved, but with monuments to Jackson, Lee, Franklin, and others.

The site of New Orleans was first visited in 1699 by Bienville, who in 1718 laid the foundations of the city, and in 1726 made it the capital. In 1763 it was ceded to Spain by France, with the rest of Louisiana; but when in 1765 the Spanish governor attempted to take possession, he was driven out, and the people established a government of their own till 1769, when the Spaniards occupied it. It was ceded to France in 1802, and transferred to the United States a few days later. Incorporated as a city in 1804, it was divided in 1836–52 into three separate municipalities, in consequence of the jealousies between the Creoles and the Americans. Other outstanding events have been the defeat of the British by Andrew Jackson in 1815; the capture in 1862 by the Federal fleet; serious political troubles with fighting in 1874 and 1877; and the lynching in 1891 of 11 Italian *maffiosi*. In 1880 the capital of Louisiana was removed from New Orleans to Baton Rouge. Pop. (1802) 10,508; (1840) 102,193; (1880) 216,190; (1900) 287,104—very cosmopolitan.

New Plymouth, the chief town of the provincial district of Taranaki, New Zealand, 220 miles NW. of Wellington by rail. Two miles off is an extensive harbour. Pop. 5932.

Newport, (1) the capital of the Isle of Wight, on the navigable Medina, near the centre of the island, 4½ miles S. of Cowes and 10 SW. of Ryde. The church, rebuilt in 1854–56 on the site of one nearly 700 years old, is a fine Decorated edifice, and contains Marochetti's beautiful monument, erected by Queen Victoria in memory of the Princess Elizabeth (died at Carisbrooke Castle in 1650). Newport besides has a town-hall (1810); a free grammar-school (1612), the scene in 1648 of the fruitless negotiations between the parliament and Charles I.; a girls' endowed school (1761); a diocesan school (1860); and a literary institute and museum. To the north-west are a reformatory (1838) and barracks (1798). A municipal borough, Newport returned two members till 1867, and then one till 1885. Pop. (1851) 8047; (1901) 10,911.—(2) A thriving town of Monmouthshire, and a parliamentary, municipal, and county borough (the first conjointly with Monmouth and Usk), is seated on the river Usk, about 4 miles from its mouth, 24 miles SSW. of Monmouth and 145 W. of London. A principal outlet for great collieries and iron and steel works, it has greatly increased its shipping trade and its dock accommodation, which covers more than 80 acres. Amongst its public buildings are the town-hall (1885), erected at a cost of £30,000, and St Woollos' Church, partly Norman and partly Perpendicular. Newport manufactures india-rubber, gutta-percha, and railway and telegraph plant and wagons, and has brass and iron foundries, breweries, potteries. In 1839 the town was the centre of a Chartist outbreak. Pop. (1801) 1087; (1881) 38,427; (1901) 67,270.—(3) A market-town of Shropshire, on the Shrewsbury Canal, 11 miles WSW. of Stafford. Chartered by Henry I., and burned in 1665, it has a 15th-century church, a grammar-school (1656), and manufactures of machinery and agricultural implements. Population, 3500.—(4) A town of Pembrokeshire, on Newport Bay, 6 miles E. by N. of Fishguard. Pop. 1337.

Newport, a town of Fife, on the Firth of Tay, 1½ mile by water SSE. of Dundee. It has a small harbour designed by Telford (1822), and municipal buildings (1890). Pop. 3000.

Newport, (1) a watering-place of County Mayo, 11 miles NW. of Castlebar. Pop. 578.—(2) A town of Tipperary, on the Mulkear, 11 miles NE. of Limerick. Pop. 637.

Newport, (1) capital of Campbell county, Kentucky, is on the Ohio, opposite Cincinnati, and at the mouth of the Licking River, which separates it from Covington. The city contains large rolling-mills, a foundry, bolt-works, tile-works, and steam-mills. Pop. (1880) 15,693; (1900) 28,301.—(2) Fourth of the cities of Rhode Island, on the west shore of the *island* of Rhode Island, in Narragansett Bay, 5 miles from the ocean, and 69 miles by rail S. by W. of Boston. It has a deep, excellent harbour, defended by Fort Adams, and a torpedo station; also cotton-mills, a brass-foundry, lead and fish-oil works, &c. There are a brick state-house, a custom-house, a city-hall, the Redwood Library, many palatial villas, and large hotels; it is one of the most fashionable watering-places in America. In Touro Park stands the 'Round Tower,' or 'Old Stone Mill,' which suggested Longfellow's 'Skeleton in Armour.' It was settled in 1638 by eighteen adherents of Roger Williams; Bishop Berkeley resided here. Till 1900 it shared with Providence the dignity of capital of the state. Pop. (1880) 15,693; (1890) 19,457; (1900) 22,034.

Newport News, an important seaport of Virginia, on the estuary of the James River, 75 miles SE. of Richmond. Pop. (1900) 19,635.

Newport-Pagnell, a market-town of Buckinghamshire, at the influx of the Ousel to the Ouse, 56 miles NNW. of London. The fine parish church was restored in 1858. Pop. 4030.

Newquay, a bathing-resort on the N. coast of Cornwall, 12 miles N. of Truro. Pop. 3115.

New Quay, a watering-place on an inlet of Cardigan Bay, 5 miles SW. of Aberayron. Pop. 3284.

New River, an artificial cut, running 38 miles southward from Chadswell Springs in Hertfordshire into reservoirs at Hornsey and Stoke Newington. It was designed for the water-supply of London, and completed (1609–20) at a cost of £500,000 by Sir Hugh Myddelton, goldsmith, who died poor in 1631. The seventy-five original shares, sold for £100 apiece, sell now at the rate of from £85,200 to £95,100.

New Rochelle, a town of villas, on Long Island Sound, 17 miles NE. of New York. Pop. 14,720.

New Romney. See ROMNEY.

New Ross, a market-town and river-port of Leinster, on the Barrow, partly in Kilkenny, but chiefly in Wexford, 92 miles S. by W. of Dublin and 15 NE. of Waterford. The two portions of the town are connected by an iron swing-bridge (1869). Before the Union New Ross—Old Ross lies 5 miles E.—returned two members, and down to 1885 one. Pop. 5840.

Newry, a seaport, mainly in County Down, but partly in Armagh, on the Newry River, 38 miles SSW. of Belfast by rail. A canal connects it with Carlingford Lough and with Lough Neagh. Flax spinning and weaving, with rope and sail making, tanning, and granite-polishing, are the industries. The castle was taken by Edward Bruce in 1318. Newry returns one M.P. Pop. (1851) 13,191; (1901) 12,884.

New Shoreham. See SHOREHAM.

New Siberia, a Siberian group of uninhabited islands, rocky and icebound, in the Arctic Ocean, between the mouths of the Lena and Indigirka. The principal are Kotelnoi (the largest), Liakhov, Fadeyeff, and New Siberia.

New South Wales, the oldest colony of Australasia, now a state of the Australian Commonwealth. The name formerly applied to the whole of the eastern part of Australia; but since the delimitation of the other 'colonies' New South Wales, lying between Queensland, Victoria, and South Australia, has an area of 310,700 sq. m., five times the size of England. Of the Australian states it is fourth in area, and in 1901 first in population. A series of mountain-chains, 20 to 100 miles distant from the sea, extend southward from near Cape York. The southernmost are the Australian Alps, running into Victoria, which culminate in Mounts Townsend (7350 feet) and Kosciusko (7308 feet). Northward are the Blue Mountains, west of Sydney, with peaks 4000 feet, and containing the Jenolan Caves (q.v.). Liverpool Range is more northerly; and the New England hills, north-east, rise 5000 feet. With the exception of some isolated mountains, the region to the west consists of vast plains, up to the Barrier Ranges near South Australia. The mountains give birth to short and rapid streams toward the sea, but long and sluggish ones westward. The Hawkesbury or Nepean, Hunter, Clarence, Shoalhaven, and Macleay are eastern. The Lachlan, 700 miles long, runs into

the Murrumbidgee, which flows 1350 miles before falling into the Murray. The Murray, after 1100 miles on the New South Wales border, passes into South Australia. The Darling, rising in Queensland, has more than 1000 miles through the colony before reaching the Murray. The Macquarie and Namoi go northward to the Darling. The dry interior has few streams. There are some fine bays on the coast. The capital, Sydney (q.v.), is on Port Jackson, and is the headquarters of the Australian naval squadron. The sea-coast, with from 40 to 70 inches of rain a year, differs much from the western interior, where in some years as little as 5 inches may fall. But the climate is so uncertain that a region may suffer from fearful drought in one season and floods in another. Cold and ice with heavy snows may be experienced on the lofty plains; but Sydney, 33° 50′ lat., had no snow in thirty years. Though in summer the thermometer may rise to beyond 100°, the nights are generally cool. The eucalyptus-tree prevails in the colony, but acacias also are common, and pines and cedars, as well as palms in the north-east. The fauna consists mainly of marsupials. Birds are of great variety, many of very beautiful plumage, and some of pleasant note. Insects are numerous, and not always welcome. Lizards and snakes may run to a good size, but there are no alligators. Fish, especially in the bays, are plentiful. The Silurian and Devonian formations, with granitic, igneous, and metamorphic rocks, are rich in gold, silver, lead, copper, tin, and other metals. Gold, known in 1823, and first worked in 1851, near Bathurst, is found over an area of 70,000 sq. m. The output to 1903 was close on £53,000,000. Silver abounds in the Barrier Ranges near South Australia; discovered in 1883, the silver area is 100 miles by 12; the Broken Hill Company had, to 1903, raised 115,500,000 oz. Copper extends over 8000 sq. m. Tin, lead (chiefly from silver-mines), antimony, manganese, bismuth, &c. are mined. Iron is abundant, but not profitable owing to the cost of labour. The diamond, emerald, zircon, sapphire, topaz, &c. occur. Asbestos, zinc, mercury, cobalt, alum, graphite, kaolin, and building-stone are also found. Coal, the most valuable mineral, extends over 24,000 sq. m.; in 1903, 6,354,846 tons were raised, value £2,319,660. There is rich kerosene shale in the Blue Mountains.

New South Wales is a great pastoral country, and owns 50,000,000 sheep. The stock was originally imported from Bengal and the Cape; but as their wool was rather hairy, the breed was improved by the introduction of Spanish merinoes. Wool exports exceed 200,000,000 lb. weight annually. While 140,000,000 acres are devoted to flocks and herds, there are little over 2 million acres devoted to culture, of which total 1,561,100 acres are under wheat, and 226,834 acres maize. The principal crops are wheat, maize, barley, oats, potatoes, lucerne, and tobacco, with sugar and wine. The sugar-plantations in the north-east are not so productive as in Queensland; nor are the apple-orchards and potato-furrows equal to those of Tasmania. But all the fruits that thrive in England and Italy grow here. The trade of New South Wales, long a free-trade colony, exceeds that of any of the neighbouring states. From 1893 to 1903 the exports varied from £20,577,673 to £28,445,466, and the imports from £15,801,941 to £27,561,071. The chief exports to Britain are wool, tin, silver ore, copper, tallow, and leather. The imports from Britain are iron goods, clothing, cottons and woollens. Over 3200 miles of railway are in use. The governor is appointed by the Imperial Government. The executive is of 8 ministers; the Upper House or Legislative Council has 61 members; the Lower, or Legislative Assembly, 90 members, receiving £300 a year. The franchise is adult, including females since 1902. The parliament is triennial. In 1901 New South Wales joined with the other Australian colonies in forming the Commonwealth of Australia, and to the Federal parliament it sends 6 senators and 26 members to the House of Representatives. The revenue in 1904 was £11,248,328. The public debt, contracted for useful works, was £80,033,581. The militia and volunteer forces comprise about 14,500 men. The pop. (1901), 1,359,133, of whom 646,677 were female, included 7434 aborigines, black and half-caste. The Church of England claims nearly one-half the population, the Roman Catholic about one-fourth. There are technological, industrial, and general museums, picture-galleries, public libraries, schools of arts, and mining schools; and a noble state university, having affiliated colleges, crowns the educational edifice. The colony was established in 1788, under Governor Phillip, with a party of transported prisoners from England. For years the settlement suffered much from want of food. The introduction of free colonists, to whom grants of land were given, promoted pastoral and agricultural pursuits; and the change from despotism to responsible government was gradually made. The cessation of transportation in 1840 was followed by social and political advance; and the gold discovery in 1851 gave a great impetus to industry and prosperity. A great wave of depression and financial difficulty passed over this and the other Australasian colonies in 1893.

See AUSTRALIA and works there cited; Dilke's *Problems of Greater Britain* (1890); and works on New South Wales by Flanagan (1862), Trollope (1874), Lang (1875), Griffin (1888), Coghlan (1890), and Barton (1890 *et seq.*).

Newstead Abbey, 10 miles NNW. of Nottingham, on the border of Sherwood Forest, was founded for Augustinian Canons by Henry II. in atonement for Becket's murder (1170), and in 1540, after the dissolution, was given to 'Sir John Byron the Little, with the great beard.' His descendant, the poet Lord Byron, made the half-ruinous old place his home in 1808, but sold it in 1818, since which time about £100,000 have been spent on its restoration.

New Sweden. See PENNSYLVANIA.

Newton, (1) capital of Harvey county, Kansas, 134 miles by rail SW. of Topeka, is the centre of a rich coalfield. Pop. 6605.—(2) A city of Massachusetts, 7 miles WSW. of Boston by rail, and almost surrounded by the Charles River. It manufactures cloth, silk, shoddy, machinery, glue, &c. Pop. 35,000.

Newton-Abbot, a market-town of Devonshire, at the influx of the Lemon to the Teign estuary, 15 miles (by rail 20) S. of Exeter. Ford House has lodged both Charles I. and William of Orange, who here in 1688 was first proclaimed king. Pop. 12,800.

Newton Heath, a north-eastern ward of the city of Manchester.

Newton-in-Makerfield (otherwise NEWTON-LE-WILLOWS), with its suburb of Earlstown, a thriving town of Lancashire, 16 miles E. of Liverpool and 16 W. of Manchester. An important railway junction, it has grown rapidly, and has printing-works, paper-mills, iron-foundries, a sugar-

refinery, brick-fields, and railway-works. On the neighbouring fine racecourse a meeting is held annually in July. At Parkside, ½ mile distant, Mr Huskisson met with the accident which caused his death, at the opening of the railway (1830). Newton returned two M.P.s from 1558 to 1832. Pop. (1801) 1455; (1881) 10,580; (1901) 16,699.

Newton-Stewart, a town of Wigtownshire, near the mouth of the Cree, 50 miles by rail W. of Dumfries. It owes its name to a son of the Earl of Galloway, who obtained a charter making it a burgh of barony in 1677. Its buildings are a fine town-hall (1884) and an endowed school, the Ewart Institute (1864). Pop. 2638.

Newton-upon-Ayr. See AYR.

Newtown (Welsh *Drefnewydd;* anc. *Llanfair Cedewain*), a town of Montgomeryshire, 13 miles SSW. of Welshpool. It is the centre of the Welsh flannel manufacture, and also produces tweeds, shawls, &c. With Montgomery, &c., it returns one member. Robert Owen was a native. Pop. 6500.

Newtownards, a town of County Down, 14 miles E. of Belfast by rail. Flax-spinning, muslin-weaving and embroidering, and nursery-gardening are industries, and there are large markets. Pop. (1851) 9567; (1901) 9110.

Newtownbarry, a Wexford market-town, 9 miles NW. of Ferns. Pop. 909.

Newtown Hamilton, a market-town, 12 miles SE. of Armagh. Pop. 688.

Newtown St Boswells, a Roxburghshire village, 40½ miles SE. of Edinburgh, on the Tweed, opposite Dryburgh. Pop. 620.

New Westminster, formerly the capital of British Columbia, is on the north bank of the Fraser River, 10 miles from its mouth and 113 miles by rail and steamer NNE. of Victoria, on Vancouver Island. Here are saw-mills and great salmon-canning establishments. Pop. 6700.

New York, the 'empire state' of the American Union, is the twenty-fifth in area and the first in population. It has a very irregular outline; two-thirds along the shores of Lake Erie, the Niagara River, Lake Ontario, the St Lawrence, and Lake Champlain, and the rest artificial straight lines. Area, 49,170 sq. m., or almost that of England. Long Island is the largest, and Manhattan, containing the most populous part of New York City, the most important of the many islands. The state is traversed by numerous chains of mountains and hills, among which lie beautiful valleys. There is also much rolling land, and there are several extensive plains. The greatest elevations are in the E. and NE., but nearly all the SE. part is hilly or mountainous. From this highland region the land slopes gradually, and declines in a series of terraces, north and west toward Lake Ontario. The most level portions are those bordering that lake and the St Lawrence River. The mountainous region in the east is cut by the gap of the Mohawk River. The narrow valley of this stream, once traversed by a mighty river which drained the great Ontario basin, joins at right angles the deep depression in which are Lake Champlain, Lake George, and the Hudson River. Both of these valleys pass directly through the Appalachian system of mountains, and divide the state into three distinct sections. The mountains are also disposed in three groups. The Adirondacks (highest point, Mount Marcy, 5400 feet), in the NE., are completely isolated by the valleys of Lake Champlain and the Mohawk River. South of the Mohawk valley are the Catskills with the Helderberg and Shawangunk Mountains, covering an area of about 500 sq. m. The Shawangunk Mountains are continuous with the Blue or Kittatinny Mountains of Pennsylvania. The Taconic range of New England enters the state still farther south, and passes south-westerly into New Jersey. This range is cut by the Hudson River, and forms the celebrated Highlands. There are extensive iron-mines, deposits of lead, copper, zinc, &c., and abundance of building-stones. The salt-springs, especially those of the Onondaga salt group, are of great value. There are also valuable petroleum springs, and mineral and medicinal springs.

The most important river belonging entirely to the state is the Hudson. The Oswego, draining a chain of central lakes, the Black, and the Genesee are affluents of Lake Ontario; the St Lawrence forms part of the northern boundary; the Niagara connects Lakes Erie and Ontario, and the Delaware, the Susquehanna, and the Alleghany rise within and drain the southern portions of the state. New York lies mainly in the lake region of North America, and claims the eastern part of Lake Erie, one-half of Lake Ontario, and one-half of Lake Champlain. Lake George and the Adirondack lakes are in the NE. The mountains, rivers, lakes, and waterfalls (including Niagara) of New York make it famous for its scenery. Other beautiful falls are the Falls of the Genesee, Trenton Falls, the Kaaterskill Falls in the Catskills, and those of Cohoes, Ticonderoga, and at Watkin's Glen. The average temperature is about 47° F., with a range of over 100°. More than one-half the area is under cultivation. In the lake valleys there are many vineyards; hops and tobacco are crops; near New York and the other large cities market-gardening is profitable. But manufacturing is the leading industry, and in the value of its manufactured products New York is the foremost state of the Union. Moreover, its geographical position and its natural avenues of communication with other parts of the country, together with the system of canals and railroads, make it the leading commercial state. Of several canals the Erie is the most important, and within the state there are nearly 8000 miles of railway.

Before the coming of the whites the territory now known as New York was occupied by the Iroquois Indians. Almost simultaneously, in 1609, Samuel Champlain discovered the lake which bears his name, and Henry Hudson explored the Hudson River as far as the present site of Albany. A few years later settlements were made by the Dutch, but they were looked upon as intruders by the English, who in 1664 forced them to surrender their city of New Amsterdam (New York City, q.v.). In the struggle for independence, in the war of 1812, and in the civil war New York played a prominent part. No other state has so many large cities and thriving towns. New York City is the centre of a thickly populated district, which is second only to London in the number of its people and the importance of its commercial interests. The other most important cities are Albany (the capital), Buffalo, Rochester, Syracuse, Troy, Utica, Yonkers, Binghamton, Schenectady, Auburn, Elmira, Oswego, Kingston, Poughkeepsie, Cohoes, Newburgh, Hudson, and Dunkirk. Pop. (1800) 589,051; (1850) 3,097,394; (1880) 5,082,871; (1900) 7,268,894.

New York City, the largest and most important city on the American continent, the third wealthiest on the globe, and, next to London,

the most populous in the world. It is situated at the mouth of the Hudson River, which enters the Atlantic Ocean through New York Bay. Previous to 1874 the city only included Manhattan Island, but in that year and in 1895 it was extended; and in 1898 a greater extension took in Kings county, part of Queens county (Long Island), Richmond county (Staten Island), and the towns of East Chester and Pelham. For administrative purposes the whole is now divided into five boroughs—Queens, Brooklyn, Richmond, the Bronx, and Manhattan—and the total area is 309 square miles.

The bar at Sandy Hook, 18 miles south of the city, which divides the Atlantic Ocean from the outer or lower bay, is crossed by two ship-channels, from 21 to 32 feet deep at ebb-tide. The lower bay covers 88 sq. m. The Narrows, through which all large ships pass on their way to the inner harbour, is a strait between Long Island and Staten Island, about a mile in width, and like other approaches is defended by forts. New York's harbour or inner bay covers about 14 sq. m.; it is one of the amplest, safest, and most picturesque on the globe, open all the year round. Bridges span the East River and Harlem River, and there are some thirty steam-ferries. The city is the centre of finance and commerce of the United States. Of the total trade of the States about 46 per cent. passes through New York, and the tonnage of vessels entering the port in 1904 was 9,235,524, and of the vessels cleared 8,600,590. The annual exports of merchandise amount to about $550,000,000, the imports to over $530,000,000. Much business is also done at the wharves of Brooklyn (q.v.). Liberty Island, in the harbour, about 1¾ mile from the city, contains the statue of Liberty (1886) by Bartholdi. The New York and Brooklyn (q.v.) Suspension Bridge and the new East River Bridge (1896–1904) span the East River.

Old New York is laid out very irregularly. Here the money interests and wholesale traffic are centred; Wall, New, and Broad streets being the great centres of banking and speculative enterprises. The newer part of the city, from 14th Street to the end of the island, northward, is divided into twelve great avenues and several smaller ones, from 75 to 150 feet in width, running north and south. These are crossed at right angles by streets, mostly 60 feet in width, running from river to river. Fifth Avenue, the great modern central thoroughfare, divides the city into eastside and westside. Several of the city's avenues are traversed their full length by elevated steam passenger-railroads. Twenty street blocks measure a mile, and every tenth street is double the usual width, designed for business purposes. Wooden buildings have been interdicted in the lower part of the city. The modern method is to build roomy, tall, fireproof and semi-fireproof structures for apartment-houses and for business purposes, the ascent being by elevators. Most of these range from 75 to 100 feet in height; some of them run to twenty stories, constructed of steel frames filled in with non-combustible material. Many of them are costly and elegant. Among prominent public edifices are the City Hall, County Court-house, Custom-house, Treasury Building, Tombs (prison), Barge Office, Masonic Temple, Academy of Design, Cooper Union, Post-office, Produce Exchange, Madison Square Garden Hall, University of the City of New York, Lenox Library, Temple Emanuel, Trinity Church, and the Roman Catholic cathedral, besides large, imposing hotels and palatial dwellings and business depôts. Immense retail bazaars and arcades are found on Broadway, Grand Street, 14th, 23d, and 125th Streets, and 3d, 6th, and 8th Avenues.

The city government is under a mayor and board of aldermen; these offices are mostly filled by adopted citizens from Ireland and Germany. New York has a fire-department conducted at an annual expense of $5,000,000, divided into 300 companies with 3000 men. The Croton Aqueduct conveys an ample supply of water from the Croton River and its lakes, a distance of about 40 miles, to the four reservoirs of the city. The New York General Post-office building, erected of granite, at a cost of $6,500,000, was first occupied in 1875. The Battery Green encloses twenty-one acres, and occupies the southern point of Manhattan Island. On its west side is Castle Garden (q.v.), Central Park (1857), comprising 843 acres of beautifully laid out grounds, contains the Egyptian obelisk (1880), and museums of Art and Natural History. Other parks are Riverside, Jerome, Van Cortlandt parks. Nearly 300 newspapers (daily, weekly, and monthly) are published—some in foreign languages. There are three general colleges—Columbia, the University of the City of New York, and the College of the City of New York, besides the Normal College, Union Theological Seminary (Presbyterian), the Episcopal Seminary, &c. Among libraries may be named the Astor (300,000 vols.), Mercantile (250,000), and Columbia College (110,000). The Museum of Art, Museum of Natural History, and Lenox Gallery are free. Noted clubs are the Manhattan, Union, New York, St Nicholas, Knickerbocker, Union League, University, Lotus, Harmonic, and Century.

John Verrazani, a Florentine navigator, was the first European who entered New York Bay, in 1525. In 1614 the Dutch built a fort on Manhattan Island, and in 1623 a permanent settlement was made, named Nieuw Amsterdam. In 1674 Manhattan Island came into the possession of Great Britain, who gave it the name New York, in honour of James, Duke of York. At the Revolution the population was less than that of Philadelphia and Boston. It was evacuated by the forces of Great Britain in 1783, and from 1785 to 1789 was the seat of government of the United States. Pop. (1774) 22,861; (1800) 60,489; (1825) 166,136; (1850) 550,394; (1860) 813,669; (1870) 942,292; (1880) 1,206,599; (1890) 1,515,301; and 'Greater New York' (1900) 3,437,202. See Histories by Lossing (1885), Roosevelt (1891), and Grant Wilson (4 vols. 1891–93); and *Historic New York*, by Misses Goodwin, Royce, and Putnam (1898).

New Zealand, a British colony in the South Pacific Ocean, comprises three main islands—North Island, South or Middle Island, and Stewart Island, the last being much the smallest—besides a number of islets. The North and South Islands are long and narrow, so that no place is more than 75 miles from the coast. They lie 1200 miles E. of Australia, and stretch 600 miles farther south. The main islands have a length of 1100 miles, and lie between 34° 22′ and 47° 18′ S. lat. and 166° 27′ and 178° 34′ E. long. The total area of the colony is 106,240 sq. m., or about one-eighth less than that of Great Britain and Ireland. Cook Strait, a deep and somewhat stormy passage of 13 miles, separates the North and South Islands. Foveaux Strait (15 miles) divides the South Island from Stewart Island. In its northern half the North Island is deeply indented by the sea, and contains many excellent harbours; the southern half has but one

harbour, that of Wellington in the SW. corner. The coast of the South Island is little broken except in the mountainous north-east and south-west corners; but the volcanic projections of Banks and Otago peninsulas supply commodious harbours. The great ports are Auckland, Napier, and Wellington in the North Island, and Lyttelton, Dunedin (Port Chalmers), and Bluff Harbour in the South Island. New Zealand is composed of rocks of all geological ages, and the chief mountain-chains are of great antiquity. Both of the great islands are traversed by a great mountain-chain running NE. and SW., which practically divides them into an eastern and a western side, between which traffic is mainly carried on by sea. Resting on the main chain of the North Island on its west side lies a vast triangular plateau. On this stand up two extinct volcanoes—the majestic cone of Mount Egmont, near the west coast, and the massive Ruapehu (9008 feet) in the centre, with the active cone of Tongariro hard by. In this plateau the chief rivers of the North Island take their rise. The Waikato, the largest and longest, passes through the beautiful Lake Taupo, and at length flows out on the west coast. The better lands of the South Island are now mostly taken up, but in the North Island there remain vast tracts of excellent land waiting to be cleared. Much of it belongs to the natives. Two-thirds of the South Island is covered by the broad and lofty chain of the Southern Alps, and its eastern and southern offshoots. It culminates in Mount Cook (12,349 feet), mantled by glaciers of greater magnitude than any in the Alps of Europe. This elevated region is penetrated by the great valleys of the numerous rivers flowing away to the east and south. The principal rivers are the Buller, Waimakariri, Waitaki, Clutha, and Waiau. The vast Canterbury plains skirt the east coast, and the Southlands plain lies between the mountains of Otago and the south coast. The west coast consists of a narrow belt of low land clothed with impenetrable forest, save where miners and farming settlers have made clearings, and where the broad river-beds come down to the sea. In the North Island much of the finest land is covered by forests of tropical luxuriance, which ascend the mountains to a height of 4000 feet, but the greater part of the South Island is very scantily supplied with timber, and mountains and lowlands alike are open and well grassed. The climate is one of the best and healthiest in the world. Owing to the great length of the islands it presents considerable variety, and the direction of the mountain-chains increases the difference due to latitude alone. The average temperature is remarkably equable, and the air is singularly fresh, being constantly agitated by winds (sometimes chilly and boisterous). The average daily range of temperature is 20°. The average annual temperature of the North Island is 7° higher than that of London, and of the South Island 4°. The great peninsula north of Manukau Harbour enjoys a humid semi-tropical climate, and is the home of the kauri pine. Near the western seaboard the climate is more equable and much moister than on the long eastern and northern slopes. More rain falls than in England, and the weather is generally more changeable, but there are fewer wet days. The country is everywhere well watered, and prolonged droughts are unknown. Snow seldom falls even in the south. The mildness of the winter allows cattle and horses to remain in the fields without shelter. For variety, picturesqueness, and wild grandeur, the scenery of New Zealand is unrivalled in the southern hemisphere. In the North Island is the wonderland of the volcanic belt, remarkable for its hot lakes and pools, which possess great curative virtue for all rheumatic and skin diseases, its boiling geysers, steaming fumaroles, sulphur-basins, and pumice plains. The exquisite siliceous terraces of Rotomahana are now buried beneath the debris of Mount Tarawera, shattered by the gigantic explosion of June 1886. In the South Island the Central Alps of the Mount Cook district display to the visitor the grandest glaciers in the temperate zones, and splendid clusters of snowy mountain-peaks. Farther south are the lovely Otago lakes, embosomed in mountains 5000 to 8000 feet high. Near Milford Sound are the famous Sutherland Falls, 1904 feet high.

New Zealand is a group of true oceanic islands. Originally it contained no mammals except two species of bat. The next highest animals were a few small lizards. Among the birds are several parrots, one of which—the mountain kea—has acquired the habit of killing sheep, and several wingless kiwis or apteryxes, the puny surviving relatives of the gigantic but extinct Moas. The Maoris brought dogs with them, and doubtless the native rat also. Cook gave them pigs. The colonists introduced the common domesticated animals of Europe. Many kinds of English birds, and also black swans from Australia have been established in the country. Unfortunately rabbits also have been acclimatised, and become a serious pest, which it costs more than £100,000 a year to keep in check. Fresh-water fishes of many kinds have been introduced with great success. Nearly all the native trees and shrubs are evergreen. The most important plants are the timber-trees. The Phormium or native flax grows wild in great profusion. Ferns of many kinds greatly abound, including numerous tree-ferns. The fruit and other trees of temperate zones thrive admirably. European grasses and trefoils spread with great rapidity, and so do weeds of every kind. Considerable tracts of the Canterbury and the inland plains are shallow and arid, and require irrigation. The principal crops are wheat, oats, barley; of other agricultural produce wool, frozen meat, butter and cheese are the most important.

The chief mineral product is gold, mainly from alluvial workings. The annual produce which declined till 1890 (when it was £773,438), increased in 1903 again to £2,037,831. Silver, lead, copper, antimony, and manganese are produced in small quantities. The coal raised in 1903 was 710,096 tons. The manufactures, stimulated by high protective duties, are mainly woollen cloths, wools, hosiery, blankets, soap, candles, leather, biscuits and confectionery, boots and shoes, paper, machinery and implements, apparel, ropes and twine, beer, &c. From 1893 to 1903 the imports rose from £6,911,515 to £12,788,675 a year, and the exports from £8,985,364 to £15,010,378. The imports from Britain in these years were between £4,000,000 and £7,512,668; the exports to Britain between £7,036,515 and £11,345,075. The chief exports were in 1903, wool (£4,044,223), frozen meat (£3,197,043), gold (£2,038,075), butter and cheese (£1,513,065), kauri gum (£631,102), flax (£595,684), grain (£494,689), tallow, sheep, hides and leather. The imports are mainly clothing and cloth; iron and steel goods; sugar; paper, books, and stationery; spirits, wines, and beer; tea; tobacco and cigars; fruit; and oils. The revenue of the colony has in 1893–1903 increased from £4,407,964 to £7,201,002, and

always exceeds the expenditure. The debt in 1904 was £57,522,215. There are 2440 miles of railway; and the islands are connected with one another, with New South Wales, and so with the rest of the world, by telegraphs. Elementary education is free, compulsory, and secular. The three university colleges at Auckland, Christchurch, and Dunedin, attended by 700 students, are affiliated to the University of New Zealand, an examining body which grants degrees.

White pop. (1851) 26,707; (1861) 99,022; (1871) 256,260; (1881) 489,933; (1901) 772,719, besides 43,143 Maoris (almost all in North Island). 516,106 were born in the colony; 111,964 in England, 47,858 in Scotland, 43,524 in Ireland, and 1765 in Wales. Only 18,593 were of non-British descent, including 2900 Chinese. Of the total, 603,916 were Protestants. Anglicans predominate in Canterbury, Presbyterians in Otago, and there are many Wesleyans. Up to 1876 the North Island was divided into four provinces—Auckland, Hawke Bay, Taranaki, and Wellington; and the South Island into five—Nelson, Marlborough, Canterbury, Westland, and Otago. These are now known as provincial districts, and subdivided into numerous counties. The colony is administered by a governor with a ministry of 8 members, a legislative council of 45 members appointed by the governor, and a legislative assembly of 80 members (four being Maoris elected by natives) elected by adult suffrage, including women. Wellington is the capital (pop. 49,344). Auckland is the largest city (pop. 67,226). The other chief towns are Napier, Wanganui, and New Plymouth in the North Island; and Nelson, Blenheim, Christchurch (57,041), Timaru, Oamaru, Dunedin (52,390), and Invercargill in the South Island. Stewart Island has a sparse population on the north-east coast, and several excellent harbours. The Maori natives belong to the Polynesian race, and are well-built, generous, and warlike; cannibalism was associated with their warfare. They still own large areas of land, on which they raise crops and keep great numbers of sheep, but they are not very industrious. The islands were discovered by Tasman, (and called *Nova Zeelanda*, in 1642, but became known really through Captain Cook. Some trade sprang up early in the 19th century, and the islands became definitely British in 1840; there were wars with the Maoris in 1843 and 1869, and self-government was granted in 1852. See books on New Zealand by Hochstetter (1867), Pennefather (1893), and Pember Reeves (1898), besides the official and other handbooks; and histories by Rusden (1895) and Frank Parsons (Phila. 1904).

Nezhin, or NIZHAN, a town in the government of Tchernigov, Russia, on the Oster River, about 80 miles NE. of Kiev. It has a historico-philological institute of high rank, with a library of 60,000 volumes. Tobacco is cultivated in the vicinity, and vegetables and fruit are important products. Pop. 32,100.

Ngami (*Ngah'mee; ng* as in *sing*), LAKE, a former South African lake, in Southern Rhodesia and situated at the northern extremity of the Kalahari Desert, in 20° 30′ S. lat. and 23° E. long., at an altitude of 2810 feet. When discovered by Livingstone in 1849, it was a lake of about 50 miles long by 10 to 20 miles broad, its chief tributary being the Cubango. It is now only a reed-grown swamp in the dry season.

Ngan-king, one of the interior Chinese ports, capital of the province of Ngan-hwei, opened to foreign commerce in 1897, is situated on the Yang-tsze-kiang, 190 miles SW. of Nanking. Pop. about 40,000.

Niagara (*Nīag'ara*—originally *Neeagah'ra*; 'Thunder of Waters'), a river of North America, which forms part of the boundary between New York state and the province of Ontario. It flows from Lake Erie to Lake Ontario, a course of 36 miles, during which it makes a total descent of 326 feet—about 50 feet in the rapids immediately above the great falls, and nearly 110 feet in the seven miles of rapids below. It encloses several islands, the largest Grand Island, which is nearly 10 miles long. Four miles below this island are the most famous falls in the world. The centre of the river here is occupied by Goat Island, dividing the cataract into two—the Horseshoe (Canadian) Fall, with a descent of 158 feet, and the American fall, 162 to 169 feet; the width of the former is about 2640 feet, of the latter 1000 feet. The volume of water which sweeps over this immense chasm (nearly nine-tenths passing over the Canadian fall) is about 15,000,000 cubic feet a minute. The depth of water on the crest of the falls is less than 4 feet, except in a few places, notably at the apex of the Horseshoe Fall, where it is about 20 feet. The limestone edge of both falls is rapidly wearing away in the centre. For seven miles below the falls (to the point, that is, where it has been supposed that the falls originally stood) the river is shut in between perpendicular walls of rock, from 200 to 350 feet high. For some distance below the falls there is still water, the body of water which pours over the precipice sinking, and only coming to the surface again two miles below, where the whirlpool rapids begin; a little lower is the whirlpool, where a sharp turn sends the waters hurling against the Canadian side, and then sweeping round in a great eddy before they find a vent at a right angle with their former course. Just below the cataract the river is crossed by a suspension bridge for carriages and foot-passengers, and a mile and a half farther down there are two railway bridges—one a cantilever bridge—about 100 yards apart. On both shores the lands bordering on the river, for some distance above and below the falls, are under the immediate control of the respective governments. The 'New York State Park at Niagara Falls' (1885) embraces 115 acres, and the 'Queen Victoria Niagara Falls Park' (1888) about 154 acres. Only in 1890 was the tunnel begun for the utilisation of the water-power of the falls to generate electricity for transmission to more or less distant centres; by 1900 one company alone had usefully applied 40,000 horse-power, and by 1904 the plant on the Canadian side alone represented 675,000 horse-power (partly transmitted to Toronto).—NIAGARA FALLS, a city of New York, is connected by the suspension bridge with the Canadian side. Pop. 20,000.—NIAGARA, a summer-resort of Ontario, is situated on Lake Ontario, at the mouth of the Niagara, 15 miles from the falls. Pop. 4250.

Nias (*Nee'as*), a Dutch island, W. of Sumatra. The surface is mountainous, attaining 1970 feet. Area, 1767 sq. m.; pop. 170,000, who grow pepper, rice, cocoa-nuts, tobacco, sugar-canes, &c.

Nicæa. See NICE.

Nicaragua (*Nīkarâh'gwa*), an independent state of Central America, stretching right across the isthmus from the Caribbean Sea to the Pacific, between Costa Rica and Honduras, with an area of 47,837 sq. m. The Central American Cordilleras (4000–5000 ft.) form the backbone of the

country. On the west the surface sinks rapidly to a longitudinal depression (110 feet), the southern two-thirds of which are filled by the large lakes of Nicaragua (115 miles long, 45 broad, and 140 feet deep) and Managua (35 miles long, 20 broad, 30 feet deep). This depression is studded with a chain of volcanic cones, mostly quiescent, from 3800 to 6800 feet high. The western districts are the chief seats of the population; there stand the towns Managua (the capital), Leon, Granada, Chinandega, Rivas. Rivers flowing eastward are the Coco or Wanks (350 miles long), the northern boundary; the San Juan (125 miles), which drains Lake Nicaragua and separates Nicaragua from Costa Rica; the Bluefields and the Rio Grande (230 miles). The low coast-belt, called the Mosquito Territory (q.v.), is lined with salt lagoons. The mountain-spurs east of the main chain are rich in minerals—gold, silver, coal, copper, tin, iron, lead, zinc, antimony, quicksilver, marble, &c. The forests include mahogany, rosewood, logwood, fustic, sandal-wood, india-rubber, medicinal plants, gums, and dye-woods. The rich soil of the cultivated western region yields maize (the staple food), coffee, cocoa, sugar, cotton, rice, tobacco, indigo, and a great variety of tropical fruits. Of the population of 480,000, one-third are Indians, and one-half mulattoes and negroes. The country is governed by a president (elected for four years), a legislative assembly of eleven members, and a senate of ten. A ship-canal from sea to sea, 170 miles long, by way of the San Juan River and Lake Nicaragua, was begun by a U.S. company in 1889; but, though some authorities held this route preferable on various grounds, the works were soon suspended, and ultimately the Panamá Canal (see PANAMÁ) was taken up by the U.S. government. During the Spanish supremacy (after 1550) Nicaragua was a province of Guatemala. In 1821 it asserted its independence, and its history down to 1865 is a record of war and dissension; there was a revolution and a counter-revolution in 1893. See works by Squier (1852), Belt (1873), Leoy (Paris, 1873), Bancroft (1882), and Bonvallius (Stockholm, 1886).

Nice, or NICÆA, a city of ancient Bithynia, in Asia Minor, situated on the eastern shore of Lake Ascania. The First and Seventh Ecumenical Councils were held here in 325 and 787 A.D.

Nice (*Neece;* Ital. *Nizza*), chief town of the French dep. of Alpes Maritimes, stands on a beautiful well-sheltered site on the coast, 140 miles E. by N. of Marseilles and 110 SW. of Genoa. On the north of the city the hills rise in terraces and shield it from the cold winds; on the south it faces the sea, which tempers the heat in summer. Owing to the advantages of its situation, Nice has for many years been celebrated as a winter-resort for invalids, the number of visitors ranging between 15,000 and 45,000. The mean temperature of winter is 49° F., of summer 72°. Pop. (1872) 42,363; (1901) 98,865. The New Town on the west is the part frequented by foreigners, particularly English (whence its name of 'English town'). Beautiful promenades stretch along the seashore, and are overlooked by villas and hotels. Numerous bridges across the little river Paglione (Paillon) connect the New Town with the Old or Upper Town. This part, with narrow streets, clusters at the foot of a rocky height, the Castle Hill; on the other (east) side of this hill is the harbour, which was enlarged to twice its original size in 1889, and deepened to 25 feet. The Castle Hill is an isolated mass of limestone 318 feet high, crowned by a ruined castle, and laid out in public gardens. The chief public buildings are the cathedral, the Gothic church of Notre Dame, the natural history museum, art gallery, library, observatory, casino, &c. The people manufacture artistic pottery, perfumery, and macaroni, grow flowers and southern fruits, the last of which they preserve, and produce inlaid work in olive-wood. The chief export is olive-oil. The ancient Ligurian town of Nicæa, founded by a colony of Phocæans from Massalia (Marseilles), became subject to Rome in the 2d century B.C. It was in the hands of the Saracens in the 10th century. In 1543 it was pillaged by the Turks. From 1600 onwards it was repeatedly taken by the French; they held it from 1792 to 1814; and in 1860 it was ceded to France by Sardinia (Savoy). Masséna was born near the city, and Garibaldi in it.

Nic'obar Islands, a group of islands in the Indian Ocean, south of the Andamans, and forming with them an extension of the great island chain of which Java and Sumatra are the principal links. Just a score in number, of which twelve are inhabited, they have an area of 684 sq. m., and consist of two divisions—the northern, low and planted with cocoa-nut trees, and the southern, mountainous (2000 feet) and covered with timber. The people belong to two races, an indigenous inland tribe, little civilised, and the coast people, 6000 in number, who are of mixed Malay blood. The archipelago was occupied by Denmark 1756–1856. In 1869 it was annexed by Britain. A penal colony for India exists at Nankauri, on the island Kamorta.

Nicome'dia, the capital of ancient Bithynia, situated at the NE. angle of an inlet of the Propontis, was built in 264 B.C. by Nicomedes I. The small town of Ismid now occupies its site.

Nicop'olis, a town of Bulgaria, on the Danube, 56 miles W. of Rustchuk. Pop. 6652.

Nicosia, (1) called also LEVKOSIA, the capital of Cyprus, situated near the middle of the northern half of the island, has some manufactures of silk, leather, and cotton. Pop. 14,536.—(2) A city of Sicily, 40 miles NW. of Catania. Pop. 15,941.

Nictheroy, a town of Brazil, and till 1894 the capital of the state of Rio de Janeiro, on the east side of the entrance to the bay, and 5 miles E. of the city of Rio de Janeiro. It has beautiful suburbs. Pop. 25,000.

Nidderdale, the valley of the river Nidd, which rises at the foot of Whernside, in Yorkshire, and flows SE. and E. to the Ouse above York.

Niddry Castle, a Linlithgow ruin, 1 mile SSE. of Winchburgh. Queen Mary fled hither from Lochleven.

Niederwald (*Nee'dervalt*), the western end of the Taunus range, that abuts upon the Rhine opposite Bingen. On a commanding site was erected in 1883 the national memorial of the war of 1870–71—a pedestal, surmounted by a bronze figure of Germania, 34½ feet high. Toothed-railways carry visitors up from Rüdesheim and Assmannshausen at the foot, both noted for their wine.

Niemen (*Nee'men*), a river of W. Russia, whose lower course (70 of its 500 miles) lies within East Prussia, where it is called the Memel, rises S. of Minsk. It is navigable to Grodno; below Tilsit it divides into two branches, which reach the Kurisches Haff each by four mouths.

Nierstein (*Neer'stīne*), a village of Hesse-Darmstadt, on the Rhine, 10 miles SSE. of Mainz, famous for its Rhine wine. Pop. 3283.

Nieuwe Diep, or Willemsoord, a small port of North Holland, 1 mile E. of the Helder (q.v.).

Nieuwveld Mountains. See Cape Colony.

Nièvre (*Nyehvr; y* consonantal), a central dep. of France, occupies a portion of the watershed between the Loire and the Seine. Area, 2632 sq. m.; pop. (1872) 339,917; (1901) 319,506. Arrondissements, Nevers, Château-Chinon, Clamecy, and Cosne; capital, Nevers.

Niger, a river of West Equatorial Africa, whose name first appears in Ptolemy, and may be derived from a native root *gir* or *jur*. The problem as to its course remained almost till the 19th century one of the most perplexed in the whole range of geography—it was an affluent of the Nile; an affluent of the Congo; an independent river terminating in an inland basin; and so on. It was left to Mungo Park and other workers in the service of the African Association (1788) to lay the basis of our present knowledge. The Niger proper (Joliba, Isa, Quorra, &c.) has a total length of 2600 miles, and the area of the entire basin (including that of the Benuë) is estimated at 1,023,280 sq. m. The head-waters are situated in the Samory region, inland from Sierra Leone and Liberia, and are contiguous to the sources of the Senegal. The Tembi and its sister streams soon gather into a good navigable river, which holds a north-easterly course as far as Timbuctoo (q.v.), 2 miles from the river. Beyond this, split into channels, it holds a more easterly direction for 200 miles, and then with its now united forces turns south-east to cut its way through a rocky tract of country, and to pass in succession Say; Bussa, where Park came to his untimely end; Rabba, one of the largest cities on its course; and Egga, where the river turns more to the south. Having received in the Benuë a rival in volume, the united river traverses a series of bold, picturesque hills by a narrow gorge, and begins to break up into one of the most remarkable mangrove-covered deltas in the world. The upper and middle basin of the Niger is under French authority; the lower basin constitutes (British) Nigeria.

Nigeria, since 1900 a British protectorate in West Equatorial Africa, includes all the territories administered till that date by the Royal Niger Company, and the Niger Coast Protectorate. On the east it is bounded by (German) Cameroon north-eastwards to the south-west corner of Lake Tsad; on the west by the Lagos Protectorate and the (French) *hinterland* of Dahomey. It includes the whole of the lower basin of the Niger from Ilo downwards, and nearly the whole of its great tributary, the Benuë. Its area is from 400,000 to 500,000 square miles, and the population is estimated to be between 30 and 40 millions. The British United African Company (after 1886 the Royal Niger Company) began operations in 1879, and finally acquired rights over nearly the whole region now called Nigeria. In 1899 the government arranged to take over all the powers and rights of the company on 1st January 1900, on payment of £565,000, and certain royalties on minerals for ninety-nine years. For administrative purposes the protectorate is divided into North and South Nigeria by a straight line between Lagos and Cameroon at 7° 15″ N., each administered by a High Commissioner. Northern Nigeria is fertile, with great agricultural resources, and fairly healthy. Cotton, indigo, rubber, hides, ivory, and minerals (silver, tin, and lead) are the chief products. The native Haussa race is civilised and industrious. The chief towns are Kano, Yola (capital of Adamawa), Wurno (capital of Sokoto), Gando, Bida, Illorin, Yakoba, Sokoto, and Zaria, with a reserved port in South Nigeria at the mouth of the Forcados River. There is a military force of about 3000 Haussas of all arms. Southern Nigeria includes the whole of the Coast Protectorate and part of the Niger Protectorate. The inhabitants are pagan negro tribes, more or less cannibal in habits. Asaba, Benin, and Idda are the chief inland towns; and on the coast, Wari, Barutu, Akassa, Brass, New Calabar, Bonny, Opoba, and Old Calabar, where the customs for both N. and S. Nigeria are collected. The chief products are palm-oil and kernels, rubber, ivory, indigo, gums, coffee, and hides. There is a native police force of over 7000 men.

Nigritia. See Soudan.

Niigata (*Nee-ee-gah'ta*), a seaport of western Japan, at the mouth of the Shinano River, opened to foreign trade in 1859. Pop. 53,500.

Nijni-Novgorod (*Nidj'nee Nov'gorod; '* Lower Novgorod'), a great commercial city of Russia, at the confluence of the Oka with the Volga, 274 miles E. of Moscow. The great fair (July—Sept.) still brings buyers and sellers from all climes between Germany and China. During it the resident pop. (95,124 in 1897) is increased fivefold; and the value of the goods sold is not much short of £20,000,000.—The *government* of Nijni-Novgorod has an area of 19,797 sq. m. and a pop. of 1,600,000.

Nijni-Tagilsk (*Nidj'nee Tah-gilsk'; g* hard), a Russian town amid the Ural Mountains, 150 miles E. of Perm by rail, with great platinum, copper, and iron works. Pop. 30,000.

Nikolaevsk (*Ni-ko-lah-evsk*), a decayed town of eastern Siberia, 23 miles from the Amur's mouth. Pop. 3500.

Nikolaieff (*Nikolïeff'*), headquarters of the Russian Black Sea fleet, in the government of Kherson, at the confluence of the Ingul with the Bug, and 42 miles from the Black Sea. It is a great fortified naval station, with docks, an arsenal, &c., and exports grain. Pop. 95,840.

Nikolsburg (*u* as *oo; C*zech *Mikulov*), a town of Moravia, 27 miles S. of Brünn by rail, lies at the foot of hills famous for their rich red wines. In the middle of it, on a rock, stands the castle of the princely Dietrichstein family. Pop. 8642.

Nikosia. See Nicosia.

Nile, the longest river of Africa, of the greatest interest historically and geographically, and to the ancient Egyptians pre-eminently *the* sacred river, draws its largest supplies of water from the Victoria and Albert Nyanzas. Its furthest head-streams (Shimiyu, Isanga, &c.) flow into the Victoria Nyanza from the south. The Nile leaves Victoria Nyanza at its northern end, pouring over the Ripon Falls, 150 to 170 yards wide but only 12 feet high, and then for 300 miles races between high rocky walls, over rapids and cataracts, at first north-west, then west, until it joins the Albert Nyanza (q.v.) near its north-east corner. About 20 miles from this lake the river leaps down 120 feet into a wild gorge, with high rocky walls. The section between the two Nyanzas is called the Victoria Nile or Somerset River. At its south-western extremity the Albert Nyanza is joined by the river Semliki, which drains the Albert Edward Nyanza. The combined river leaves the northern extremity of the Albert Nyanza as the Bahr-el-Jebel, and from that point flows in a general

northerly direction to the Mediterranean. At Lado (5° N. lat.) it enters the plains, and moves thence slowly and sluggishly down to Khartoum, 900 miles to the north. The whole of this stretch is navigable for fairly large river-steamers. In 7½° N. lat., however, the main channel divides into two arms, which flow, at no great distance apart, through a low swampy region. In 9½° N. lat. the Bahr-el-Jebel is met by the Bahr-al-Ghazal from the west, which gathers the waters of many rivers. Sixty miles east of the confluence the river, now called White Nile, receives the Bahr-el-Zeraf, and 30 miles farther east still the Sobat, from the Galla country. Hence the White Nile flows almost due N. to Khartoum without receiving a single tributary. At Khartoum (in 15° 37′ N. lat.) the White Nile, or Bahr-al-Abiad, is joined from the south-east by the Blue Nile, the Bahr-al-Azrak, 950 miles long, from Lake Tana (5658 feet above sea-level) on the Abyssinian plateau. From Khartoum the Nile flows north-north-east, and 200 miles below that city is joined from the right by the Atbara or Black Nile. In its course through the Nubian Desert the great river makes two deep bends, first round by the north, then round by the south, and subsequently resumes its northerly flow. Below Khartoum navigation is rendered extremely dangerous by the cataracts which obstruct the bed of the river, the sixth occurring not far north of Khartoum, the first near Assouan, in Egypt, just above 24° N. lat. The course of the river from Assouan to the sea, its inundations, &c., are described under Egypt (q.v.). The total length of the river cannot be stated precisely; from Victoria Nyanza it is estimated to measure 3400 miles. Irrigation is largely regulated by the great Nile Barrages at Rosetta and Damietta, constructed by French engineers in 1843–61, and practically reconstructed by British engineers in 1886–90 at a cost of £405,000; and by the immense dams at Assouan (completed 1902) and Assiout, at a total cost of nearly £5,000,000.

The ancients had little authentic knowledge of the Nile above Meroe, half-way between Berber and Khartoum. The Emperor Nero began the work of searching for the sources of the Nile by sending two expeditions into Nubia. Ptolemy speaks of two streams issuing from two lakes 6 and 7 degrees south of the equator and uniting in 2° N. lat., and being joined in 12° N. lat. by the Astapus, which likewise flowed from a lake (Coloe). The two lakes in the far south were fed by the melting snows of a great range of mountains, the Mountains of the Moon. This remained the sum total of information about the river down to the 19th century, except that in 1770 Bruce discovered that the Blue Nile issued from Lake Tana. The Egyptian government in 1839–42 sent three expeditions as far as Gondokoro. In 1858 Speke reached the Victoria Nyanza, in 1860 Sir Samuel Baker discovered Albert Nyanza, and in 1868–71 Schweinfurth explored the western feeders of the White Nile. Stanley, in 1875, sailed all round Victoria Nyanza, and in 1889 traced the course of the Semliki, and discovered Albert Edward Nyanza and Mount Ruwenzori. The British occupation of Uganda, between the Victoria and Albert Nyanzas, and the arrangement made with the Congo State in 1894, tended to retain the whole valley of the Nile, from the Nyanzas to the Mediterranean, under British influence.

See works of the explorers named, also others by Wilson and Felkin, Petherick, Junker, &c., with Walter Budge's *The Nile* (1890). For the battle of the Nile, see Aboukir.

Nilgir'i. See Neilgherry.

Nimach (*Neemach*), a town of India, in the native state of Gwalior, on the north-west border of Malwa, 370 miles SW. of Delhi by rail, 1613 feet above sea-level, with an agreeable climate. There has been a British cantonment here since 1817. Pop. of town, 5161; of cantonment, 13,069.

Nimeguen (*Neem'e-gen*; Fr. *Nimègue*; Dutch *Nijmegen*), a town of Holland, in Guelderland, on the left bank of the Waal, 73 miles by rail E. of Rotterdam. It is built on the slope of the 'Hill of the Huns,' on which the Romans formed the permanent camp of *Noviomagum*. Near by stood till 1796 a castle, said to have been founded by Cæsar and inhabited by Charlemagne; here still stands a little sixteen-sided Romanesque baptistery of the 12th or 13th century. On another eminence is a modern Belvidere. The fortifications have been demolished; but Nimeguen retains its Renaissance town-hall (1554), and the fine Gothic church of St Stephen (dating from 1272). The manufactures include tobacco, eau de Cologne, metal-work, beer, &c. Pop. (1875) 22,929; (1900) 42,756. Regained by the Spaniards (1585–91), Nimeguen is celebrated for its great peace congress in 1678–79, at which France made treaties with Holland, Spain, and Austria.

Nimes (*Nēēm*), the capital of the French dep. of Gard, lies in a fertile plain, engirt by the vine-clad Cevennes, 31 miles by rail NE. of Montpellier and 30 SW. of Avignon. The old town, with narrow crooked streets, is separated by shady boulevards from the well-built faubourgs; and mediæval and modern edifices are a much mutilated cathedral, the prison (formerly citadel, 1687), the palais-de-justice, St Paul's (1850), St Baudile's (1875), &c., with a most magnificent fountain, and a monument (1874) to Antoninus Pius. But the glory of Nimes is its Roman remains of the ancient *Nemausus*. These include the 'Maison Carrée' (now a museum, with Delaroche's masterpiece, 'Cromwell looking on Charles I.'s corpse'), a splendid specimen of Corinthian architecture; an amphitheatre (now a bull-arena), 70 feet high, and seating 20,000 spectators; the exquisite Nymphæum; a mausoleum ('La Tour Magne'), baths, and two gates, whilst 14 miles NE. is the 'Pont du Gard,' most perfect of aqueducts. Nimes manufactures silk and cotton goods, carpets, shawls, wine, brandy, boots, &c. Pop. (1872) 60,020; (1901) 72,749, one-third Protestants. Supposed to have been colonised from *Massilia* (Marseilles), Nimes, one of the great cities of Roman Gaul, was taken by the Visigoths (465), the Franks (507), and the Saracens (725), and subsequently became an appanage of Aragon, but was restored to France in 1259. The inhabitants adopted Calvinism in the 16th century; and it was a stronghold of the Camisards. In 1791 and 1815 it was the scene of bloody religious and political reactions. Nicot, Guizot, and Daudet were natives.

Nin'eveh, long capital of the ancient kingdom of Assyria. Rich in 1818 conjectured that the mounds of Kouyunjik, opposite the modern town of Mosul, concealed its ruins beneath, but it was not until the excavations of Botta in 1842 and Layard in 1845 that the remains of Nineveh were revealed to the world.

Ning-po, a treaty-port of the Chinese province of Che-keang, stands in a fertile plain, 16 miles from the mouth of the Takia (Ning-po) River and 100 S. of Shanghai. It is surrounded by a

wall 25 feet high and 16 thick, and contains numerous temples, colleges, &c., chief amongst them the temple of the Queen of Heaven, founded in the 12th century, though the present building dates from 1680. The imports include opium, cottons and woollens, tin, iron, medicines, &c.; the exports, green tea, cuttle-fish, sedge hats and mats, silk goods, and cotton. Pop. 250,000.

Niort (*Nee-orr'*), capital of the French dep. of Deux-Sèvres, on the Sèvre Niortaise, 43 miles NE. of La Rochelle. An important railway junction, it has an old castle, an hôtel-de-ville (1530), a fine public garden, and the 16th-century church of Notre Dame, with a spire 246 feet high. Tanning and glove-making are the leading industries. The population is about 21,000. Niort, which in the 14th century was held for eighteen years by the English, was the birthplace of Madame de Maintenon.

Nip'igon, an island-studded lake of Ontario, 30 miles NW. of Lake Superior, with which it is connected by the Nipigon River. It is 70 miles long, but its deeply indented coast-line measures 580 miles. Its greatest depth is 540 feet.

Nip'issing, a lake (50 × 28 miles) of Ontario, NE. of Lake Huron, into which (Georgian Bay) it drains through French River (55 miles).

Nippon. See JAPAN.

Nisch (*Neesh*), the chief town of southern Servia, 152 miles by rail SE. of Belgrade, conspicuous in the Turkish wars from 1375 to 1878, when it was regained by Servia. Pop. 25,877.

Nishapur', a town of the Persian province of Khorassan, 53 miles W. of Meshed. It was the birthplace, and contains the grave, of Omar Khayyám. Pop. 11,000.

Nith, a beautiful Scottish river, rising in Ayrshire, and flowing 71 miles SSE. (mainly through Dumfriesshire), until, 14 miles below Dumfries, its estuary joins the Solway Firth.

Nitrian Desert, containing the Natron Lakes, lies W. of the Damietta branch of the Nile, and was of old famous for its monasteries and hermits.

Nivelles (*Nee-vel'*; Flem. *Nyvel*), a Belgian town, on the Thines, 19 miles by rail S. of Brussels. Its fine Romanesque church (1045) contains the relics of Pepin's daughter, St Gertrude. In 1381 the townsfolk of Ghent were defeated here by Count Louis of Flanders, and 6000 burned in a monastery. Nivelles manufactures cotton, paper, lace, &c. Pop. 11,788.

Nivernais (*Nivernay'*), formerly a province in the middle of France, nearly corresponding to the present dep. of Nièvre.

Nizam's Dominions. See HYDERABAD.

Nocera (*No-chay'ra*), an episcopal city of south Italy, 8 miles NW. of Salerno. Pop. 22,522.

Nogent-le-Rotrou (*Nozhon^g-leh-Rotroo'*), a town in the French dep. of Eure-et-Loir, on the Huisne, 93 miles by rail SW. of Paris, with the ruined château of the great Sully, his violated sepulchre, and a statue of General Saint-Pol, who fell before Sebastopol. The Germans here won two fights in 1870–71. Pop. 7500.

Noisseville (*Nwass-veel*), a village of Lorraine, 5 miles E. of Metz, where in 1870 Bazaine vainly attacked the German besiegers of Metz.

Nola, an episcopal city of Italy, 16 miles ENE. of Naples, on a very ancient Campanian site. Augustus died here, 14 A.D. Pop. 14,700.

No Man's Land, a name given to various outlying districts prior to settlement, especially Griqualand East, and parts of South Australia.

Nome, the largest town in Alaska, on the south shore of the Seward Peninsula, is the centre of a productive gold-mining district. Pop. about 13,000.

Nootka Sound, a harbour on the west coast of Vancouver Island, British Columbia, its entrance protected by an island of the same name.

Nord, the most northerly dep. in France (whence its name), corresponding with the old French Flanders. Area, 2193 sq. m.; pop. (1881) 1,603,259; (1901) 1,866,994. The arrondissements are Lille (the capital), Douai, Cambrai, Valenciennes, Avesnes, Hazebrouck, and Dunkirk.

Norden, a west suburb of Rochdale.

Nordenham. See BREMERHAVEN.

Norderney (*Nordernī*), a small treeless island, lying 3 miles off the coast of the Prussian district of East Friesland. Area, 4 sq. m.; pop. 4850. Its sea-bathing attracts 13,000 summer visitors.

Nordhausen (*Nordhow'zen*), a flourishing town of Prussian Saxony, pleasantly situated at the southern base of the Harz Mountains and the west end of the fertile *Goldene Aue* ('golden plain'), on the Zorge, 48 miles by rail NNW. of Erfurt. A free imperial city from 1253, Nordhausen fell to Prussia in 1803. Pop. 30,000.

Nördlingen (*Nörd'ling-en*), a town in the west of Bavaria, on the Eger, 44 miles NW. of Augsburg by rail, with carpet manufactures. Here in 1634 the Swedes were defeated by the Imperialists with a loss of 12,000. Pop. 8295.

Nore, a sandbank in the estuary of the Thames, 3 miles NE. of Sheerness and 47 from London. Off its east end is the floating light, which revolves 50 feet above high-water. The naval 'mutiny at the Nore' broke out on 20th May and lasted until 13th June 1797.

Norfolk (*Nor'fok*), an eastern county of England, bounded by the North Sea, Suffolk, Cambridgeshire, Lincolnshire, and the Wash. With an extreme length and breadth of 66 miles by 42, it has an area of 2119 sq. m. or 1,356,173 acres. Pop. (1801) 273,371; (1831) 390,000; (1881) 444,637; (1901) 460,040. Its coast-line, upwards of 90 miles in length, is for the most part flat, and skirted by low dunes, except near Cromer, and again at Hunstanton, where cliffs, from time to time undermined by the sea, rise to a height of from 100 to 200 feet. Inland the surface is undulating, well timbered, and well watered, the principal rivers being the Ouse, Bure, Yare, and Waveney, which last three fall into the sea near Yarmouth, and in their course link together the numerous Broads (q.v.). The soil consists chiefly of light loams and sands—in places there are extensive rabbit-warrens, and with so much wood (over 50,000 acres) there is naturally an abundance of game. Agriculture has here been brought to the highest state of perfection; upwards of 3400 acres are occupied as market-gardens and orchards; whilst great attention is paid to the rearing of turkeys and geese for the London markets, and on the rich marsh-lands in the extreme west of the county, as well as on the pastures bordering the various rivers, great quantities of cattle are grazed. Norfolk comprises 33 hundreds, the city of Norwich, the municipal boroughs of Lynn, Yarmouth, and Thetford, and 736 civil parishes with parts of 9 others, mostly in the diocese of Norwich. Its parliamentary divisions are six in number. Towns other than the foregoing are Dereham, Diss, Downham Market, North Walsham, Swaffham, and Wymondham. In the history of the county the most notable incidents

have been the settlements within its borders of the Flemish refugees and Walloons in the reigns of Henry I., Edward III., and Queen Elizabeth; and Ket's rebellion (1549). Venerable antiquities are the ruins of priories at Castle Acre, Thetford, and Walsingham, the castles of Norwich, Castle Rising, and Caistor, the earthworks at Buckenham, Caistor, and Thetford, and the old halls of Blickling, Holkham, Houghton, Oxburgh, and East Barsham. Among Norfolk 'worthies' (omitting those noticed under Norwich) are Sir John Fastolf, the Earl of Surrey, Sir Thomas Gresham, Skelton and Shadwell (poets-laureate), Sir Edward Coke, Spelman, L'Estrange, Sir Cloudesley Shovel, Sir Robert Walpole and his son Horace, Tom Paine, Windham, Godwin, Lord Nelson, Porson, Manby, Sir Astley Cooper, Elizabeth Fry, Fowell Buxton, Lord Cranworth, Captain Marryat, Cattermole, Borrow, Bulwer Lytton, and Rider Haggard. See county histories by Blomefield (11 vols. 1805–10), Chambers (1829), Rye (1885), and White (new ed. 1890).

Norfolk, a city and port of entry of Virginia, on the right bank of the Elizabeth River, 8 miles from Hampton Roads, and 33 miles from the sea. Its large deep harbour is fortified. A government navy yard, dry-dock, and hospital are at Gosport, a naval suburb of Portsmouth, on the opposite bank of the river. Norfolk ships cotton, oysters, and early fruits and vegetables. Off here the turret-ship *Monitor* defeated the Confederate *Merrimac*, 9th March 1862. Pop. (1880) 21,966; (1900) 46,624.

Norfolk Island lies in the Western Pacific, about half-way between New Zealand and New Caledonia, 400 miles NNW. of the former. The coasts are high and steep, and the surface generally uneven, rising in Mount Pitt to 1050 feet. The island is 6 miles long, and has an area of 13½ sq. m. The soil is fertile and well watered, and the climate healthy. The Norfolk Island Pine grows to a height of 200 feet. Norfolk Island was discovered by Cook in 1774. In 1788–1805, and again in 1826–55, it was a penal settlement for convicts sent from New South Wales. In 1856 many of the inhabitants of Pitcairn Island (q.v.) were transferred hither by the British government. In 1905 the pop. was 830. Norfolk Island is the headquarters of the diocese of Melanesia, founded in 1861. The people govern themselves, under the superintendence of the government of New South Wales; they fish, farm, and supply provisions to passing vessels.

Norham Castle (*Norr'am*), the Border fortress of the Bishops of Durham, on the Tweed's right bank, 8 miles SW. of Berwick. Founded in 1121, and deemed impregnable in 1522, it has memories of Kings John, Edward I., and James IV., but is known best through *Marmion*. The picturesque ruins comprise a great square keep, 70 feet high. See Jerningham's *Norham Castle* (1883).

Nor'icum, a Roman province, corresponding to Styria, Carinthia, and part of Salzburg in Austria. The name survives in the Noric Alps.

Nor'manby, a town of Yorkshire, 3½ miles SE. and mainly within the parliamentary bounds of Middlesbrough. Pop. 9118.

Nor'mandy, formerly a province of France, lying along the seaboard of the English Channel, between Brittany and French Flanders. In area it corresponded approximately to the modern deps. of Seine-Inférieure, Eure, Orne, Calvados, and Manche, its capital being Rouen. From the middle of the 9th century its coasts were harried by the vikings or sea-rovers of the north; by 912 they had established themselves in such force along the Seine that Charles, king of the Western Kingdom, was glad to make an agreement with their leader Rolf or Rollo, Duke of the Northmen, who became the king's vassal and a Christian. After the conquest of England by Duke William (1066), Normandy continued an appanage of the English crown until 1203–4, when the duchy was taken away from John by the king of France, on the plea that as the murderer of his nephew Arthur he (John) had forfeited his French fiefs. The claim to the title was, however, only formally renounced by Henry III. in 1259. Twice subsequently Normandy was in English hands: Edward III. conquered it in 1346, and Henry V. in 1417–18; but the English were finally driven out in 1450. The Channel Islands (q.v.) are a remnant of the Norman possessions still belonging to the descendants of the Norman kings of England. See works by Blackburn (1869) and K. Macquoid (1874).

Nor'manton, a town in the West Riding of Yorkshire, by rail 3 miles NE. of Wakefield and 10 SE. of Leeds, a railway junction and seat of coal-mining and iron-working. Pop. 12,234.

Noronha, Fernando (*Noron'ya*), a volcanic group of one large (6½ miles by 2) and several small islands belonging to Brazil, in the South Atlantic, 200 miles ENE. of Cape San Roque. The islands are fertile and thickly wooded. The group was visited in 1775 by Cook, in 1832 by Darwin, and in 1873 by the *Challenger* Expedition. The main island is a penal settlement.

Norristown, capital of Montgomery county, Pennsylvania, on the left bank of the river Schuylkill (crossed by three bridges to Bridgeport), 17 miles by rail NW. of Philadelphia. It contains a fine marble court-house, cotton-mills and woollen factories, rolling-mills and foundries, flour-mills, and manufactories of glass, tacks, &c. Pop. 23,500.

Norrköping (*Nor'chö-ping*), first manufacturing town of Sweden after Stockholm, stands at the head of the Bråvik, 113 miles by rail SW. of Stockholm. The rapid river Motala from Lake Vetter affords water-power for cloth-mills, cotton spinning and weaving; and there are manufactures of sugar, paper, tobacco, &c., and shipbuilding. Pop. 43,300.

North Adams, a manufacturing village of Massachusetts, on the Hoosac River, near the west end of the Hoosac tunnel, 143 miles by rail W. by N. of Boston. It has woollen and cotton mills, shoe and print-cloth factories, a foundry, &c. Pop. 25,200.

Northal'lerton, the capital of the North Riding of Yorkshire, 30 miles NNW. of York. It has a town-hall (1874); a fine cruciform church, Norman to Perpendicular in style; a cottage hospital (1877); and sites of a Roman camp and a Norman castle of the bishops of Durham. At Standard Hill, 3 miles N., was fought, on 22d August 1138, the great battle of the Standard, in which Archbishop Thurstan routed David I. of Scotland. From 1640 to 1832 Northallerton returned two members, and then till 1885 one. Pop. 4050. See works by Ingledew (1858) and Saywell (1886).

Northamp'ton, the capital of Northamptonshire, and a county, parliamentary, and municipal borough, is seated on rising ground on the Nen's left bank, 66 miles NW. by N. of London and 50 SE. of Birmingham. It has a fine town-hall (1861–64), with other municipal offices; a county hall; corn exchange (1850); museum, free

library, and schools of science and art (enlarged 1889); large hospitals; a theatre (1884); infantry barracks (1797; rebuilt 1877–78); and thirteen churches, the most interesting of which are St Peter's (Norman), St Sepulchre's (Norman and Decorated, one of the few remaining round churches in England), All-Saints', and St Giles'. The town is the English centre of the boot and shoe manufacture; leather is dressed, some lace is made, and extensive breweries are in operation. On the outskirts of the town is a fine race-course, on which meetings are held in April and November. In the autumn of 1892 Ubington Abbey and 20 acres therewith were offered as a free gift to Northampton by Lord Wantage. In the grounds is a mulberry planted by Garrick. Pop. (1801) 7020; (1831) 15,351; of the municipal borough, (1901) 76,072, and of the parliamentary borough, which returns two members, 87,021. Northampton was burnt by the Danes (1010); it had a castle (of which no traces now remain) built about 1075, and a university, founded in 1260, but abolished some few years later. In a battle (10th July 1460) fought in the meadows below the town, Henry VI. was defeated by the Yorkists; a great fire (20th September 1675) almost entirely destroyed the town.

Northampton, capital of Hampshire county, Massachusetts, stands near the west bank of the Connecticut River (here crossed by a bridge to Hadley), 103 miles by rail W. of Boston and 3 miles NW. of Mount Holyoke. It contains the state lunatic asylum, the Clarke Institute for deaf-mutes, a public library, housed in the handsome Memorial Hall, and Smith College for women. The manufactures include paper, silk, cotton and woollen goods, sewing-machines, cutlery, baskets, brushes, jet ornaments, &c. Pop. 20,100.

Northamp'tonshire, or NORTHANTS, a midland county of England, 67 miles long, and 25 where broadest, is surrounded by the counties of Rutland, Lincoln, Cambridge, Huntingdon, Bedford, Buckingham, Oxford, and Warwick. Area, 984 sq. m., or 629,912 acres, of which more than half is pasture. Pop. (1801) 131,757; (1841) 199,208; (1881) 272,558; (1901) 338,088. In the north-east near Peterborough the county is flat, and forms part of the Bedford Level (q.v.), but elsewhere the surface is undulating, the highest ground—about 800 feet above sea-level—being found in the neighbourhood of Daventry. The Nen and the Welland are the chief rivers. Corn and green crops are largely grown; many cattle are grazed on the broad pastures, and dairy-farming is carried on; but, although Northants is a great hunting county, the breeding of horses is not much encouraged. Limestone is quarried in the north-east, and excellent ironstone is found near Kettering and Wellingborough. The county comprises twenty hundreds, the municipal boroughs of Brackley, Daventry, Higham Ferrers, Northampton, Peterborough, and Stamford (the last two extending into Huntingdonshire and Lincolnshire), and has 344 civil parishes, with parts of four others, almost entirely in the diocese of Peterborough. The parliamentary divisions are four, each returning one member. Northamptonshire has witnessed the battles of Edgecote (1469) and Naseby (1645), the beheading of Mary, Queen of Scots, at Fotheringay Castle (1587), and the imprisonment of Charles I. at Holmby House (1647). Of its natives, besides Richard III. and (perhaps) Catharine Parr, the best known are Archbishop Chichele, Sir Christopher Hatton, Catesby, Thomas Fuller, James Harrington, Bishop Cumberland, Dryden, Charles Montagu, Earl of Halifax, William Law, Doddridge, James Hervey, Cartwright ('the father of Reform'), Dr Paley, William Lisle Bowles, Clare (the peasant poet), the Earl of Cardigan (leader of the Balaclava charge), and Dean Mansel. See the county histories by Bridges (2 vols. 1791), Baker (2 vols. 1822–41), and Whellan (2d ed. 1874).—Hampshire (q.v.) is the county of *Southampton*.

North Berwick, a fashionable watering place of Haddingtonshire, at the entrance to the Firth of Forth, 23 miles by a branch-line (1848) ENE. of Edinburgh and 10 by water SSE. of Elie in Fife. Behind it rises conical North Berwick Law (612 feet); and westward stretch splendid golf-links. Tantallon Castle, 3 miles E., fronting the Bass Rock, is a magnificent ruin, finely described in Scott's *Marmion*. A stronghold of the Douglases, and the birthplace of Gawin Douglas, it resisted James V. in 1528, but in 1639 was 'dung down' by the Covenanters. Robert III. made North Berwick a royal burgh, and till 1885 it returned, with Haddington, &c., one member to parliament. Pop. 2900. See Ferrier's *North Berwick* (11th ed. 1890).

North Cape, the northernmost point in Europe, in 71° 10′ N. lat., is on the island of Magerö. The northernmost point on the continent is Cape Nordkyn (71° 6′ N. lat.), 6 miles farther S., and 45 miles E. of North Cape.

North Carolina, one of the thirteen original United States, is situated on the Atlantic seaboard, S. of Virginia. Its extreme length is 500, its breadth 186 miles. Area, 52,250 sq. m., or larger than that of England. The eastern part is low, and in parts swampy, the central part undulating, and the western mountainous; but almost everywhere the soil is remarkably fertile and the climate healthy. The highest mountains in the United States east of the Mississippi are in North Carolina, more than fifty peaks exceeding 6000 feet—Mitchell's Peak (6707 feet) the highest. Most of these are clothed to their tops with thick forests, but some have prairie-like summits covered with turf. All this picturesque region, known as 'the Land of the Sky,' is a favourite resort in summer for southerners and in winter for northerners. North Carolina is rich in mineral products—silver, lead, zinc, iron, copper, plumbago, coal, corundum, granite, marble, gems, &c. Maize, cotton, wheat, oats, hay, tobacco, and sweet potatoes are the most valuable products. A chief industry in eastern North Carolina is the making of tar, rosin, and turpentine. Since 1880 the manufactures of cotton and woollen fabrics have largely increased, tobacco-factories have been enlarged, and in 1888 the first silk-factory in the southern states was established. Fisheries employ 12,000 men. The state has 3700 miles of railway. The chief port and largest city is Wilmington, the capital Raleigh. In 1584 Raleigh's first expedition landed on Roanoke Island. In 1629 Charles I. granted to Sir Robert Heath the territory, also claimed by Spain and called Florida, from lat. 30° to 36° as *Carolana Florida*. In 1653 a colony from Virginia settled on the Roanoke and Chowan rivers. In 1663 Charles II. granted the region across the continent between lat. 31° and 36° N. (extended to 29° and 36° 30′) to eight of his favourites, under the name of Carolina. The proprietors adopted a constitution prepared by Locke and Shaftesbury. In 1729 the king bought out the proprietors, and North Carolina became a royal province. It was

the last state but one to ratify the federal constitution in 1789. It was the last, too, of the eleven Confederate States to pass the ordinance of secession in 1861. The capture of Fort Fisher in January 1865 led to the federal occupation of Wilmington, the advance on Raleigh, and the surrender of General Johnston, which practically ended the war of secession. Pop. (1800) 487,103; (1840) 753,419; (1880) 1,399,750; (1900) 1,893,810—making North Carolina the fifteenth state in order of population. Presidents Jackson, Polk, and Johnson were natives.

North Dakota, a state of the American Union, bounded by Canada (Saskatchewan and Manitoba), Minnesota, South Dakota, and Montana; area, 70,795 sq. m.—a fifth larger than England and Wales; pop. (1900) 319,146. The surface is largely undulating plain. The Turtle Hills in the north cross the Canadian frontier; and a belt of high plateau, the Coteau du Missouri, crosses the state from the NW., dividing it into two unequal sections, through the SW. of which flows the Missouri River, with its tributaries, including the Little Missouri. Devil's Lake or Minniwaukon, in the NE., has no outlet and is salt. Great part of the NW. overlies beds of lignite. In the NE. are the rich wheat lands of the Red River basin. Some of the great 'Bonanza' farms of North Dakota are from 10 to 80 sq. m. in extent; continuous furrows are sometimes ploughed for miles in a line. Other crops are maize, flax, oats, rye, potatoes, buckwheat, and hay. The cattle interest is great; the ranche system prevails in the less settled districts. The rainfall is relatively low. The winters are cold, but dry and sunny. The first settlement was by French Canadians near Pembina about 1780. Dakota territory, including North and South Dakota, was organised in 1861. The two Dakotas were admitted as separate states in 1889. The capital of North Dakota is Bismarck; the largest town is Fargo (9600), others being Grand Forks and Jamestown.

Northern Territory. See SOUTH AUSTRALIA.

Northfleet, a western suburb of Gravesend.

Northleach, a Gloucestershire town, near the Leach's source, 10 miles NE. of Cirencester. It has a grammar-school (1607). Pop. 660.

North Marston, a Bucks parish, 7½ miles N. of Aylesbury. Here is Schorne College (1875).

Northowram, a town in the West Riding of Yorkshire, since 1900 incorporated with Halifax.

North Queensferry. See QUEENSFERRY.

North Sea, or GERMAN OCEAN, a southern extension of the Arctic Ocean. Its northern boundary would be represented by a line drawn from the Shetland Islands to the opposite coast of Norway, and its southern boundary is the Strait of Dover; W. it is bounded by Great Britain, and E. by Norway, Denmark, Germany, Holland, and Belgium. With the Atlantic it communicates through the Strait of Dover and the English Channel on the south, and on the north by the Pentland Firth and the channel between the Orkney and Shetland Islands; and with the Baltic by the Skagerrack and Cattegat. The North Sea is over 600 miles in length and about 400 miles in maximum width, and its area exceeds 160,000 sq. m. By far the greater proportion of this area is less than 100 fathoms in depth, the only part where deeper water—360 fathoms—is found being off the coast of Norway. The sea is very shallow towards the south and east, and the coasts in this direction are low and flat, being in some places below the level of the sea, whereas to the north and west, where the water is deeper, the sea-coast is high, and the deep 'Norwegian Gully' is faced by the high and bold cliffs of Norway. The sea-bottom is very irregular, a number of banks running across from the Yorkshire coast towards the Skagerrack, the most important of which is the Dogger Bank (q.v.), and there are also depressions like the Silver Pit; off the low-lying coasts of Holland, Belgium, and Britain there are numerous shoals and sandbanks formed of the materials brought down by the rivers. The North Sea receives many rivers, the principal being the Thames, Ouse, Humber, Tyne, Tweed, Forth, and Tay, the Scheldt, Rhine, Weser, and Elbe. The North Sea has been from the earliest times one of the most important highways of the world, and is surrounded by some of the most prosperous commercial nations. Its fisheries are among the greatest in existence, providing employment for thousands of fishermen.

North Shields. See SHIELDS.

Northum'berland, the most northern county of England, separated from Scotland by the Tweed, and from Durham by the Tyne and Derwent. The German Ocean bounds it on the E., and Cumberland, with a part of Roxburghshire, on the W. Among the English counties it ranks fifth in size, having an area of 1,290,312 acres. Its greatest length is 70 miles and its greatest breadth 47 miles. The surface, except near the coast, is picturesquely broken into rounded and conical hills and high moorland ridges. The main valleys are fertile and well wooded. The principal heights belong to the Cheviot Hills (q.v.), and are seated in the north-west part of the county. These are Cheviot (2676 feet), Hedgehope (2348), Cushat Law (2020), Bloody Bush Edge (2001), and Windy Gyle (1963). The Simonside Hills near Rothbury attain 1447 feet. The chief rivers are the Tyne, Wansbeck, Coquet, Aln, Breamish, Till, and Tweed. In the south-west are some small sheets of water called the Northumbrian Lakes, the largest of which is Greenley Lough. Off the coast lie Lindisfarne or Holy Island, the Farne Islands, and Coquet Isle. The climate is cold; still, the winters are often much milder than in the south, and the average rainfall, except in the Cheviot district, is considerably less than in Devon, Dorset, Hampshire, and Sussex. Northumberland contains 541 civil parishes, and, ecclesiastically, is in the province of York. It is divided into nine wards (answering to hundreds or wapentakes), three of which formed part of Durham till 1844; and it comprises four parliamentary divisions—the Tyneside, Wansbeck, Hexham, and Berwick-upon-Tweed. The principal towns are Newcastle-upon-Tyne, Alnwick, Morpeth, Hexham, and North Shields. A large portion of the county is agricultural, especially the fertile tracts along the principal valleys and near the coast. The western portion is pastoral, the Cheviots supporting large flocks of hardy sheep. The staple trade is in coal, and the chief manufactures are connected with its mining and transit; there are over 110 collieries. The salmon-fisheries of the Tyne and Tweed have long been famous. Pop. (1801) 168,078; (1841) 266,020; (1881) 434,086; (1901) 602,859.

In the 6th century Northumberland was colonised by the Angles, forming part of the kingdom of Bernicia. Being a Border county, it suffered much during the Scottish wars, and from the 11th to the 17th century was

frequently the scene of much bloodshed. The battles of Otterburn, Homildon Hill, and Flodden were fought on its soil. Northumberland is very rich in memorials of the past, some of which are noticed separately under Bamburgh, Dunstanburgh, Hexham, Alnwick, Holy Island, Norham, &c. Natives have been Bishop Ridley, Thomas Bewick, Akenside, Lord Eldon, George and Robert Stephenson, Grace Darling, the second Earl Grey, Birket Foster, and Lord Armstrong. See works by Wallis (1769), Hutchinson (1778), Mackenzie (1825), Hodgson (1820–40), Hartshorne (1858), and Bateson (1893 *et seq.*).

Northumbria, the most northern of the ancient English kingdoms, stretching from the Humber northwards to the Firth of Forth, and separated from Cumbria and Strathclyde by the Pennine range and the Ettrick Forest.

North Walsham. See WALSHAM.

North-west Frontier Province, a new province of India (1901) under a chief commissioner, comprising the districts of Peshawar and Kohat, with parts of Bannu, Dera Ismail Khan, and Hazara, all heretofore in the Punjab. Area, 16,466 sq. m.; pop. (1901) 2,125,480. Peshawar is capital.

North-west Passage, a route for ships from the Atlantic to the Pacific by the north of America; proved by Franklin and his followers to exist, but to be impracticable for commerce. The *North-east Passage* is that by the north of Asia, utilised by Nordenskiöld.

North-west Provinces, a lieutenant-governorship of British India (since 1835), occupying the upper basin of the Ganges and Jumna, and extending from Bengal to the Punjab. Oudh, from 1857 a separate government, was in 1877 put under the same lieutenant-governor, and in 1901 the name of the whole was changed to the United Provinces of Agra and Oudh (q.v.). The province, which constitutes the great part of Hindustan proper, is mainly a great alluvial plain, sloping from the Himalayas, and comprises the Doab, Rohilkhand, Bundelkhand, &c., and the Upper Ganges valley. It is the great wheat country of India, but is not on a level with Bengal as to resources or trade. The headquarters of Hinduism, and containing some of the most sacred memorials of the Aryan race, it was long subject to Moslem sway; still a seventh of the population are Mohammedans. Area of the United Provinces, 107,164 sq. m. Pop. (1901) 47,691,782 (40,757,137 Hindus).

North-west Territories, in Canada (q.v.), has been most currently used of Alberta, Saskatchewan, Assiniboia, and Athabasca, rearranged and organised in 1901 as the two provinces of Alberta and Saskatchewan (which now include the others). Keewatin is a territory under Manitoba; Yukon is since 1898 a separate territory; but under the term North-west Territories still fall not merely Mackenzie in the north-west, but Ungava in the peninsula of Labrador in the far north-east, and Franklin, comprising some of the Arctic islands of the north.

Northwich, a town of Cheshire, on the river Weaver and the old Watling Street, 18 miles ENE. of Chester. Underneath and around are brine-springs, used for making salt since before the Christian era, and the town is being undermined by the pumping of the brine. Pop. 18,500.

Norwalk (*Nor'ok*), a town of Connecticut, at the mouth of Norwalk River, on Long Island Sound, 41 miles by rail NE. of New York. It has a good harbour, oyster-fisheries, the largest straw-hat factory in America, foundries and ironworks, and manufactories of felt-hats, cloth, woollens, shirts, shoes, locks, and door-knobs. Pop. (with South Norwalk, 900) 19,932. — (2) Capital of Huron county, Ohio, 55 miles by rail WSW. of Cleveland. It manufactures organs, shoes, ploughs, sewing-machines, tobacco, and fanning-mills. Pop. 7195.

Norway (Norweg. *Norge*), the western division of the Scandinavian peninsula, extends from lat. 57° 59′ N. in the south-west to 71° 11′ in the north-east, overlapping Sweden and Lapland on the N. Quite 1160 miles in length (coast-line 3000 miles), it varies in width from 20 to 100 miles north of 63° N. lat.; below that line it swells out to 260 miles. Area, 124,495 sq. m. Norway is separated from Sweden by the Kjölen Mountains (3000 to 6000 feet), the backbone of the peninsula, which bifurcate south of 63°; the western branch widens out into a broad plateau, undulating between 2000 and 4000 feet and embossed with mountain-knots—Dovre, Jotun, Lang, Fille, Hardanger Fjelde (*fells*)—the separate peaks of which shoot up to 6000 feet and higher (Galdhöppigen, 8399 feet). Norway presents a bold front to the Atlantic; on the inner or eastern side—the 'Eastland'—the slope is more gradual. Finmark, which is inhabited chiefly by Lapps, is a monotonous undulating plateau (1000 to 2000 feet). The greater part of the country lies between the same degrees of latitude as Greenland, and it is mainly owing to the Gulf Stream that Norway is habitable. In winter the west coast districts are the warmest, and the cold increases in intensity according to the distance inland. The places that have the lowest winter mean (11·8°) are all inland (where mercury sometimes freezes at − 40° F.). The prevalent south-west winds bring considerable rainfall, 40 to 70 inches in the year, to the west coast of southern Norway; in the interior only 12 to 16 inches fall. The pop. has much more than doubled since 1820, when it was 977,500; in 1901 it was 2,239,880. There is one town with over 100,000—Christiania (227,626); four above 20,000—Bergen (72,251), Trondhjem (38,180), Stavanger (30,613), and Drammen (23,093); eight above 10,000, and nine above 5000. The density of the population is only 18 per sq. m.; but then fully 70 per cent. of the total area is wholly uncultivable, and 24 per cent. is forest.

From the North Cape to below 59° N. lat., to the point nearest Scotland (280 miles distant), the precipitous coast is protected from the Atlantic waves by a belt of rocky islands, called the Skjærgaard ('Skerry Fence'). The outermost are the mountainous Lofoten and Vesteraalen chains, where 30,000 fishermen congregate in winter to prosecute the herring and cod fisheries. All the islands of the Skjærgaard are frequented by enormous quantities of sea-birds. The peninsular rampart is crowned with several gigantic glaciers—the shores (6000 feet) of Lyngen Fjord in the north are lined with them, besides great snowfields; south Norway possesses the second largest glacier in Europe (Vatnajökull in Iceland being the largest), the roof-shaped Justedal (4600 to 5400 feet), which has an area of 580 sq. m. (87 miles long by 6 to 22 miles wide). Throughout Norway the limit of perpetual snow ranges from 3100 feet on Justedal to 5150 on the Dovre Fjeld. The lofty west coast region is everywhere cleft by gigantic fissures, very narrow and winding, into which the sea-water flows—the fjords. In some cases they are of great depth, much deeper than the sea outside (200 fathoms): Sogne Fjord, for instance, is 2820 feet deeper; Hardanger

Fjord, 930 feet. Sogne Fjord cuts its way to the foot of the Jotun Fjeld, 106 miles from the ocean, and Hardanger Fjord is 68 miles long. The finest of the valleys stretching inland from the fjords is Romsdal, where the rounded, pure gneiss mountains tower up to 6000 feet with almost perpendicular walls. The steep sides and extremities (2000 to 4000 feet) of these fjords and valleys are braided with waterfalls. The only considerable break in the lofty coast-wall is the basin of Trondhjem. The southern coast-lands, bordering the Skagerrack and the wide Christiania Fjord, are comparatively low and tame. East of the peninsular rampart the valleys converge upon Christiania Fjord. Most of these valleys are traversed by mountain torrents and streams, the longest being the Glommen (350 miles) and Drammen (163). Some of these streams in their lower courses expand into long narrow lakes. The coast of northern Norway is estimated to have risen between 400 and 600 feet.

Norway's natural wealth lies in her fisheries (especially for cod and herring), her forests, and her shipping; her manufactures, her mines, and her agriculture are all unable to meet the home demands. Salted fish and cod-liver oil are largely exported. Over 100,000 are engaged in the cod and herring fisheries. The forests, their sawmills, and wood-pulp factories employ some 12,000 men. The rearing of cattle, sheep, and goats—in the north reindeer—constitutes important branches. The area under cultivation is only 2 per cent. of the entire surface of the country, and meadows and grazing land add another 2·8 per cent. The output of the copper and iron mines of Röros and the silver-mines of Kongsberg have greatly declined. The total mineral output of Norway (iron pyrites, silver, copper, apatite, nickel) has an average yearly value of £300,000, and employs some 3500 men. The purely industrial establishments are grouped mainly around Christiania, include textile factories, machine-shops, chemical works, flour-mills, breweries, &c., and do not employ more than 80,000 persons altogether. The Norwegians rank amongst the busiest sea-carriers of the world, the Norwegian mercantile marine ranking third among maritime nations, or first in proportion to population. The number of ships is about 7200, the tonnage 1,450,000 tons. The total exports of Norwegian goods amount annually to from £8,500,000 to £10,700,000 (about £5,500,000 to Britain), the chief being fish, timber, and wood-pulp, minerals, oils, tallow, tar, hides, horns, textiles, paper, and dyestuffs. The imports have an annual value of from £15,500,000 to £16,200,000 (about £3,000,000 from Britain), and include grain, textiles, bacon, butter, iron, coffee, coals, wines, tobacco, &c.

The Norwegians share with the Swiss the distinction of being the most democratic people in Europe; all titles of nobility were abolished in 1821. During the 19th century large numbers of the population emigrated, mostly to the United States. In 1897 the number fell to 4669, but in 1900 increased to 10,931, in 1903 to 26,831. Since 1871 earnest endeavours have been made to diminish the consumption of spirituous liquors, the agency chiefly relied upon being the Gothenburg licensing system. The railway lines radiate chiefly from Christiania, and have a total length of nearly 1500 miles. Norway is now visited in summer by large numbers of tourists. Attendance at school is free and compulsory. Besides primary schools, there are 84 secondary schools, 10 normal schools, and the university of Christiania. Except 52,700 persons (including 10,286 Methodists, 5674 Baptists, 1969 Roman Catholics, Jews, Mormons, &c.), the entire population belong to the Lutheran Church (8000 Lutheran nonconformists). The language of the educated is Danish, the pronunciation diverging slightly; the dialect of the people is substantially similar. The Storthing or parliament consists of 117 (paid) members; and divides for legislative purposes into two chambers. The national expenditure averages slightly over five and a half millions per annum, and is just balanced by the revenue. The national debt amounted in 1905 to £14,500,000. There is an army of about 30,000 (including reserves), raised by universal military service; and a navy serviceable only for coast defence.

When we first hear of Norway it was occupied by Lapps and by several Gothic tribes. Harold Haarfager (863–930 A.D.) unified the country by making himself over-king over numerous minor kings or chiefs as far north as Trondhjem. Many of these, refusing to become his vassals, emigrated with their followers to Orkney, Shetland, the Hebrides, Ireland, and Iceland. Olaf Tryggveson (991–994), a typical viking, yet made his people Christian at least in name; Olaf, saint and king, welded the country into a united Christian kingdom (*c.* 1015). Canute the Great sought to incorporate Norway with his Danish kingdom (1028). Harold Hardraada, who died at Stamford Bridge near York in 1066, conquered Denmark. Magnus Barefoot waged war in the Orkneys and Hebrides, and fell in Ireland in 1103. Iceland acknowledged the supremacy of Haco, who died at Kirkwall in 1263, after his defeat at Largs. In 1319 the crown passed through a female heir to the Swedish royal house, and again through marriage to the Danish (1380). The great Queen Margaret of Denmark united all three kingdoms (1383). The Hebrides had been ceded to Scotland in 1266; the Orkneys and Shetlands were pledged to Scotland in 1468. From 1536 Denmark treated Norway as a conquered province; and it was not till 1814 that the cession of Norway to Sweden gave the Norwegians (who at first opposed the transference) their national rights again, with a free constitution, under the Swedish king. In 1821 the Norwegians abolished all titles of nobility; and the union of democratic—almost republican—Norway with aristocratic Sweden never worked smoothly. The nationalist movement became pronounced in 1890. A movement for an even larger measure of home rule, and diplomatic representation distinct from that of Sweden, ended in the refusal by Sweden to grant the concessions asked and in the formal proposal by Norway, in 1905, to withdraw from the union with Sweden. After some negotiations and the meetings of Swedish and Norwegian parliaments, a separation was amicably agreed to, and in October Norway was again a distinct and independent state. By a vast majority, the Norwegians agreed to ask Prince Carl, second son of the Crown-prince of Denmark, to become their king; and the new king was welcomed, as Haakon VII. (Haco), in December.

See books on Norway by Mary Wollstonecraft (1796), J. D. Forbes (1853), Wood (1880), Du Chaillu (1881), Vincent (1881), Lovett (1885), besides guidebooks by Nielsen, Baedeker, Tönsberg, Bennett, Jörgensen, and Wilson; and for the history, Laing's *Heimskringla* (1833; new ed. 1890), Carlylè's *Early Kings of Norway* (1878), Boyesen's *History of Norway* (new ed. 1890), and Nisbet Bain in the 'Cambridge History' (1905).

Norwich (*Nor'ridge*), a cathedral city, the capital of Norfolk, and a parliamentary, county, and municipal borough (the first returning two members), is situated on the Wensum, immediately above its confluence with the Yare, 18 miles W. of Yarmouth and 114 NNE. of London. Pop. (1801) 34,975; (1831),61,110; (1881) 87,842; (1901) 111,728. Built on the summit and slopes of a hill which gradually rises from the river, the city, with its hamlets, covers an area of 7472 acres, as compared with that of 1300 enclosed by its ancient walls (1294–1342). Its narrow, winding streets are rich in examples of early architecture—as Pull's Ferry and the Bishop's Bridge (1295), both on the river-banks; St Giles' Hospital (1249); the Ethelbert Gateway (*c.* 1272); Bishop Salmon's Gateway (*c.* 1325); the Guildhall (completed 1413); Erpingham Gate (1420); the Music House (partly Norman, and once a residence of Sir Edward Coke); the Bridewell (Decorated and Perpendicular, *c.* 1400); and the Dolphin Inn (1587). The cathedral, almost wholly Norman in plan, but the growth of more than four centuries, occupies a site close to the river, and was founded in 1096 by Bishop Herbert Losinga: its dimensions are 407 feet in length by 72 in breadth (or 178 across the transepts), and it is surmounted by a noble (Norman) tower and (Decorated) spire of 315 feet—the highest in England next to Salisbury. Close by is the grammar-school, founded as a Mortuary Chapel in 1319, and famous as the place of education of Lord Nelson, Rajah Brooke, and other celebrities; also St Andrew's Hall (Perpendicular; formerly the church of the Black Friars), in which are held the triennial musical festivals, first established at Norwich in 1824. Next after the cathedral the most striking edifice is the castle, crowning the summit of a sugar-loaf mound in the centre of the city: its massive quadrangular Norman keep, the only portion now standing, has since 1886 been converted from a prison to a museum. On the cattle-market beneath the castle is held annually, on Maundy Thursday, the famous cattle and sheep fair, formerly held on Tombland, and so graphically described in Borrow's *Lavengro*. The churches, forty-four in number, are for the most part built of flint, and in the Perpendicular style: those of St Peter Mancroft, St Andrew, St Giles, St Lawrence, St Michael Coslany, and St Stephen are the finest examples; whilst of modern public buildings may be mentioned the hospital (founded 1771 and rebuilt 1879–83), an Agricultural Hall (1882), and a Volunteer Drill-hall (1886). Formerly one of the largest seats in England of the worsted-weaving trade, the city is still noted for its textile fabrics—especially its crapes; but the principal manufactures now carried on are those of mustard, starch, ornamental ironware, boots and shoes, whilst extensive breweries and a vinegar distillery, as well as large nursery-gardens on the outskirts of the town, give employment to many hands. The bishopric was translated hither from Thetford in 1094; and the chief subsequent event in the city's history was the encampment of Ket's rebels on Mousehold Heath (1549). Of citizens the best known are Thomas Bilney; Archbishop Parker; Dr Caius; Greene (the dramatist); Bishops Cosin and Tanner; Sir Thomas Browne; Dr Samuel Clarke; 'Old' Crome, his son, Cotman, Stark, and Vincent (the 'Norwich school' of painters); Mrs Opie; Crotch (the composer); W. Taylor; Professor Brewer; Sir W. J. Hooker; Gurney and his sister, Elizabeth Fry; Lindley (the botanist); and Harriet Martineau and her brother James.

See works by Stacy (1819), Bayne (1858), Goulburn (1876), Jarrold (1883), and Jessopp (1884); also those cited under Norfolk.

Norwich (*Nor'ritch* or *Nor'witch*), capital of New London county, Connecticut, at the head of the Thames River, 13 miles by rail N. of New London. The chief portion of the city lies on an eminence between the Yantic and Shetucket rivers, which here unite to form the Thames. There are manufactories of paper, cotton and woollen goods, worsted, picture cords, pistols, files, locks, iron pipes, &c., besides rolling-mills and ironworks. The city's site was granted by Uncas the Mohican to an English ensign who in 1656 reached him by night with a canoe-load of provisions, when he was besieged; a memorial obelisk was erected in 1825. Pop. 17,260.

Norwood, now part of the county borough of Croydon, gives name to a parliamentary division (pop. 85,730) of Lambeth.

Noss. See Bressay.

Nossi-Bé (*Bay*), a volcanic island NW. of Madagascar. Area, 115 sq. m.; pop. 9500.

Nostell, or Nostal, a hamlet 5½ miles SE. of Wakefield, with ruins of a famous Augustinian priory, founded 1121.

Notley Abbey, Bucks, 2 miles NNE. of Thame, a ruined Augustinian canonry (1162).

Noto, an ancient episcopal town of Sicily, 16 miles SW. of Syracuse by rail. Pop. 22,600.

Nottingham, capital of Nottinghamshire, a parliamentary (three members) and municipal city (1897), county borough, and suffragan see under Lincoln, is seated on the Trent, 126 miles NNW. of London, 15 E. of Derby, and 38 S. by E. of Sheffield. Formerly surrounded by ancient walls (910–1265), of which all traces have now disappeared, the town covers an area of about 16 sq. m., and its appearance of late years has been much improved by the widening of its streets; by the erection of a new town-hall, University College, and other public buildings; by the opening and laying out of an arboretum of 17 acres, of a public park and recreation grounds of over 150 acres, and of a tract of open land, called 'Bulwell Forest' (135 acres); as also by the spanning of the Trent—which is here 200 yards wide—with a broad granite and iron bridge in the place of a former narrow structure of seventeen arches. Crowning a precipitous rock, which rises 133 feet above the river, stands the castle, built (1674–83) on the site of an ancient Norman fortress, dismantled during the Parliamentary wars, and itself much damaged by fire during the Reform Bill riots of 1831. It was restored in 1878, and transformed into an art museum. Near to it are the county hall (1770); St Mary's Church (restored 1867–85), a cruciform building in the Perpendicular style, 216 feet in length; and a spacious market-place, 5½ acres in extent, having at its eastern end the exchange, with a richly-decorated façade (rebuilt 1814). In another group not far off are the guildhall and other municipal offices (1888), in the French Renaissance style of architecture; two theatres (1865–84); and University College (1879–81; chartered in 1903), with 1700 students, and a library, natural history museum, &c. Other edifices are a hospital (1781, with additions 1829–79); a Roman Catholic cathedral (1844); and the high school, founded as a grammar or free school in 1513, moved into new buildings in 1867, and since

1882 controlled under a new scheme. Of the various manufactures carried on in the town the most important are those of lace and hosiery; baskets, bicycles, cigars, and needles are also made, whilst several iron-foundries are in operation, and malting and brewing are carried on. There is a great Michaelmas goose-fair. Pop. (1801) 28,801; (1831) 50,220; (1881) 186,575; (1901) 239,753. Charles I. raised his standard (1642) at Nottingham; and it was the scene of riots (1795–1816), partly owing to a bread famine and partly to the Luddites. See works by Dickinson (1816), Wylie (1853–65), Hine (1876), Stevenson (1890), and the *Records of the Borough* (5 vols. 1882–1900).

Nottinghamshire, or Notts, an inland county of England, bounded by Yorkshire, Lincolnshire, Leicestershire, and Derbyshire. Its greatest length is 50 miles; average breadth, 20 miles; and area, 824 sq. m., or 527,752 acres. Pop. (1801) 140,350; (1831) 225,400; (1881) 391,815; (1901) 514,537. Apart from the valley of the Trent, which is very flat, the general aspect of the county is undulating and well wooded, the highest ground—600 feet above the sea-level—being in the west, in the vicinity of Sherwood Forest (q.v.). In the south are the Wolds, consisting of upland moors and pasture-lands broken up by many fertile hollows, whilst the northern boundary for upwards of 15 miles is skirted by the Car, a tract of low-lying land, formerly a swampy bog, but since 1796 drained and brought into cultivation. The Trent, with its tributaries, the Erewash, Soar, and Idle, is the principal river. As regards productiveness the county is not above mediocrity, except in the Vale of Belvoir to the east of Nottingham. The principal mineral products are coal, gypsum, iron ore, and limestone. The manufactures are noticed under the chief towns—viz. Nottingham, Newark, Mansfield, Retford, and Worksop. Lying wholly in the diocese of Southwell, Notts is divided into six wapentakes, nine poor-law unions, and 273 parishes, and returns seven M.P.s, one for each of its four divisions (Bassetlaw, Newark, Mansfield, and Rushcliffe), and three for Nottingham (its capital and assize town). Of its natives the best known are Archbishops Cranmer, Secker, Sterne, and Manners-Sutton; Garnet (the Jesuit); Denzil, Lord Holles; General Ireton; Colonel Hutchinson; Lady Mary Wortley Montagu; Bishop Warburton; Dodsley, Kippis, and Wakefield (the authors); Admiral Earl Howe; Sandby and Bonington (the artists); Dr Erasmus Darwin; Edmund Cartwright; Kirke White and Bailey (the poets); Lord Byron; 'Speaker' Denison; and 'General' Booth. See works by Thoroton (3 vols. 1797), Bailey (4 vols. 1852–55), Briscoe (1881), White (1885), C. Brown (1891), and W. Stevenson (1893).

Notting Hill, a London district, in Kensington and Chelsea parishes.

Noumea. See New Caledonia.

Novara, a town of north Italy, 60 miles N. of Turin by rail. Here the Sardinians were utterly defeated by the Austrians in 1849. Pop. 45,250.

Nova Scotia, a province of Canada, consists of a long, narrow peninsula, and the island of Cape Breton, which is separated from the mainland by the Strait of Canso. It is bounded N. by Northumberland Strait and the Gulf of St Lawrence; NE., S., and SE. by the Atlantic; W. by the Bay of Fundy; and NW. by New Brunswick, with which it is connected by an isthmus only 11 miles wide, separating the Bay of Fundy from Northumberland Strait. The greatest length is 350 miles, the greatest breadth 120 miles, and the area 20,907 sq. m. (13,380,480 acres)—one-third less than that of Scotland. One-fifth of the area consists of lakes, rivers, and inlets of the sea. Of upwards of 6,000,000 acres occupied, nearly 2,000,000 are in crop and pasture, and over 30,000 are gardens and orchards. Pop. (1806) 67,515; (1851) 276,117; (1871) 387,800; (1901) 459,574.

The coast-line is about 1000 miles in length, and the shores abound with excellent harbours. There are numerous rivers, few of them more than 50 miles long. Bras d'Or in Cape Breton (q.v.) is a much indented sea-inlet. Lake Rossignol is 20 miles in length; Ship Harbour, a lake 15 miles long. Mines Basin, the east arm of the Bay of Fundy, penetrates 60 miles inland, and terminates in Cobequid Bay. The tides rise 30 to 50 feet in the basin with great impetuosity, and form a 'bore.' On each side of the Cobequid range are two extensive areas of fine arable lands; the Annapolis valley is especially rich. The northern part of Cape Breton is bold and steep (North Cape, 1800 feet). The principal cities and towns are Halifax, Dartmouth, Yarmouth, Truro, Pictou, Amherst, Windsor, Kentville, and Annapolis. The extreme of cold is 20° below zero, and of heat 98° in the shade. Spring is rather tedious, and the winter variable; fogs are prevalent along the coasts, but do not penetrate far inland. Rye, oats, and barley, buckwheat, Indian corn, tomatoes, potatoes, turnips, and all root-crops grow in abundance; wheat is not much grown; hay is a very important crop. Apples, pears, plums, cherries, and other garden fruits attain the utmost perfection. Attention is now devoted to dairying and to the raising of live-stock. Sport is excellent throughout the province. The manufactures are limited, but are being developed. Mining (gold, coal, iron, &c.) is extensively carried on. The fisheries of Nova Scotia are among the finest in the world. The waters abound with mackerel, cod, herring, shad, salmon, halibut, haddock, lobsters, &c. The chief exports are fish, minerals, lumber, agricultural products, and general manufactures. There are 700 miles of railway. Education is free, and there are six colleges. The public affairs are administered by a lieutenant-governor, and executive council of twenty-one members, and a legislative assembly of thirty-eight members elected by the people for four years. The province is represented in the Dominion parliament by ten senators and eighteen members of the Lower House.

Discovered by Cabot in 1497, the country was partly settled in 1604 by the French, to whom it was known as *Acadie*. It long remained a bone of contention between France and England, but became finally British in 1713. The Acadians who refused to fall in with the new settlement were expelled in 1755 (Longfellow's *Evangeline* is not historically just); the well-being of Nova Scotia dates from the immigration of loyalists from the United States after the Revolutionary war. It entered the Dominion in 1867. See works by Haliburton (1829), Murdoch (1867), and Hannay (1889), besides the histories of Canada.

Nova Zembla (Russ. *Novaja Zemlja*, 'New Land'), an Arctic island lying between the Kara Sea and Barents Sea. Long and narrow, it measures 600 miles from north to south and 60 in average width, and is cut in two nearly midway by a narrow winding sea-passage, the Matochkin Shar. The centre and north are mountainous, rising to 4000 feet or higher, and are covered with snow and ice. Although not permanently inhabited, it is visited by Russian and Norwegian

seamen and hunters. It was known to the hunters of Novgorod in the 11th century, but was rediscovered by Willoughby in 1553.

Nov'gorod ('new-town'), a famous city of Russia, is situated on the Volkhof, near where it issues from Lake Ilmen, 110 miles SSE. of St Petersburg by rail. It is the cradle of Russian history. In 864, according to tradition, Rurik (a Varangian, apparently a Scandinavian) was invited hither by the neighbouring tribes, and with him Russian history begins. In the 12th century it had connections with the Hanse cities, and it became the market of north-east Europe. 'Novgorod the Great,' a kind of republic, had 400,000 inhabitants, but in 1471 the czar Ivan III. nearly destroyed the town, and bereft it of its liberties. St Sophia, founded in the 11th century, is built on the model of St Sophia at Constantinople. Pop. 26,599.—The *government*, lying E. of that of St Petersburg, contains 3000 lakes and for three-fourths is covered with forests. Area, 47,236 sq. m.; pop. 1,390,507.

Novi, a town of Italy, 30 miles NW. of Genoa. Pop. 9917. Here in 1799 the French were defeated (15th August) and victorious (6th November).

Novibazar' (also *Jenipasar* and *Rascia*), a town where Austrian and Turkish authority meet, on the river Rashka, an affluent of the Morava, 120 miles SE. of Saraievo in Bosnia. Pop. 12,000. The sanjak of Novibazar (3842 sq. m.; pop. 153,000) is mountainous and barren, but as lying between Servia and Montenegro is of strategic importance. The W. part is occupied by Austria.

Novogeorgievsk (*Novojorjevsk'*), a Russian fortress of the first rank, on the Vistula, 20 miles NW. of Warsaw. With Warsaw, Ivangorod, and Brest Litovsk, it forms the Polish Quadrilateral.

Novorossisk', a fortified port on the Black Sea, to the SE. of Anapa in Caucasia. A breakwater and quay were begun in 1890. Pop. 16,200.

Novotcherkask', a town of southern Russia, capital of the province of the Don Cossacks, on the Aksaï, a tributary of the Don, 40 miles from the Sea of Azov, and 70 ENE. of Taganrog. The administration was transferred hither from Tcherkask in 1805; but the choice was not a happy one, the distance of the town from the Don (12 miles) being much felt. Pop. 47,091.

Noyon (*Nwa-yon'*), a town in the French dep. of Oise, 67 miles NNE. of Paris by rail. It has a fine cathedral in the Transition style of the 12th century, an hôtel-de-ville (1485–1523), and a former episcopal palace. Pop. 5812. The *Noviodunum* of Cæsar, Noyon was a residence of Charlemagne and Hugo Capet, and the birthplace of Calvin.

Nubia is a comparatively modern name for a large region of Africa, formerly a portion of Ethiopia (q.v.), and extending on both sides of the Nile from Egypt to Abyssinia; touching the Red Sea on the east and the desert on the west. *Nubia Proper*, or *Lower Nubia*, extends from Assouan on the Egyptian frontier to Dongola; beyond that is *Upper Nubia*. But of late the name of *Egyptian Soudan*, properly applicable to a section of Upper Nubia, has come to be used for Nubia in its widest sense, together with the once Egyptian territory actually in the Soudan, and the Equatorial Provinces. Both in its lower and upper sections Nubia is for the most part an expanse of rocky desert, with patches where grass sometimes grows, and ravines in which moisture enough is found to keep alive a few mimosas or palms, and to raise pasture for gazelles and camels. There are also wells and small oases here and there. The great 'Nubian Desert' lies east of the Nile, opposite the great western bend of the river. Below Khartoum rain is almost unknown; the climate is accordingly excessively hot and dry, and, except in the river-ports after the fall of the Nile, is very healthy. The only exception to the general aridity is the narrow strip of country on both sides of the Nile, which nowhere exceeds four miles in breadth, and in many places is only a quarter of a mile wide. The most fertile part is near Dongola. A mountain barrier bounds the valley on both sides of the Nile, and consists of granite and sandstone.

Nuble, a province of Chili; capital, Chillan (q.v.).

Nueva Esparta. See MARGARITA.

Nuevo Leon (*Nway'vo Lay-oan'*), a northern state of Mexico; Monterey (q.v.) is the capital.

Nukha (*Noo-hha*), a town of Caucasia; it is on the southern slope of Caucasus, and 120 miles E. of Tiflis. Pop. 24,719.

Numidia (Gr. *Nomadia*, 'land of Nomads'), the Roman name for part of the north coast of Africa, largely corresponding with Algiers.

Nun, CAPE. See MOROCCO.

Nuncham Park, an Oxfordshire seat, on the Thames, 5¼ miles SSE. of Oxford.

Nundydroog, or NANDIDRÚG, a fortified hill and health-resort in Mysore, 31 miles N. of Bangalore, and 4810 feet above the sea. It was stormed by a British force in 1791.

Nun'eaton, a market-town of Warwickshire, on the river Anker and the Coventry Canal, 14 miles NNW. of Rugby, 9 N. by E. of Coventry, and 22 E. of Birmingham. It has a good Gothic parish church, some remains of a 12th-century nunnery, with a modern church built thereon, and a grammar-school (1553). The ribbon manufacture has given place to worsted, cotton, and woollen spinning. 'George Eliot,' born at Arbury farm to the south, went to school at Nuneaton, and here saw her *Felix Holt* riot. Pop. of Nuneaton and Chilvers Coton (1901) 24,996.

Nuremberg (Ger. *Nürnberg*), a city in the Bavarian province of Middle Franconia, in a sandy but well-cultivated district, on the little Pegnitz (a sub-affluent of the Main), 95 miles N. by W. of Munich, and 145 ESE. of Frankfort. It is the quaintest and most interesting town of Germany, on account of the wealth of mediæval architecture which it presents in its many-towered walls, its gateways, its picturesque streets with their gabled house-fronts, its bridges, and its beautiful Gothic fountains. The Burg or royal palace was built (*c.* 1024–1158) by Conrad II. and Frederick Barbarossa; in its courtyard is a coeval linden-tree. Of eight fine churches the two finest are St Lawrence (1274–1477), with two noble towers 233 feet high, exquisite stained glass, the famous stone tabernacle (1495–1500) by Adam Krafft, and the wood-carvings of Veit Stoss; and St Sebald's (*c.* 1225–1377), with the superb shrine of Peter Vischer. Other noteworthy objects are the Italian Renaissance townhall (1622); the new law-courts (1877); the gymnasium, founded by Melanchthon (1526); the Germanic museum (1852); an industrial museum (1871); a library of 200,000 volumes; Albert Dürer's house; and the statues of him, Hans Sachs, and Melanchthon, with the 'Victoria' or soldiers' monument (1876). Although the glory of Nuremberg's foreign commerce has long since passed away, the home trade is still of high importance. It includes the specialities of metal, wood, and bone carvings, and children's 'Dutch' toys and

dolls, which, known as 'Nuremberg wares,' find a ready sale in every part of Europe, and are largely exported to America and the East. In all there are close on 200 factories, producing also chemicals, ultramarine, type, lead-pencils, beer, &c.; and the town besides does a vast export trade in hops, and import trade in colonial wares from the Netherlands. Pop. (1818) 26,854; (1875) 91,018; (1900) 261,081—the great majority Protestants. First heard of in 1050, Nuremberg was made a free imperial city in 1219. In 1417 the Hohenzollerns sold all their rights to the magistracy. This put an end to the feuds which raged between the burggrafs and the municipality; and Nuremberg for a time became the chief home in Germany of the arts and of inventions—watches or 'Nuremberg eggs,' air-guns, globes, &c. In 1803 it retained its independence, with a territory of 483 sq. m., containing 80,000 inhabitants; but in 1806 it was transferred to Bavaria. See books by Headlam, Rée, and Bell (1905).

Nuwara Eliya. See NEWERA ELIA.

Nyangwe, a station on the Upper Congo or Lualaba, where Stanley commenced the descent of the Congo in 1876.

Nyanza. See ALBERT and VICTORIA NYANZA.

Nyassa, or NYASA (*Nee-ah'sa*), the southernmost of the equatorial great lakes of East Africa, is situated about 260 miles SE. of Tanganyika and 400 inland from the east coast. It lies at an altitude of 1570 feet, is very deep in the middle, shelving rapidly from the shores, which are rocky and high. Long and narrow, it measures 350 miles from north to south and an average of 40 from east to west. The river Shiré goes S. from its southern extremity to the Zambesi. Although the Portuguese knew of the lake as Maravi early in the 17th c., Livingstone was the first to fix in 1859 its situation and to navigate it.

NYASSALAND is the unofficial name for a region west and south of Lake Nyassa, in which, since 1878, the African Lakes Company and British missionaries—especially of the Established and Free Churches of Scotland—have been at work. In 1889 it was declared within the British sphere of influence, and in 1891 formally created the British Central Africa Protectorate. It is the most important part of a much wider area within the British sphere—British Central Africa—which extends from Lake Nyassa on the east, right across Africa to the German and Portuguese west coast possessions, with the Congo Independent State to the north, and the Zambesi dividing it from Southern Rhodesia. British Central Africa, since 1891 under the British South Africa Company as North-eastern and North-western Rhodesia, has an area of about 500,000 sq. m., and a pop. estimated in 1903 at 350,000 (250 Europeans). The Protectorate proper of British Central Africa is administered by an Imperial Commissioner, whose authority also extends, under the charter of the British South Africa Company, to the whole of Northern Rhodesia. Lying on the western and southern shores of Lake Nyassa, it forms the eastern boundary of North-eastern Rhodesia, and has an area of 40,000 sq. m. and a population of about 900,000. Blantyre (pop. 6000, 150 Europeans) is the largest place; Zomba, on the Shiré, is the seat of the commissioner. Other places are Bandawe, Port Maguire, and Fort Johnston. The Livingstonia mission here was originally founded in accordance with a suggestion of Dr Livingstone, as was also the Lakes Company, with the express purpose of counteracting the influence of the Arab slave-dealing marauders who were the curse of the region. The missions and the company had a fierce struggle with the slave-catching interest, until relieved by the government establishments. There are also settlements on Lake Moero and on Lake Bangweolo. The imports of the protectorate (cottons, provisions, hardware, machinery, agricultural implements, &c.) have an annual value of about £180,000; the exports, ivory, india-rubber, oil-seeds, rhinoceros' horns, hippopotamus' teeth, strophanthus seed, beeswax, rice, are worth near £40,000. Coffee and wheat are also grown; merino sheep thrive.

Nyborg. See FÜNEN.

Nyiregyháza, a town of Hungary, 130 miles E. by N. of Budapest. It is the centre of an extensive wine district, with allied manufactures. It has an important annual fair. Pop. (1900) 31,875.

Nykerk (*Nye'kerk*), or NIEUWKERK, a Dutch town, 28 miles SE. of Amsterdam by rail, and 1½ mile from the Zuider Zee. Pop. 7599.

Nyköping (nearly *Nee-chup'ing*), a seaport of Sweden, on a bay of the Baltic, 62 miles SW. of Stockholm (100 miles by rail). Pop. 7374.

AHU. See HAWAII.

Oajaca (*O-a-hah'ka*), a mountainous Pacific state in the south of Mexico. The capital, Oajaca, lies 5060 feet above the sea, in the fertile valley of the Atoyac. It has a large cathedral (1729), a quaint bishop's palace, the State Institute, manufactures of chocolate, cotton goods, cigars, candles, and soap. Pop. 37,856.

Oakengates, a Shropshire market-town, 14 miles W. of Shrewsbury. Pop. 10,900.

Oakham, the county town of Rutland, in the vale of Catmose, 25 miles WNW. of Peterborough. The castle, every peer passing which must forfeit either a horseshoe or a fine, is in ruins except the hall, used for county business. The fine parish church, with a lofty spire, was restored by Scott in 1858–59 at a cost of £6100; and Archdeacon Johnson's grammar-school (1584; reconstituted 1875) has an endowment of £1200 a year. Beer, boots, and hosiery are made. Pop. 3342.

Oakland, capital of Alameda county, California, on the east side of San Francisco Bay, 4½ miles from San Francisco. It has wide streets adorned with evergreen oaks, and is surrounded with gardens and vineyards. It is the terminus of the Southern Pacific Railroad, and steam ferry-boats ply constantly to San Francisco. Besides a Congregational seminary, a large R. C. college (1889), and the state home for the blind, the city contains canning-factories, manufactories of cottons, woollens, jute, iron, nails, shoes, pottery, carriages, &c. Pop. (1870) 10,500; (1900) 66,960.

Oakworth, a town in the West Riding of Yorkshire, 3 miles SW. of Keighley, with cotton and worsted industries. Pop. 4081.

Oamaru (*O-a-ma-roo'*), a port and bathing-resort of New Zealand, 78 miles by rail NE. of Dunedin. Pop. 5621.

Oatlands Park, Surrey, near the Thames, 3 miles ESE. of Chertsey, a former royal palace, purchased in 1794 by the Duke of York, and in 1858 opened as an hotel.

Ö'ban, a fashionable watering-place of Argyllshire, 84 miles WNW. of Stirling, and 136 of Edinburgh, by a railway opened in 1880. It curves round a beautiful and almost land-locked bay, which, sheltered from every wind by the island of Kerrera on the west and by the high shores of the mainland, forms a spacious haven, crowded in summer by yachts and steamers. A mere 'clachan' when Dr Johnson visited it in 1772, Oban began to be feued in 1803-20, and in 1832 was constituted one of the Ayr parliamentary burghs. It is now the great tourist headquarters of the West Highlands, possessing some thirty hotels and splendid steamboat facilities. Objects of interest are the picturesque ruins of Dunolly and Dunstaffnage Castles, and a prehistoric cave-dwelling, discovered in 1890. Pop. (1821) 1359; (1901) 5274.

Obeid, El, capital of Kordofan, in the eastern Soudan, 220 miles SW. of Khartoum, with trade in gum-arabic, ivory, gold, and ostrich-feathers. Pop. 35,000. Near this, in Nov. 1883, an Egyptian force under Hicks Pasha, with an English staff, was exterminated by the Mahdi.

Ober-Ammergau (*Ammergow'*), a village of 1281 inhabitants, in the valley of the Ammer in Upper Bavaria, 45 miles SW. of Munich. Here the famous Passion Play (established 1633) has been performed every ten years.

Oberhausen, an important manufacturing town in the Rhine province of Prussia, 40 miles N. of Cologne. It has large iron and other works, and coal-mines. Pop. 42,500.

Oberland. See Bern.

Obi, or Ob, the great river of Western Siberia, rises in two branches, the Biya and the Katun, in the Altai Mountains, within the Chinese frontier, and flows 2120 miles NW. and N. to the great Gulf of Obi in the Arctic Ocean. Its chief tributaries are the Irtish, Tcharysh, Tom, and Tchulym, all navigable. It has been proved to be accessible for some time yearly to sea-borne trade with Europe round the North Cape.

Obock, a French possession on the African coast of the Red Sea, inside Bab-el-Mandeb, and opposite Perim, including the protectorates of Tajurra and Koubbet. Area, 2300 sq. m.; pop. 24,600. In 1894 the capital was fixed at Djiboutil.

Ocean Grove, a Methodist Episcopal seaside resort and pleasure retreat, on the New Jersey coast, established by a church society in 1870, is 6 miles by rail S. of Long Branch, and 54 from New York. Bathing, riding, and driving are as stringently forbidden on Sundays as are theatricals, smoking, or drinking at all times; and the 25,000 summer visitors spend much of their time in religious services in an *Auditorium* built to hold 5000 persons.

Oceania, a name sometimes given to the fifth division of the globe, comprising all the islands which intervene between the south-eastern shores of the continent of Asia and the western shores of America. It naturally divides itself into three great sections—the Malay Archipelago, Australasia or Melanesia, and Polynesia (q.v.).

Ochil Hills (*Oa'hil*), a pastoral range occupying parts of the Scottish counties of Clackmannan and Fife, and extending 24 miles from the vicinity of Stirling north-east to the Firth of Tay. Chief summits are Benclegh (2363 feet), Dunmyat (1375), and King's Seat (2111). See Beveridge's *Between the Ochils and the Forth* (1888).

Ochiltree (*Oa'hil-tree*), an Ayrshire village, on Lugar Water, 11½ miles E. of Ayr. Pop. 599.

Ocmulgee. See Georgia.

Oconto, capital of Oconto county, Wisconsin, on Green Bay, at the mouth of the Oconto River, 149 miles by rail N. of Milwaukee. It has large steam saw-mills. Pop. 6219.

Odense (*O'den-seh;* 'Odin's island'), the chief town of the Danish island of Fünen (q.v.). Its cathedral was founded in 1086. Pop. (1880) 20,804; (1900) 40,138.

Odenwald, a mountainous system partly in Baden and Bavaria, but mainly in Hesse (q.v.).

Oder (Slavon. *Vjodr*), one of the principal rivers of Germany, rises in the Oderberg on the tableland of Moravia, 1950 feet above sea-level, and flows 550 miles NW. and N. through Prussian Silesia, Brandenburg, and Pomerania, to the Stettiner Haff, whence it passes into the Baltic by the triple arms of the Dievenow, Peene, and Swine, which enclose the islands of Woollin and Usedom. The rapidity of the current and the silting at the embouchures of the numerous tributaries render the navigation difficult. Canals connect the Oder with the Spree, Havel, and Elbe; the Warthe is a navigable tributary. On the banks are Ratibor, Brieg, Breslau, Frankfort-on-the-Oder, Stettin, and Swinemünde.

Odessa, the fourth city of Russia, on the Black Sea, midway between the estuaries of the Dniester and Dnieper, by rail 967 miles SSW. of Moscow and 381 S. of Kieff. It is built facing the sea on low cliffs, seamed with deep ravines and hollowed out by galleries in the soft rock, in which numbers of the poorest inhabitants herd together. Above ground its streets are long and broad, and cross each other at right angles. Odessa was only founded in 1794, near a Turkish fort that fell into Russian hands in 1789; but it quickly became the port for the corn-growing districts of South Russia. Its progress was greatly aided by its being a free port from 1817 to 1857, and again by the railway to Kieff (1866). The pop. increased from 3150 in 1796 to 25,000 in 1814, 100,000 in 1850, 184,800 in 1873, and 405,000 (very many Jews and some Greeks) in 1905, when there were fleet mutinies, riots, massacres of Jews, and a local civil war. The harbour or roadstead, protected by moles, is blocked by ice about a fortnight in the year. The exports include wheat, sugar, wool, and flour; the imports, raw cotton, oils, groceries, iron and steel, coal, food-stuffs, fruits, tea, tobacco, machinery. The chief industries are flour-milling, sugar and oil refining, the manufacture of tobacco, machinery, leather, soap, chemicals, biscuits, &c. Odessa has a university (1865) with 600 students, a public library (1829) of over 40,000 vols., the cathedral (1802-49) of the Archbishop of Kherson, a very fine opera-house (1887), palatial grain-warehouses, corn-elevators, and the 'palais royal,' with its gardens and park. Monuments to Count Worontsoff (1863), the Duke de Richelieu (1827)—both great benefactors of Odessa—and Pushkin (1889) adorn the city. Water is brought by aqueduct (27 miles long) from the Dniester. Numerous coast batteries have been built.

Odeypoor. See Udaipur.

Odiham, a market-town of Hampshire, 23 miles NE. of Winchester. Pop. of parish, 2667.

Oedenburg (*Ödenburg';* Hung. *Soprony;* the *Scarabantia* of the Romans), a town of Hungary, 3 miles W. of the Neusiedler See and 48 S. by E. of Vienna. It manufactures candied fruits, sugar, soap, &c. Pop. 33,320.

Œland, a Baltic island, 4 to 17 miles from the

east coast of Sweden. It is 55 miles long and 5 to 12 broad; pop. 30,400. Scarcely more than a limestone cliff, it is scantily covered with soil, but in some parts is well wooded.

Oels, a manufacturing town of Prussian Silesia, 16 miles ENE. of Breslau by rail. Pop. 10,876.

Œr'ebro, a town of Sweden, where the Svarta enters the Hjelmar Lake, 170 miles W. of Stockholm by rail, with an old castle. Pop. 14,893.

Oesel, a Baltic island belonging to Livonia, and lying across the mouth of the Gulf of Riga. It is 45 miles long from NE. to SW., and has an area of 1000 sq. m., with a pop. (chiefly Esthonian) of 56,600. The surface is broken by low hills, marshy, and well watered and wooded. The only town is Arensburg, on the south-east coast (pop. 4000). Long governed by the Teutonic Knights, Oesel became Danish in 1559, Swedish in 1645, and Russian in 1721.

Ofen. See PESTH.

Offa's Dyke, the ancient boundary between Mercia and Wales, extending from the mouth of the Dee to that of the Severn.

Offenbach, a manufacturing town of Hesse-Darmstadt, on the Main's south bank, 5 miles by electric railway SE. of Frankfort. Among its manifold industrial products are chemicals, fancy leather goods, machines, and carriages. Pop. (1831) 7802; (1875) 26,012; (1900) 50,468.

Ogasawara. See BONIN.

Ogden, capital of Weber county, Utah, is situated, at an elevation of 4340 feet, at the confluence of the Weber and Ogden rivers, where the former passes through the Wahsatch Mountains, 37 miles N. of Salt Lake City. A great railway junction, it has a Methodist university (founded 1890), a foundry and mills, breweries, and manufactories of woollens, brooms, boots and shoes, &c. Pop. (1880) 6069; (1900) 16,313.

Ogdensburg, a port of New York, on the St Lawrence, at the mouth of the Oswegatchie, opposite Prescott, Canada, and 515 miles by rail NNW. of New York City. It has a Catholic cathedral, a large lake and river trade, a huge grain-elevator, and manufactories of flour, lumber, and leather. Pop. 12,662.

Ogowé, or **Ogoway**, a river of West Africa, rises on the west side of the watershed that parts its basin from that of the Congo, in 2° 40′ S. lat., 14° 30′ E. long., and flowing north-west and west, finally curves round by the south to Nazareth Bay, on the north side of Cape Lopez. It forms a wide delta of some 70 sq. m. in extent. During July–September it shrinks to a narrow current; at other times it is a deep, broad stream; but numerous islands and sandbanks and shallows prevent vessels of any size from ascending. It has been dominated by France, through her colony on the Gaboon (q.v.), since 1885.

Ohi'o, next to the Missouri the largest affluent of the Mississippi, is formed by the union of the Alleghany and Monongahela at Pittsburgh, Pennsylvania, and flows west-south-west 975 miles, with a breadth of 400 to 1400 yards. In its course it separates the northern states of Ohio, Indiana, and Illinois from the southern states of West Virginia and Kentucky. Towns on its banks are Pittsburgh, Wheeling, Cincinnati, Louisville (where there are rapids of 22 feet in a mile, with a steamboat canal), Evansville, New Albany, Madison, Portsmouth, Covington, and Cairo. The chief affluents are the Tennessee, Cumberland, Wabash, Kentucky, Great Kanawha, Green, Muskingum, and Scioto. It is usually navigable from Pittsburgh; in 1884 it rose 71 feet.

Ohio, the fourth in population of the states of the American Union, lies between Lake Erie and the Ohio River. It stretches from north to south 210 miles, and from east to west 220 miles; area, 39,964 sq. m., equal to that of Ireland and Wales. The country is an extensive, moderately undulating plain; in many places streams have forced a way through bold cliffs of sandstone. A low ridge enters the state near the north-east corner and crosses it in a south-westerly direction; this 'divide' (1300 feet above sea-level) separates the waters of Lake Erie and the Ohio River. North of this ridge the surface of the country gently declines toward the lake. The central part of Ohio is almost a level plain, about 1000 feet above the sea, slightly inclining southward. The southern part is somewhat hilly, the valleys growing deeper as they approach the Ohio River, whose tributaries here water many extensive and fertile valleys. The coalfields cover over 12,000 sq. m.; and immense deposits of limestone, freestone, and mill-stones abound. In no other state have been found so many evidences of man's antiquity exemplified in implements of stone, bone, copper, and clay; while the most extensive and elaborate systems of earthworks in America are at Newark, near Chillicothe, and on the Miami bluffs near Waynesville. Ohio is one of the chief manufacturing states in the Union, leading all others in the manufacture of farm machinery, carriages and wagons, woollen and cotton goods, furniture, and wine and spirits. It has also great rolling-mills and iron-factories, glass-factories, potteries, and oil-works. In agriculture the state is first in the Union in many regards; its annual production of maize is some 155,000,000 bushels, of wheat 40,000,000, of wool about 15,000,000 lb. Cattle and hogs are reared in large numbers. In the southern sections cattle may be left in the fields all winter. The belt adjoining Lake Erie is famous for its fruit; excellent melons are grown in almost all parts of the state. The oil-fields and stores of natural gas are sources of wealth.

Ohio is part of the original North-west Territory, claimed mostly by Virginia under charters from English kings. In 1787 the Ohio Company of Associates was organised by soldiers of the revolution war, and under their auspices a large tract of land was purchased from government. In 1788 Marietta and Cincinnati were founded. In 1791 the Indians became troublesome, and in 1794 a signal victory was gained over them by General Wayne. Soon after settlers occupied rapidly the land, and Chillicothe was made the seat of government. In 1803 Ohio was admitted into the Union. Ohio has given birth to four presidents—Grant, Hayes, Garfield, and Benjamin Harrison. The largest cities are Cincinnati, Cleveland, Columbus (the capital), Toledo, Dayton, Youngstown, and Springfield. Pop. (1816) 230,760; (1850) 1,980,329; (1870) 2,665,260; (1880) 3,198,062; (1900) 4,157,545.

Ohlau (*Oa-low'*), a town of Prussian Silesia, 20 miles SE. of Breslau, on the Oder. Pop. 9575.

Oich, a loch of Inverness-shire, measuring 4 miles by ¼ mile, 105 feet above the sea, at the summit-level of the Caledonian Canal (q.v.). It sends off the Oich, 6¾ miles NNE. to Loch Ness.

Oikell, a Sutherland stream, running 35 miles SSW. and E. by S. to the Dornoch Firth.

Oil City, Pennsylvania, on the Alleghany River,

133 miles by rail N. by E. of Pittsburgh, is a great oil market, and contains, besides oil-refineries, engine and boiler factories, and a large cooperage. There were fearful inundations here in June 1892. Pop. (1870) 2276; (1900) 13,264.

Oil Rivers. See NIGER.

Oise (*Wáz*), a dep. in the north of France, separated from the English Channel by Seine-Inférieure; area, 2261 sq. m.; pop. (1881) 404,555; (1901) 405,642. The rivers are the Oise, a tributary of the Seine, 150 miles long, with its affluents the Aisne and Therain. The arrondissements are those of Beauvais (the capital), Clermont, Compiègne, Senlis.

Oka, a navigable river of central Russia, the Volga's chief affluent from the south, rises in Orel, and flows 706 miles NE. to the Volga at Nijni-Novgorod. Towns on its banks are Orel, Bielev, Kaluga, Riazan, and Murom; affluents are the Moskwa, Kliasma, and Tzna.

Okavango. See NGAMI.

Okeechobee, a lake of Florida (q.v.).

Okehampton, a Devon market-town, 26 miles W. by N. of Exeter. It returned two members till 1832. Pop. 2600.

Okhotsk, SEA OF, an inlet of the North Pacific Ocean, on the east coast of Siberia, nearly enclosed by Kamchatka and the Kuriles and Saghalien. On its north shore, at the mouth of the Okhota, is the seaport of Okhotsk (pop. 300).

Oklaho'ma, between Texas and Kansas, was organised in 1890 as a territory, and in 1906, absorbing the Indian Territory, became a state. In 1890 it consisted of two detached sections separated by the Cherokee Outlet, which, sold by the Indians in 1893, was then incorporated with the territory. The Public Land Strip situated N. of the Texas 'pan-handle' and S. of the parallel 37° N., ceded to the United States by Texas at its annexation, was not included in any state or territory until its incorporation in Oklahoma, and was known as No Man's Land. The area is 39,030 sq. m. Pop. (1890) 78,475; (1900) 398,331, including 18,831 negroes and 11,945 Indians. The surface, which rises gradually toward the north and west, is for the most part an upland prairie. The most important elevations are the Wichita Mountains in the south. Oklahoma is fairly well watered by the Red and Arkansas rivers and their affluents, but many of the streams are brackish, and so saturated with alkaline salts as to be at times unfit for drinking purposes or for irrigation. The rainfall is much lighter and also less uniform than in Indian Territory. In the river-valleys and in some of the upland regions there are fertile and productive spots. The Public Land Strip has an arid and unproductive soil covered here and there with a sparse growth of cactus, yucca, and sage-brush. The climate is subject to sudden changes produced by 'northers.' In 1886 the tribes to whom the lands of Indian Territory had been granted ceded the western portion of their domain to the United States. Notwithstanding the stipulation that it should be used only for settlement by other Indian tribes or freedmen, western speculators claimed that the lands were the property of the government, and open, like other public lands, for settlement under the Homestead laws. In 1879 an organised effort was made to take forcible possession of the lands, but the adventurers from Texas, Kansas, and Missouri were finally ejected by United States troops. After many difficulties from the renewed invasions of the 'boomers,' negotiations with the Indians were renewed, as a result of which, upon the receipt of an additional sum, the Indians waived all claims. This unoccupied area was opened for public settlement on April 22, 1889. No one was allowed to enter the borders until noon, but by twilight the population had increased by at least 50,000. Claims were selected, town sites staked out, and portable houses erected before nightfall. The territory was organised in 1890, and was, with the Indian Territory added, made a state in 1906. Chief centres of population are Oklahoma (11,000), Guthrie (10,000), East Guthrie, and Kingfisher.

Old'bury, a busy manufacturing town of Worcestershire, 5½ miles WNW. of Birmingham, stands in a rich mineral district, and has iron and steel works, factories for railway plant, edge-tools, chemicals, &c. Pop. (1851) 11,741; (1901) 25,191.

Oldcastle, a Meath market-town, 72 miles NW. of Dublin. Pop. 745.

Oldenburg (*Ol-den-boorg*), a grand-duchy of northern Germany, consisting of three distinct territories—Oldenburg Proper, the principality of Lübeck, and Birkenfeld. Total area, 2508 sq. m. (less than Devonshire); pop. (1900) 398,499. Oldenburg Proper, which comprises ⅞ths of this area, is bounded by the German Ocean and Hanover. The principal rivers are the Wesor, the Jahde, and various tributaries of the Ems. The country is flat, part of the great sandy plain of northern Germany, and mainly moors, heaths, marsh or fens, and sandy tracts. The principality of Lübeck, consisting of the secularised bishopric of the same name, does not contain the city (north of which it lies), and is surrounded by Holstein. Its area is 209 sq. m. The principality of Birkenfeld (q.v.) lies among the Hundsrück Mountains, in the very south of Rhenish Prussia; its area is 192 sq. m. Oldenburg became an independent state in 1180. The family that then established its power has continued to rule to the present day, giving, moreover, new dynasties to Denmark, Russia, and Sweden. Danish from 1667 to 1773, Oldenburg acquired the Lübeck territories in 1803, and Birkenfeld at the Congress of Vienna, when it became a grand-duchy.

The capital, OLDENBURG, is pleasantly situated on the Hunte, 30 miles WNW. of Bremen by rail. It has the grand-ducal palace, with fine gardens and art collections, a public library of 100,000 volumes, a picture-gallery, museum, &c. Oldenburg is the seat of an active river-trade, and is noted for its great cattle and horse fairs. Pop. 28,000.

Oldham, a parliamentary, municipal, and county borough of Lancashire, on the Medlock, 7 miles NE. of Manchester, 5 SSE. of Rochdale, and 38 ENE. of Liverpool. It has grown since 1760 from a small village, through its proximity to the Lancashire coalfields and the extension of its cotton manufactures. It has nearly 300 mills, with more than 12 million spindles, which consume one-fifth of the total British imports of cotton; and the other manufactures include fustians, velvets, silks, hats (once a leading industry), cords, &c., besides huge weaving-machine works, one employing 7000 hands. The town-hall (1841) is a good Grecian edifice, enlarged in 1879 at a cost of £29,000; and there are the lyceum (1854–80), a school of science and art (1865), public baths (1854), an infirmary (1870–77), and the Alexandra Park of 72 acres (1865). Oldham received its charter in 1849. It was enfranchised by the Reform Bill of 1832, and returns two members, the parl. borough (which

extends into Ashton-under-Lyne parish) covering 19¼ sq. m., the municipal only 7⅞. Pop. of the former (1891) 183,871; of the latter (1801) 12,024; (1841) 42,595; (1881) 111,343; (1901) 137,238.

Old Point Comfort, a village and watering-place of Virginia, at the mouth of James River, on Hampton Roads, is the site of Fortress Monroe.

Old Sarum. See SARUM.

Oléron (*Olayron'*), a fertile island 2 to 10 miles off the west coast of France, and part of the dep. Charente-Inférieure. It is 19 miles long by 5 broad. Pop. 17,020, mostly Protestants.

Olifant River, a forked stream of Cape Colony, rises in the mountains north-east of Capetown, and flows 150 miles NW. to the Atlantic.—Another stream of the same name rises in the Transvaal, and goes east to the Limpopo.

Olinda, a city of Brazil, 4 miles NE. of Pernambuco. Pop. 8000.

Olivenza, a fortified Spanish town, 20 miles SSW. of Badajoz. Pop. 8934.

Olives, MOUNT OF, OR MOUNT OLIVET, a limestone ridge E. of Jerusalem, from which it is separated by the narrow Valley of Jehosaphat. The modern Jebel-al-Tôr, it took its familiar name from a once magnificent grove of olive-trees on its western flank.

Ollerton, a town of Notts, on the Maun and near Sherwood Forest, 8½ miles NE. of Mansfield. Pop. 690.

Olmütz, a town of Moravia, Austria, on the March, 129 miles NNE. of Vienna. The country round can be laid under water, and during 1839–75 the old walls and moats were superseded by an outer cordon of forts. Chief buildings are the 14th-century cathedral (restored 1887); the church of St Maurice (1472), whose organ has 48 stops and 2342 pipes; the noble town-hall, with a steeple 255 feet high; the archiepiscopal palace; and the lofty Trinity column on the Oberring. The university (1581–1855) is reduced to a theological faculty, with 200 students and a library of 75,000 volumes. Pop. 22,176. Olmütz, which in 1640 was superseded by Brünn as capital of Moravia, suffered severely in both the Thirty and the Seven Years' Wars.

Olney, a pleasant little town of Buckinghamshire, on the Ouse, 11 miles W. by N. of Bedford and 10 SE. of Northampton. At the corner of the market-place still stands the house where Cowper lived from 1767 to 1786, writing with John Newton the *Olney Hymns* (1779). The place has memories of Scott the commentator, of Carey, and many more missionaries. Brewing and bootmaking are industries. Pop. 2349. See Thomas Wright's *Town of Cowper* (1886).

Olonetz', a government of Russia, bounded by Finland, Archangel, Novgorod, and St Petersburg. Area, 57,422 sq. m.; population, 370,000. Petrosavodsk is the capital.

Oloron (*Oloron'*), a town in the French dep. of Basses-Pyrénées, on the Gave d'Oloron, 22 miles by rail SW. of Pau. Pop. 7266.

Olten, a Swiss town, on the Aar, 23 miles SE. of Basel. Pop. 6980.

Olympia, scene of the Olympic games, was a beautiful valley of Elis, in the Peloponnesus, watered by the Alpheus. Great excavations have been carried out by the Germans since 1875.

Olympia, capital of Washington state, on a peninsula at the south end of Puget's Sound, 65 miles from the Pacific Ocean, and 121 by rail N. of Portland, Oregon. Pop. 4098.

Omagh (*O'ma* or *O-ma'*; Gael. *Oigh magh*, 'seat of the chiefs'), county town of Tyrone, on the Strule, 34 miles S. of Londonderry and 110 NNW. of Dublin. It grew up around an abbey founded in 792. On its evacuation by the troops of James II. in 1689 it was partially burned, and a second fire in 1743 completed its destruction. But it was well rebuilt. Pop. 4790.

O'maha, the chief city of Nebraska, is on the right bank of the Missouri, by rail 495 miles W. of Chicago and 501 NW. of St Louis. It is the terminus of four important railways, and the Missouri is spanned by a bridge (2750 feet, cost $1,250,000) to Council Bluffs, where a number of others (including the Union Pacific) start. The city is built on a plateau 80 feet above the river, and has wide streets and street railways. Among the large buildings are the city-hall, U. S. court-house and post-office, Chamber of Commerce (1885), Exposition (1886), Creighton College, the high school, &c. The manufactures comprise linseed-oil, boilers, safes, &c.; but Omaha, founded in 1854, became famous for the largest silver-smelting works in the world, and the third largest pork-packing business in the States. Near it are the headquarters of the military department of the Platte. Pop. (1860) 1912; (1870) 16,083; (1880) 30,518; (1900) 102,555.

Oman', the most eastern portion of Arabia, a strip of maritime territory, extending between the Strait of Ormuz and Ras-el-Had, and bounded on the SW. by the deserts of the interior. At a distance of from 20 to 45 miles inland a chain of mountains runs parallel to the coast, reaching 6000 feet in Jebel Akhdar. There are some richly fertile tracts in this region, which is under the rule of the sultan of Muscat.

Omdurman (*Om-door'man*), a town of the eastern Soudan, on the Nile, opposite Khartoum (q.v.), which, as the headquarters of Mahdism, for a time it superseded.

Omsk, chief town of the Siberian province of Akmolinsk, at the Om's confluence with the Irtish, 1800 miles E. of Moscow, with a military academy, Greek and R. C. cathedrals, museum, governor's palace, &c. Pop. 44,721.

One'ga, a seaport in the north of Russia, at the Onega's mouth in the White Sea, 87 miles SW. of Archangel. Pop. 2547.

Onega, LAKE, in the north of Russia (after Ladoga, to which it sends off the Swir southwestward, the largest lake in Europe), is 146 miles long, 50 in greatest breadth, 3764 sq. m. in area, and 1000 feet deep. The northern end is studded with islands and deeply indented with bays. The shores in other parts are flat. Ice-bound generally for five months, the lake is the scene of busy traffic at other seasons. Fish abound. Surveys were completed in 1890 for a canal to connect Lake Onega with the White Sea, and to be 145 miles long, 10 feet deep, and 63 wide, mostly along natural water-ways.

Oneglia (*O-nel'ya*), a town on the Gulf of Genoa, 3 miles NE. of Porto Maurizio by rail. Pop. 8286.

Oneida (*Oni'da*), a manufacturing post-village of New York, on the Oneida Creek, 58 miles SE. of Oswego; pop. 6383. Four miles S. was the Oneida Community, long the headquarters of the Perfectionists.

Ongar, or CHIPPING-ONGAR, a town of Essex, 6 miles E. by N. of Epping, and 23½ NE. of London. It has memories of the Taylor family. Pop. of parish, 970.

Onta'rio, the easternmost and smallest (7240 sq. m.) of the five great lakes of North America, receives at its south-west corner the waters of the upper lakes by the Niagara River, and at its north-east corner issues into the St Lawrence. Its surface, which is subject to periodical variations of about 3½ feet, is 326$\frac{3}{10}$ feet below the surface of Lake Erie and 246$\frac{7}{10}$ feet above the ocean-level. Its mean depth is about 300, its maximum depth 738 feet. It is 190 miles long, 55 in its widest part, and over 500 in circumference. Ports are Kingston, Coburg, Port Hope, Toronto, and Hamilton on the Canadian shore, and Sackett's Harbor, Oswego, and Charlotte in the United States. Lake Ontario is connected with Lake Erie by the Welland Canal, with the Erie Canal and river Hudson by the Oswego Canal, and by the Rideau Canal with the Ottawa; and in 1890 a ship-railway (69 miles) was projected, to connect it with Lake Huron. The lake is subject to violent storms, and it is probably owing chiefly to the constant agitation of its waters that it freezes only for a few miles from the shore. The shores are generally very flat, but the Bay of Quinte, near Kingston, a crooked arm of the lake, 50 miles long, possesses attractive scenery. Burlington Bay, on which Hamilton lies, is a large basin almost enclosed by a fine natural bank of sand. The name is Indian.

Onta'rio, the most populous and wealthy province of Canada, is bounded by James Bay, Labrador, Quebec, the St Lawrence and the Great Lakes (separating it from the United States), Manitoba, and Keewatin. Area, 222,000 sq. m.; pop. (1901) 2,182,947. The surface is generally undulating; for the Laurentian Hills, see CANADA, p. 148. The principal rivers are tributaries of the Ottawa, which forms part of the NW. boundary. Among smaller lakes are Simcoe, Nipissing, and Nipigon. Immense crops are raised of all the products of a temperate climate, and in the south-west corner of the province Indian corn is a regular crop, and grapes, peaches, and tomatoes ripen in the open air. Stock-raising, dairy-farming, and fruit-growing are important industries. Iron is found in many parts; copper, lead, plumbago, apatite, antimony, arsenic, gypsum, marble, and building-stone are abundant; there are also gold and silver. The nickel deposits at Sudbury are probably the most extensive in the world. Petroleum wells in the SW., and salt wells near Lake Huron are very productive. The principal manufactures are agricultural implements, iron and woodware, wagons and carriages, railway rolling-stock (including locomotives), cottons and woollens, leather, furniture, flax, hardware, paper, soap, woodenware, &c. The most thickly populated part of Ontario more nearly resembles England than any of the other colonies. There is only one large city, Toronto (208,000); but smaller cities and towns (including Hamilton, Ottawa, and London, between 60,000 and 39,000) are scattered all over the province. Ontario has a perfect network of railways (between 6000 and 7000 miles). Water-ways and water-power are exceptionally developed. The exports are, in order of value, agricultural products, animals and their produce, manufactures, lumber, and minerals. The public affairs are administered by a lieutenant-governor and a legislative assembly. Methodists are the most numerous religious body, followed by Presbyterians and the Church of England. Ontario, long known as Upper Canada, was largely founded by immigration of loyalists from the United States after the revolutionary war. See CANADA.

Oodeypore. See UDAIPUR.

Oojein. See UJJAIN.

Ookiep (*O-keep*), a copper-mining station in the north-west of Cape Colony, 90 miles SE. of Port Nolloth by rail.

Oori. See LIMPOPO.

Oosterhout, a Dutch town in North Brabant, 6 miles NE. of Breda. Pop. 11,911.

Ootacamund', or UTAKAMAND, the chief town in the Neilgherry Hills, the principal sanatorium of the Madras Presidency. It stands on a hill-girt plateau, 7228 feet above the sea, 350 miles WSW. of Madras city, and 24 from the nearest railway station on the Madras line. There are a public library (1859), the Lawrence Asylum (1858) for the children of British soldiers, and botanic gardens. The mean annual temperature is 58° F. The first house was built in 1821. Pop. 15,335.

Ophir, the region to which Solomon's ships traded, has been identified with the east coast of Africa near Sofala, the south of Arabia, and the west coast of India, as well as other less likely countries (see ZIMBABYE). The name has been given to a mountain of Sumatra, near the equator (9600 feet); and to one 45 miles NE. of the town of Malacca (5700 feet).

Openshaw, a SE. suburb of Manchester.

Oporto (Port. *O porto*, 'the port'), the second city of Portugal, stands high on the steep, rocky, right bank of the Douro, which reaches the sea 3 miles W. One of the crags overlooking the river is crowned with a Crystal Palace (1865). Many of the former monasteries are put to other uses: one is a citadel, another the exchange, a third barracks. There are seven principal churches, including the cathedral (built by Henry the Navigator), the old Gothic church of Cedofeita (originally founded in 559), and the Church dos Clerigos, with a tower 213 feet high. The English factory (1785), the bishop's palace, and the hospital of St Antony are noticeable secular buildings. Oporto possesses a polytechnic academy, a medical school, art academy, commercial museum, library (1796) of 200,000 vols. and 9400 MSS., and two picture-galleries. On the south side of the river, connected with Oporto by a lofty bridge, is the suburb of Villa Nova de Gaia, with a pop. of 9126, and extensive wine-cellars. The railway to Lisbon (209 miles) crosses the river a little higher up, on a fine steel bridge; the arch spans 549 feet, and its centre is 203 feet above the river. The pop. of Oporto is about 175,000. They are chiefly engaged in the manufacture of cloth and silks, hats, porcelain, ribbons, tobacco, soap, and candles, in metal-casting, tanning, brewing, distilling, cork-cutting, sugar-refining, and brick-making, and in commerce and shipping. Oporto is the principal place of export for port wine; other exports are cattle, oranges and other fruits, cork, copper, onions, meat, hides, and wool. The imports consist chiefly of corn and flour, cod-fish, metals, machinery, textiles, rice, raw sugar, hides, coal, and timber. Originally the *Portus Cale* of the Romans (whence 'Portugal'), this city was long a stronghold of the Christians against the Moors. In 1808 the inhabitants were especially hostile to the French; and they stoutly opposed the usurper Miguel (1828).

Opoteca (*Opotay'ca*), a town of 1000 inhabitants, in Honduras, 15 miles NNW. of Comayagua, once famous for its great silver-mines.

Oppeln, a town of Prussian Silesia, on the Oder, 51 miles SE. of Breslau. Its church of St

Adalbert was founded in 995; and there is an old castle on an island in the river. The manufactures include pottery, cigars, cement, beer, leather, &c. Pop. 30,120.

Oppenheim (*Op'penhime*), a town of Hesse-Darmstadt, on the Rhine's left bank, 20 miles SSE. of Mainz by rail. Pop. 3452.

Oran (*Orân'*; Arab. *Waran*), a seaport of Algeria, on the Gulf of Oran, 261 miles by rail W. by S. of Algiers and 130 by sea S. of Cartagena in Spain. It climbs up the foot of a hill, has a thoroughly French appearance, and possesses a Roman Catholic cathedral (1839), a grand mosque, a college, a seminary, and two citadels or castles. The harbour is protected by moles constructed in 1887 at a cost of £280,000; alfa, iron ore, and cereals are exported. The population is about 90,000. Oran was built by the Moors. In the 15th century it was a prosperous commercial town, but was taken by the Spaniards in 1509 and made a penal settlement. Taken and retaken by Turks and Spaniards, it was finally annexed by the French in 1831.—The *province* has an area of 33,236 sq. m.; pop. 1,150,000.

Orange, or Gariep (*Gareep'*), the largest river of South Africa, rises in the Kathlamba Mountains, in the east of Basutoland, and winds 1000 miles W. by N. to the Atlantic. It separates Cape Colony, on the south, from the Orange Free State, Griqualand West, Bechuanaland, and German Namaland. Its principal tributaries are the Caledon and the Vaal. Its volume varies greatly between the dry season, when it is not navigable, and the rainy season, when it overflows its banks. Its mouth is obstructed by a bar.

Orange (Fr. pron. *Oronᵍzh'*), a town in the French dep. of Vaucluse, on the Aigue's left bank, 18 miles by rail N. of Avignon. The *Arausio* of the Romans, which contained 40,000 inhabitants, it has splendid Roman remains—a triumphal arch, 72 feet high, and a theatre whose façade was 340 feet long by 118 high. There are a Romanesque cathedral and statues of two of the counts. Pop. 9804. Orange was the capital of a small independent principality, which was ruled by its own sovereigns from the 11th century to 1531, when it passed to the Counts of Nassau, and so was associated with the fortunes of Holland; becoming finally French in 1713.

Orange, a city of New Jersey, 12 miles W. of New York by rail, and 3 miles by tram-car from Newark. The slope of Orange Mountain is laid out in beautiful parks, with villas. There are manufactures of hats, carriages, &c. Pop. 25,000.

Orange River Colony, a British crown colony in South Africa, lying between the Vaal and Orange rivers, and surrounded by Cape Colony, the Transvaal Colony, Natal, and Basutoland. This region is a plateau, rising 3000 to 5000 feet above sea-level, with very little wood, except alongside the numerous watercourses that traverse it. Its vast undulating plains slope down to the Vaal and the Orange, and are dotted over with isolated hills called 'kopjes'—magnificent pasture-land. Area, 50,100 sq. m.; pop. (1880) 133,518; (1904) 385,045—143,419 being whites, mainly of the Dutch Reformed Church. Pastoral pursuits predominate—the rearing of merino sheep, cattle, horses, goats, and ostriches. Corn (wheat, maize, Kaffir corn) is grown chiefly in the east. Coal is mined in the north and diamonds in the south-west, towards Kimberley. The climate is healthy and temperate. The administration is carried on by a lieutenant-governor with executive and legislative councils. The revenue in 1904 was £1,139,576, and the expenditure £929,681. Bloemfontein (q.v.), the capital, is connected by railway with both the Cape and Johannesburg. The exports include wool, diamonds, hides, ostrich-feathers, &c. When the Dutch Boers left the Cape Colony (1836) and occupied this country, it was inhabited by Bushmen, Bechuanas, and Korannas. The Cape government appointed a resident in the republic in 1845, and three years later it was annexed by Britain; in 1854 it was given up to the Boers, who established a republic (Orange Free State); but in consequence of its joining the Transvaal in the Boer war (1899–1902), it was finally annexed by Britain as a crown colony. See books named at Cape Colony.

Oranienbaum, a palace and small town (pop. 5500) of Russia, opposite Cronstadt (q.v.).

Orchom'enos, an ancient city of Bœotia, capital of the kingdom of the Minyæ, was situated at the NW. corner of Lake Copaïs, where it was joined by the Cephissus. In 1880 Schliemann excavated an old 'treasury.'—A second Orchomenos, in Arcadia, lay NNW. of Mantinea.

Or'egon, one of the Pacific states of the American Union, bounded by Washington, Idaho, California, and Nevada. Area, 96,030 sq. m., or almost twice that of England. Oregon on the west is literally rock-bound by the Coast Range of mountains, having, however, numerous indentations, which furnish good harbours. The Columbia River, which bounds the state on the north, affords the largest and deepest entrance. Seventy miles east of the Coast Range is the Cascade Range, rising to 6000 to 8000 feet, and surmounted by snow-capped peaks of nearly double that altitude. From the Cascade Range eastward to the Blue Mountains, about 70 miles, and farther on to the eastern boundary the surface is diversified by mountains and valleys, rolling plains, and tablelands. Here the soil and climate are suitable for agriculture and grazing. In Western Oregon, between the Coast and Cascade ranges, is the Willamette valley, 130 miles long and 60 wide, every foot of which is arable—adapted to grain and fruit. The climate is mild, in spite of the northerly situation, owing to the Japanese oceanic current and the shelter of the mountain-ranges. On the coast there is fog in summer and excessive rain in winter; in the Willamette valley the summers are pleasant, the winters wet; in Eastern Oregon there is a good deal of snow in winter. The grain-crops are wheat, oats, barley, rye, and maize. Flax-seed, hay, potatoes, tobacco, and hops are also raised. Great quantities of butter and cheese, and of fruit, both green and dried (prunes, apples, pears, peaches, grapes, and cherries), are annually shipped. The wealth of Oregon in timber is remarkable. Among the other industries are the tinning of salmon, the rearing of sheep, and mining. The minerals comprise coal, iron ore, gold, copper, nickel, quicksilver, fireclay, chrome, silver, manganese, zinc, lead, and platinum.

Oregon formerly included all the land between the Rocky Mountains and the Pacific Ocean north of 42° N. lat. John Jacob Astor established Astoria (q.v.) in 1811; in 1813 it was sold to the North-western Fur Company, and it afterwards passed to the Hudson Bay Company. There was joint occupation by Britain and the United States from 1818 until 1846, when the long dispute was compromised, the boundary line with British America being fixed at 49° N. lat. Oregon became

a territory in 1848, and, with reduced limits, a state in 1859. The principal cities are Portland (90,500), Astoria (8400), Baker City (6670), and Salem, the capital (5000). Pop. of the state (1860) 52,464; (1880) 174,768; (1900) 413,536.

Oregon River. See COLUMBIA.

Orel', a town of Russia, on the Oka, 222 miles by rail SSW. of Moscow, manufactures ropes, tallow, bricks, machinery, and verdigris. It was burned down in 1848 and 1858. Population, 70,000.—Area of the *government*, 18,036 sq. m.; pop. 2,075,000.

Orenburg (*O'ren-boorg*), a town of Russia, on the river Ural, by rail 727 miles ESE. of Moscow. Pop. 72,740.—The *government* has an area of 73,794 sq. m. and a pop. of 1,610,000.

Oren'se, capital of a Galician province of Spain (area, 2739 sq. m.; pop. 405,074), near the Portuguese frontier, on the Minho's left bank, 60 miles from its mouth. Pop. 15,440.

Orford, a Suffolk fishing-town on the Ore, 5 miles SSW. of Aldeburgh. It has a Norman keep, till 1832 returned two members, and was a municipal borough till 1887. Pop. of parish, 987. On the promontory of Orford Ness, 2½ miles ESE., are two lighthouses.

Orihuela (*Oreehooay'la*), a town in the Spanish province of Alicante, on the Segura, 38 miles N. of Cartagena. It has a cathedral and college, and manufactures silk, linen, hats, &c. Pop. 21,125.

Orino'co, one of the great rivers of South America, has its origin on the slopes of the Sierra Parima, in the extreme south-east of Venezuela. Flowing at first W. by N., a mountain-stream, it divides, a little below Esmeralda (65° 50′ W. long.), and sends off to the south an arm, the Cassiquiare, 180 miles to the Rio Negro, a tributary of the Amazon. The other branch on reaching San Fernando (68° 10′ long. and 4° 2′ N. lat.) is met by the strong current of the Guaviare; the united stream then turns due north, and, after passing over the magnificent cataracts of Maypures and Atures, and picking up the Meta and the Apure, turns east and traverses the llanos of Venezuela, its waters being here 4 miles broad. About 120 miles from the Atlantic, into which it rolls its milk-white flood, its delta (8500 sq. m.) begins. Of the numerous mouths seven are navigable. The waterway principally used by ocean-going vessels, which penetrate 240 miles up to Ciudad Bolivar (Angostura), is the Boca de Navios, 3¾ to 23 miles wide. The total length of the river is some 1550 miles, of which 900, up to the cataracts of Atures, are navigable, besides a farther stretch of 500 miles above the cataracts of Maypures. Most of the larger affluents are also navigable—the Meta, for instance, to within 60 miles of Bogotá in Colombia. See lives of Raleigh for his last voyage hither; and works by Humboldt, Bonpland, and Schomburgk.

Orissa, an ancient kingdom of India, extended from Bengal on the N. to the Godavari on the S. The present province is the extreme south-west portion of Bengal. Orissa was long a Buddhist stronghold; in 474 a new dynasty made it Brahmanical, and introduced the worship of Siva. Orissa ceased to be an independent state in 1568, being conquered for the Great Mogul. Its next masters were the Mahrattas, who seized it in 1742; but they were forced to surrender it to the English in 1803. The British commissionership has an area of 9853 sq. m. and a population of 4,350,500; the tributary states, a hilly country with dense jungle, lying between the low coast districts and the interior plateau, have an area of 14,387 sq. m. and a pop. of 1,996,710. All this region was visited by severe famine in 1868–69. The principal river is the Mahanadi, and the chief towns Cuttack, Balasor, and Puri. The irrigation of a large portion of Orissa is provided for by a costly system of canals.

Oriza'ba, a town of the Mexican state of Vera Cruz, 82 miles WSW. of Vera Cruz City, and 181 ESE. of Mexico, lies in a fertile garden country, 4030 feet above the sea. It has a cotton-factory, paper and corn mills, and railway-shops. Pop. 31,500.—The *volcano* of Orizaba, 25 miles to the north, is a noble pyramid of 18,205 feet. Its last severe eruption was in 1566.

Orkney Islands, a group of ninety Scotch islands, islets, and skerries, of which only twenty-nine are inhabited, and which have an aggregate area of 376 sq. m., the largest being Pomona or Mainland (207 sq. m.), Hoy (53), Sanday (26), Westray, South Ronaldshay, Rousay, Stronsay, Eday, Shapinshay, Burray, Flotta, &c. They extend 50 miles north-north-eastward, and are separated from Caithness by the Pentland Firth, 6½ miles wide at the narrowest. With the exception only of Hoy (q.v.), which has fine cliffs, and in the Ward Hill attains 1564 feet, the scenery is generally tame, the surface low and treeless, with many fresh-water lochs. The area under cultivation has more than doubled since 1850, but is still less than one-half of the total area. The live-stock during the same period has trebled. The holdings are small—16½ acres on an average; and agriculture and fishing are the principal industries. Kirkwall and Stromness, the only towns, are noticed separately, as also are the standing-stones of Stennis and the tumulus of Maeshowe. Orkney unites with Shetland to return one member to parliament, but it was dissevered therefrom as a county by the Local Government (Scotland) Act, 1889. Pop. (1801) 24,445; (1861) 32,395; (1901) 28,699. The Orkneys (Ptolemy's *Orcades*) were gradually wrested by Norse rovers from their Pictish inhabitants; and in 875 Harold Haarfager conquered both them and the Hebrides. They continued subject to the Scandinavian crown—under Norse jarls till 1231, and afterwards under the Earls of Angus and Stratherne and the Sinclairs—till in 1468 they were given to James III. of Scotland as a security for the dowry of his wife, Margaret of Denmark. They were never redeemed; and in 1590, on James VI.'s marriage with the Danish princess Anne, Denmark formally resigned all claims to the Orkneys. The landed proprietors are chiefly of Scotch descent, the islanders generally of mixed Scandinavian and Scotch origin. See Tudor's *Orkneys and Shetland* (1883).

Orleans (*Or'leens* or *Or'le-anz;* Fr. pron. *Or-lay-on^{g}*), a city of France, the capital now of the dep. of Loiret, and formerly of the old province of Orléannais, which comprised most of the present deps. of Loiret, Eure-et-Loir, and Loir-et-Cher, with portions of four others. It stands in a fertile plain on the right bank of the Loire, here crossed by a nine-arched bridge (1760), 364 yards long, and by rail is 75 miles SSW. of Paris. The walls and gates have given place since 1820 to handsome boulevards, but the town as a whole wears a lifeless appearance. There are the cathedral, destroyed by the Huguenots in 1567, and rebuilt from 1601 onwards; the *Mairie* (1530); and the 15th-century *Musée* (till 1853 the hôtel-de-ville); besides the house of Agnes Sorel, Diane de Poitiers, and Joan of Arc, of whom there

are three statues. The commerce is far more important than the industries (of which the chief is market-gardening). Pop. (1872) 48,976; (1901) 59,568. The Celtic *Genabum*, Orleans about 272 A.D. was renamed *Civitas Aureliani*, of which the present name is a corruption. It was besieged by Attila in 451, and twice plundered by the Northmen (855 and 865). In 1428–29 it was besieged by the English, but was delivered by Joan of Arc, the Maid of Orleans. It suffered much in the Huguenot wars, and was occupied by the Germans Oct. 11 to Nov. 9, 1870, and then became the headquarters of the Army of the Loire until its crushing defeat on Dec. 3–5.

Orme's Head, GREAT. See LLANDUDNO.

Or'miston, a Haddingtonshire village, on the Tyne, 12 miles ESE. of Edinburgh. Moffat, the missionary, was born here.

Ormskirk, a town of Lancashire, 12 miles NNE. of Liverpool. It has a grammar-school (1612); a church, with a spire and the burial-vault of the Earls of Derby; and manufactures of cordage, iron, silk, cotton, &c. Pop. 6898.

Or'muz, or HORMUZ, a ruined town on the island of Jerun (12 miles in circuit), in the strait of Ormuz, at the entrance of the Persian Gulf, 4 miles S. of the Persian coast. About 300 B.C. there existed on the mainland, 12 miles E., a city Ormuz; this in the 13th century was the headquarters of the Persian trade with India. But about 1300 its ruler transferred his people to the site of the present town, to escape the Mongols. The new city maintained its commercial supremacy even after Albuquerque's capture of it in 1507. It was taken from the Portuguese in 1622 by an English fleet, and given to Shah Abbas of Persia, who transferred the trade to his port of Gombroon, 12 miles north-west on the mainland. The Portuguese castle still stands.

Orne (*Orn*), a French dep. formed out of the provinces of Normandy, Alençon, and Perche. Area, 2353 sq. m.; pop. (1861) 423,350; (1901) 326,952. Its arrondissements are Alençon (the capital), Argentan, Domfront, and Mortagne.

Orontes (*Oron'tees*), the ancient name of a river in Syria, now called *Nahr-el-Asi*. It rises in the highest part of Cœle-Syria, near Baalbek, and flows 147 miles N. and W. past Antioch to the Mediterranean. Its lower course is remarkably beautiful, the rocky banks rising 300 feet.

Orota'va (*a* as *ah*), a town on the north coast of Teneriffe, one of the Canaries. Pop. 9293.

Orpington, a village of Kent, 12 miles by rail SE. of London, where Ruskin's books began to be published in 1873 (see E. T. Cook's *Studies in Ruskin*, 1890). Pop. of parish, 4299.

Orrell, a town of Lancashire, 3 miles W. of Wigan. Pop. 5440.

Or'sova, the name of two towns on the Danube at the Iron Gates. OLD ORSOVA, a Hungarian place, is 478 miles by rail SE. of Vienna, and is a station for the Danube steamers. Pop. 5381.—NEW ORSOVA, on the Servian side, is a fortified town held by Austria (since 1878).

Ortegal', CAPE, the north-west extremity of Spain (q.v.), in Galicia.

Orthez (*Or-tay*), a town in the French dep. of Basses-Pyrénées, on the Gave de Pau, 41 miles by rail E. of Bayonne. The 'Tour de Moncade' (1240), the stately castle of the Counts of Foix, which Froissart visited in 1388, was reduced to a ruin by Richelieu. Near Orthez Wellington defeated Soult, 27th February 1814. Pop. 6374.

Ortler Spitz, highest (12,874 feet) of the Rhætian Alps, in Tyrol, close to the Swiss frontier.

Orton, a Westmorland market-town, 8 miles SW. of Appleby. Pop. of parish, 830.

Orto'na, a town of Italy, on the Adriatic, 104 miles by rail SSE. of Ancona. It has a cathedral and a recently improved harbour. Pop. 15,000.

Oru'ro, capital of the Bolivian dep. of Ororo, and sometimes of the republic, stands 11,960 feet above the sea, near the salt lake of Aullagas, and possesses mines of silver, gold, and tin. Founded in 1590, it had 70,000 inhabitants in the 17th century, but now has 15,500.

Orvieto (*Or-vee-eh'to*), a city in the Italian province of Perugia, 78 miles NNW. of Rome, crowns an isolated tufa rock, which rises 765 feet above the river Paglia, and 1327 above sea-level. The cruciform cathedral (1290–1580), one of the most beautiful specimens of Italian Gothic, is built of black and white marble, and measures 295 feet by 109. The façade is unsurpassed for its mosaics, sculptures, and elaborate ornamentation. The interior also is magnificently decorated with sculptures and with paintings by Luca Signorelli, Fra Angelico, &c. The bishop's palace and St Patrick's Well (1527; disused), with its 250 steps, are also noteworthy. Pop. 18,500. Orvieto, called in the 7th c. A.D. *Urbs Vetus*—whence its present name—has by some been supposed to occupy the site of the Etruscan Volsinii. In the middle ages it gave shelter to thirty-two popes in times of trouble.

Orwell. See IPSWICH.

Osa'ka, or OZAKA, an important city of central Japan, situated at the head of the gulf of the same name, and at the mouth of the Yodo River, which issues from Lake Biwa. Its fine castle, the stones of whose walls are of astonishing size, was constructed in 1583, and the palace, built in its precincts and destroyed in 1868, was perhaps the most magnificent structure in Japan. Intersected with canals, Osaka is the commercial centre of the empire, and the headquarters of the rice and tea trade. Pop. 821,250.

Osborne House. See COWES.

Oscott, a Roman Catholic college, 4 miles N. of Birmingham. Dating from 1752, and rebuilt in 1835, it has since 1889 become a seminary.

Oshkosh, capital of Winnebago county, Wisconsin, on the Fox River, at its entrance to Lake Winnebago, 80 miles by rail NNW. of Milwaukee. The lake (30 miles by 12) forms, with the Fox and Wisconsin rivers, which are connected by a canal, a water-route between Lakes Michigan and Superior. The city extends along the lake for 4 miles, and carries on a great trade in lumber. It has also extensive door and sash factories, and large manufactories of furniture, matches, carriages, and soap, besides pork-packing establishments. It is the seat of a state normal school, and close by is a state lunatic asylum. Oshkosh was incorporated in 1853, and burned down in 1859; it was again partially destroyed by fire in 1874 and 1875, and in 1885 a cyclone overwhelmed part of the suburbs. Pop. (1880) 15,748; (1900) 28,284.

Oskaloosa, capital of Mahaska county, Iowa, 104 miles WNW. of Burlington. It mines bituminous coal, and manufactures flour, woollens, boilers, electric appliances, &c. Here are Penn College (Quaker) and two others. Pop. 9558.

Osmington, a Dorset parish, 4 miles NE. of Weymouth. Here is a mounted figure of George III. cut out in the turf.

Osnabrück, a town in the Prussian province of Hanover, in the fertile valley of the Hase, 75 miles by rail SSW. of Bremen and 70 WSW. of Hanover. Its great Catholic cathedral, whose see was founded by Charlemagne about 810, and re-established in 1857, is in the Transition style of the first half of the 13th century, and rich in relics and monuments; the town-hall (1486–1512) contains portraits of all the plenipotentiaries who here on 24th October 1648 signed the peace of Westphalia. Osnabrück has important iron and steel works, and manufactures of railway plant, agricultural machinery, gas-meters, paper, tobacco, &c. Dating from 772, it suffered much in the Thirty Years' War, but recovered, thanks to its linen industry, during the 18th century. The name *Osnaburgs* given to coarse linens in England is derived hence. Pop. (1852) 13,718; (1900) 51,573, of whom one-third were Catholics.

Osrhoene (*Oz-ree'nee*), a district in the north-west of Mesopotamia, containing Edessa (q.v.).

Ossa, the ancient name of a mountain on the east side of Thessaly, near Pelion (q.v.), and separated from Olympus by the vale of Tempe.

Ossett, a town in the West Riding of Yorkshire, 3 miles W. of Wakefield. Pop. (1901) 12,903.

Ossining, the name of what used to be called Sing-Sing (q.v.).

Ostashkoff, a town of Russia, 107 miles W. by N. of Tver. Pop. 9905.

Ostend', a fashionable watering-place in the Belgian province of West Flanders, on the German Ocean, 77 miles by rail WNW. of Brussels. Its *Digue*, or sea-wall, 3 miles long, 40 feet high, and 35 yards broad, forms a favourite promenade, as also do the two *Estacades*, or wooden piers, projecting on both sides of the harbour's entrance. Two spacious floating basins for the Dover mail-packets (a four hours' passage) were completed in 1874; and as a station also for London steamers, and the terminus of various lines of railway, Ostend is a lively and active place of transport traffic (butter, rabbits, oysters, &c.), and the resort in the season (July to September) of 16,000 to 20,000 visitors from all parts of the Continent. It is, moreover, an important fishing-station, and has a good school of navigation, a handsome Cursaal (1878), an hôtel-de-ville (1711), a fish-market, and a lighthouse (1771; 175 feet). The manufactures include linen, sailcloth, candles, and tobacco. Pop. (1874) 16,533; (1900) 39,484. Dating from 1072, Ostend is memorable for the protracted siege by the Spaniards which it underwent from 7th July 1601 to 20th September 1604. Twice again it surrendered—to the Allies in 1706, and to the French in 1745. The fortifications have been demolished since 1865.

Ostero'de, a town of Hanover, at the western base of the Harz Mountains, on the Söse, an affluent of the Leine, 30 miles by rail NW. of Nordhausen. Its church of St Giles (724; rebuilt 1578) contains the graves of the Dukes of Grubenhagen, and there is also a fine town-hall. Pop. 6435.—Osterode, in East Prussia, on the Drewenz, 77 miles NE. of Thorn, has a castle of the Teutonic knights (1270). Pop. 13,170.

Ostia, a city of Latium, at the mouth of the Tiber, 14 miles SW. of Rome. It was a mere ruin in 830, when Gregory IV. founded a village—the modern Ostia—near the ancient one, whose ruins extend for a mile and a half along the Tiber.

Ostrau, the name of two neighbouring towns in Austrian Silesia, 80 miles W. by S. from Cracow. Moravian Ostrau has extensive iron-works and other manufactures. Pop. 30,120. Polish Ostrau is the centre of a rich coalfield. Pop. 18,760.

Ostrog, a town of Russia, in Volhynia, 176 miles W. of Kieff. Pop. 16,522, mostly Jews.

Ostu'ni, a city of south Italy, 22 miles NW. of Brindisi by rail. Pop. 18,199.

Osu'na, a town of Spain, 66 miles by rail ESE. of Seville, stands on a triangular hill crowned by the castle of the Girons, Dukes of Osuna, and by a collegiate church (1534). Pop. 18,126.

Oswe'go, the capital of Oswego county, New York, is situated at the mouth of Oswego River (here crossed by three bridges), on Lake Ontario, at the extremity of the Oswego Canal (to Syracuse), 326 miles by rail NW. of New York City. It has a United States government building, court-house, city-hall, state armoury, &c., and is the principal port on the lake, with a breakwater, large elevators, and 4 miles of wharves. The river falls here 34 feet, and the water-power is utilised in flour-mills, knitting-mills, &c. Oswego starch and corn-flour are household words. Pop. (1880) 21,116; (1900) 22,200.

Os'westry, a thriving market-town and municipal borough (1397) of Shropshire, 18 miles NW. of Shrewsbury. It has an old parish church, restored in 1872 at a cost of £10,000; a fragment of the Norman castle of Walter Fitzalan, progenitor of the royal Stewarts; and a 15th-century grammar-school, rebuilt in 1810 and enlarged in 1863–78. Railway workshops were established in 1865, and sewerage and water works in 1866. Oswestry derives its name from St Oswald, slain here in 642. In 1644 it was captured by the parliamentarians. Pop. (1851) 4817; (1901) 9579. See works by Price (1815) and Cathrall (1855).

Otago (*Otah'go*; prob. from Maori *Otakou*, 'red earth'), the most southern provincial district of New Zealand, in the South Island, till 1876 one of the original six provinces in the colony. It was colonised in 1848 by the Otago Association. It has a coast-line of 400 miles, and an area of over 15,000,000 acres. Pop. (1891) 153,005; (1901) 173,145. Gold was discovered here in 1861. Dunedin (q.v.) is the capital.

Otaheite. See Tahiti.

Otaru, a large seaport of Yezo (Hokkaido), Japan, on the west coast, 22 miles W. of Sapporo. It has important herring-fisheries and a well-protected harbour, and has railway connection with Sapporo. Pop. 57,000.

Otchakoff, a Russian seaport, on the north shore of the Dnieper's estuary, 38 miles ENE. of Odessa. After it had been bombarded by the Allied fleet in 1855, the Russians demolished the fortifications. In 1887 a ship-canal was opened here, which makes the estuary of the Bug and Dnieper accessible to large ships. Pop. 10,800.

Otley, a market-town in the West Riding of Yorkshire, on the Wharfe's right bank, and at the north base of Otley Chevin (925 feet), 10 miles NW. of Leeds. It has an interesting church, a court-house (1875), a mechanics' institute (1869), and a grammar-school (1602). Machine-making is the principal industry, with worsted and leather manufactures. Pop. 9500.

Otranto (anc. *Hydruntum*), a decayed seaport in the extreme south-east of Italy, 29 miles by rail SE. of Lecce, and on the Strait of Otranto, 45 miles from the opposite coast of Albania. Long the chief port for Greece, it has a ruined castle, which gave title to Horace Walpole's story, and an archiepiscopal cathedral, restored

since the capture of Otranto in 1480 by the Turks. Pop. 2400.

Ott'awa, one of the largest rivers of British North America, rises nearly 300 miles due north of Ottawa City, flows 300 miles west to Lake Temiscamingue, and thence 400 miles south-east, and falls into the St Lawrence by two mouths, which form the island of Montreal. During its course it sometimes contracts to 40 or 50 yards; elsewhere it widens into numerous lakes of considerable size. Of its many tributaries the chief are the Petewawa, Bonnechère, Madawaska, and Rideau on the right, and the Coulonge, Gatineau, and Rivières du Lièvre and du Nord on the left. These, with the Ottawa, form the means of transit for the largest lumber trade in the world.

Ottawa, the capital of the Dominion of Canada, is situated upon the south bank of the Ottawa River, 120 miles from its influx into the St Lawrence at Montreal. The river here forms the splendid Chaudière Falls (200 yards wide and 40 feet high), above which a suspension bridge spans the river, and which supply the motive-power for the numerous lumber-mills, flour-mills, factories, &c. East of the city the river Rideau forms a second fall. The Rideau Canal (1827) passes through the centre of the city, and connects with the Rideau Lakes, and so with the great lakes beyond. Opposite the city, to the NE., the Gatineau River joins the Ottawa. The industries of Ottawa are mostly connected with lumber. In the winter thousands of men are engaged in cutting timber and drawing it to the streams, and in the spring the freshets carry the rafts down to the mills. Flour, iron wares, bricks, leather, and matches are also manufactured. The parliamentary buildings, constructed in the Italian Gothic style after 1860, when the Prince of Wales laid the foundation-stone, are placed on a bluff on the bank of the Ottawa. These structures, including the handsome library building and the Victoria Tower (180 feet high), cost altogether about $8,000,000. The residence of the governor-general —an old-fashioned, ugly building, called Rideau Hall—is about a mile from the city. The post-office, city-hall, banks, and telegraph-offices are handsomely built of stone. Ottawa is the place of residence of the bishop of Ontario (Church of England), and of the Roman Catholic bishop of Ottawa, who has a cathedral here. There are a normal school and a collegiate institute, a very large college conducted by the Oblate Fathers, a ladies' college, a musical academy, an art school, a well-equipped geological museum, and the parliamentary library, with 140,000 volumes. The city was begun in the last years of the 18th century by a settler named Wright, of Boston, Massachusetts, who built himself a residence near the Chaudière, and called the village which he founded Hull. The construction of the Rideau Canal (1827) stimulated the settlement, which was called Bytown. In 1854 its name was changed to Ottawa, and the town was created a city. Pop. (1861) 15,000; (1871) 21,545; (1881) 27,412; (1901) 59,120, about one-half being Roman Catholics. In 1858 Ottawa was chosen as the administrative capital of Canada. The first parliament met here in 1865.

Ottawa, (1) capital of La Salle county, Illinois, at the confluence of the Fox and Illinois rivers, 82 miles by rail WSW. of Chicago. It has a spring rich in bromine and iodine, and manufactures glass, flour, cutlery, tiles, fire-proofing, organs, and pianos. Pop. 10,600.—(2) Capital of Franklin county, Kansas, on the Osage River, 68 miles by rail SW. of Kansas City, with a college, foundry, and railway-shops, manufactures flour, furniture, carriages, and soap. Pop. 6948.

Otter, a Devon stream running 24 miles to the English Channel, 5 miles SW. of Sidmouth.

Otterbourne, a Hampshire parish, 4 miles SW. of Winchester.

Otterburn, a small village in Redesdale, Northumberland, 16 miles S. of the Border, and 32 miles NW. of Newcastle, on the benty uplands a little to the west of which, during the moonlit night of 19th August 1388, 2300 Scots under the Earls of Douglas, Dunbar, and Moray, defeated 8600 English under Harry Percy ('Hotspur'), the latter being made prisoner, and Douglas slain. See Robert White's monograph (1857).

Ott'ery St Mary, a town of Devonshire, on the river Otter, 11 miles (15 by rail) E. of Exeter. Twice the scene of a great conflagration, in 1767 and 1866, it retains its magnificent collegiate church, a reduced copy of the cathedral of Exeter (q.v.), with the only other transeptal towers in England. Begun about 1260 by Bishop Bronescombe, it is Early English, Decorated, and Perpendicular in style, and was restored by Butterfield in 1849–50. The Old King's Grammar-school was demolished in 1884. Alexander Barclay was a priest here; Coleridge was a native; and 'Clavering' in *Pendennis* is Ottery St Mary, the Devonshire residence of Thackeray's stepfather. Silk shoe-laces, handkerchiefs, and Honiton lace are manufactured. Pop. 3500.

Ottoman Empire. See TURKEY.

Ottum'wa, capital of Wapello county, Iowa, on the Des Moines River, 75 miles by rail W. by N. of Burlington, in the heart of the state's bituminous coalfields. The residence portion extends along the high bluffs. A number of railways meet here. Great dams concentrate the river's water-power; and there are planing, flour, starch, and linseed-oil mills, foundries, plough, cutlery, and screen factories, bridge-works, cooperages, manufactories of furniture, boilers, &c., and a pork-packing establishment. Pop. 20,000.

Oudenarde (Fr. pron. *Ood'nârd;* Flemish *Owde-nar'day*), a town of Belgium, on the Scheldt, 37 miles W. of Brussels. It has a fine flamboyant Gothic town-hall (1535) and two interesting churches. Margaret of Parma was born here. Pop. 6200. In 1706 Oudenarde was taken by Marlborough; and a French attempt to retake it brought about the third of Marlborough's four great victories over the French, 11th July 1708.

Oudh (*Owd*), or AWADH, a great plain sloping southward to the Ganges and watered by the Gumti, Gogra, and Rapti rivers, was made a British commissionership in 1858, and from 1877 was administered by the lieutenant-governor of the North-west Provinces (q.v.); but since 1901 the latter term is disused, the two areas being jointly known as the United Provinces of Agra and Oudh. Area, 24,246 sq. m.; pop. (1881) 11,387,741; (1901) 12,884,150. The bulk of the inhabitants of Oudh are Hindus, though the dominant native race for centuries has been Mohammedan. The Brahmans are about one-eighth of the whole population. The principal towns are Lucknow (the capital), Faizabad, Bahraich, Shahabad, Rai Bareli. Oudh was one of the oldest homes of Aryan civilisation in India. After being the seat of a long native Hindu dynasty it was subjugated by the ruler of Kanauj, and in 1194 was made subject to the Mussulman empire

of Delhi. In 1732–43 it became virtually an independent state, and the dynasty of the Nawabs lasted until the annexation by the British in 1856. During the mutiny of 1857 Oudh was a centre of rebellion.—For the city of Oudh, see AJODHYA.

Oughterard (*Ohh-ter-ard'*), market-town on the W. shore of Lough Corrib, 17 miles NW. of Galway. Pop. 690.

Oulton, (1) a Suffolk parish, on Oulton Broad, 2½ miles W. of Lowestoft. George Borrow lived and died here.—(2) A village in Rothwell parish, West Riding of Yorkshire, 5½ miles ESE. of Leeds. Richard Bentley was born here.

Oundle, a small but ancient and pleasant town of Northamptonshire, 13 miles SW. of Peterborough by rail, has an old church, partly Early English and partly Decorated, restored in 1864. Lace is made. Here St Wilfrid died. Laxton's Grammar-school dates from 1550. Pop. 2480.

Ouro Preto (*Ooro Pray'to;* 'Black Gold'), capital of the province of Minas Geraes, Brazil, stands among barren mountains, 3780 feet above sea-level, and 200 miles N. by W. of Rio Janeiro. The gold-mining is now trifling. Pop. 14,000.

Ouse (*Ooz*), a river of Yorkshire, formed by the union of the Swale and the Ure near Boroughbridge, and flowing 60 miles south-eastward past York, Selby, and Goole. About 8 miles below the last town it joins the Trent, and forms the estuary of the Humber (q.v.). The last 45 miles (from York) are navigable for large vessels. Its principal affluents are the Wharfe, Aire, and Derwent.—The GREAT OUSE, rising close to Brackley, in the south of Northamptonshire, flows 160 miles north-eastward through Buckingham, Bedford, Huntingdon, Cambridge, and Norfolk, till it falls into the Wash, 2½ miles below Lynn. It is navigable for 50 miles. It receives the Ivel, Cam, Lark, and Little Ouse.

Ousuri, or USURI. See AMUR.

Ovenden, a NW. suburb of Halifax.

Over, a town of Cheshire, 4¼ miles W. of Middlewich. Pop. of parish, 6835.

Over Darwen. See DARWEN.

Overton, a parliamentary borough of Flintshire (detached), near the Dee, 23 miles NNW. of Shrewsbury. With Flint, &c., it returns one member. Pop. 1131.

Overtown, a Lanarkshire village, 1½ mile SE. of Wishaw. Pop. 1395.

Overyssel (*y* like *i*), a Dutch province, lying east of the Zuider Zee, and separated from Guelderland on the south by the river Yssel. Area, 1291 sq. m.; pop. 350,000. The chief cities are Zwolle, Deventer, and Kampen.

Oviedo (*Ovecay'do;* anc. *Ovetum* or *Asturum Lucus*), the capital of the Spanish province of Asturias, 20 miles by rail SSW. of Gijon on the Bay of Biscay and 87 N. by W. of Leon. Sheltered to the north by a hill 470 feet high, it has four main streets, branching off from a central square, and possesses a cathedral, a university (1604), a theatre, a botanic garden, a fine aqueduct, &c. The cruciform cathedral, dating from 781, but mainly rebuilt 1388–1528, is a noble specimen of Gothic, with a tower 284 feet high, the remains of fourteen early kings and queens of Asturias, many relics, and a fine old library. Linens, woollens, hats, and firearms are manufactured; near by are ironworks, and at Prutia (12 miles W.) a government foundry, producing cannon, rifles, bayonets, &c. Pop. 46,671.

Ovoca. See AVOCA.

Owe'go, capital of Tioga county, New York, on the Susquehanna River (here bridged), at the mouth of Owego Creek, 228 miles by rail NW. of New York City. It manufactures pianos, flour, soap, leather, &c. Pop. 5025.

Owensboro, capital of Daviess county, Kentucky, on the Ohio, 160 miles below Louisville (112 by rail). It has tobacco-factories, whisky distilleries, foundries, flour and planing mills, &c. Pop. 14,000.

Owen Sound, a town and port of entry of Ontario, at the head of Georgian Bay, 122 miles by rail NW. of Toronto. It possesses a deep sheltered harbour (12 miles by 5), trades in lumber and grain, and manufactures furniture and wooden wares, machinery, woollen goods, &c. The Canadian Pacific steamers leave here for Port Arthur. Pop. 9000.

Owston Ferry, a Lincolnshire town, on the Trent, 7 miles N. of Gainsborough. Pop. 1204.

Owosso, or OWASSO, a city of Michigan, on the Shiawassee River, 78 miles by rail NW. of Detroit. The river supplies abundant waterpower, and there are flour and planing mills, furniture and sash factories, foundries, and railway-shops. Pop. 8700.

Oxenhope, a town in the West Riding of Yorkshire, 5 miles S. of Keighley. Pop. 2225.

Oxford, the capital of the county, the home of the university, and the seat of the bishopric of the same name, stands about the confluence of the rivers Cherwell and Thames, 52 miles (63 by rail) WNW. from London. Up to 1885 the city returned two members to parliament; since that date only one. Until about 1830 the area and population of the city remained almost stationary, extending only a little beyond the limit of the old city wall as reconstructed in the reign of Henry III. But since then the city has grown rapidly, and the rural districts of St Giles' on the north, St Clement's on the west, Grandpont on the south, and Botley on the east have been covered with lines of close-built streets. Pop. (1801) 11,000; (1861) 27,560; (1881) 40,837; (1901) 49,335. The topography of Oxford is simple in the extreme. The river Thames (locally called the 'Isis'), takes here a sharp bend to the east, and about a mile from the angle receives the Cherwell, flowing from the north. All the old part of the town stands in the rectangle thus formed by the rivers. The centre of the town is at a place called 'Carfax' (derived from *quadrifurcus*, 'four-forked'), from which four main streets (traversed since 1883 by tram-lines) run to the four points of the compass. *North* runs Cornmarket Street ('the Corn'); *east*, High Street ('the High') to Magdalen Bridge over the Cherwell; *south*, St Aldgate's Street to Folly Bridge over the Isis; and *west*, Queen Street to the Castle and station. Among Oxford's countless buildings are All Souls College (founded 1437); the Ashmolean Museum (1682); Balliol College (*c.* 1268); the Bodleian Library (1602; 500,000 books, 30,000 MSS.); Brasenose College (1509); Christ Church College (1525–46; its chapel the cathedral 1120 and onwards); the Clarendon Building (1712–30, till 1830 the University Press); Corpus Christi College (1516); the Divinity Schools (1445–80); the Examination Schools (1882); Exeter College (1314); Hertford College (1874); the Indian Institute (1884); Jesus College (1571; still partly Welsh); Keble College (1870); Lincoln College (1429); Magdalen College (1458); Manchester College (1893); Mansfield College (1886); the Martyrs' Memorial (1841); St Mary's Church (1300–1488), with a spire

180 feet high; Merton College (1264); the New Museum (1856-60); New College (1379); Oriel College (1326); Pembroke College (1624); Queen's College (1340); the domed Radcliffe Library (1749; since 1861 a reading-room for the Bodleian); the Radcliffe Observatory (1795); St John's College (1555); the Sheldonian Theatre (1669; in which 'Commemoration' is held); the Taylor Institution (1843); Trinity College (1554); the Union Society (1823; new building 1859); University College (1249; *not* founded by King Alfred in 872); The University Press (1830); Wadham College (1613); and Worcester College (1714). To which may be added Somerville Hall (1879), Lady Margaret Hall, and St Hugh's Hall, all for women.

The university of Oxford, which dates from the 12th century, comprises twenty-one colleges. It has a teaching body of 54 professors, readers, and lecturers, and upwards of 3500 undergraduates, including about 150 unattached or non-collegiate students. A few of its great alumni have been Duns Scotus, Roger Bacon, Wolsey, Raleigh, Jewel, Hooker, Sir Philip Sidney, William Harvey, Blake, John Hampden, Burton, Herrick, Jeremy Taylor, Lovelace, Hobbes, Clarendon, Evelyn, Locke, Wycherley, Addison, Steele, Collins, Dr Johnson, Wesley, Chatham, Adam Smith, Gibbon, Gilbert White, Fox, Southey, Shelley, De Quincey, Landor, Keble, Cardinals Newman and Manning, Gladstone, Froude, Freeman, Green, Ruskin, Matthew Arnold, Clough, and Swinburne.

See, besides Anthony Wood's great works, others by the Rev. C. W. Boase ('Historic Towns' series, Longmans, 1887); Maxwell Lyte (1886); Dr Brodrick (1886); the Rev. E. Marshall ('Diocesan Histories' series, 1882); A. Lang (new ed. 1890); and A. Clark (1891); 'A Mere Don' (1894); with Parker's *Handbook for Oxford*, as an admirable guide to the architectural features of the city.

Oxfordshire, an inland county of England, in shape very irregular, and with an extreme length and breadth of 48 miles by 26; is bounded by Warwickshire, Northants, Bucks, Berkshire, and Gloucestershire. Area, 755 sq. m., or 483,621 acres. Pop. (1801) 109,620; (1881) 179,559; (1901) 182,768. Flat and bleak in the north and west, except near Edgehill (q.v.), on the Warwickshire border, and undulating in the central district, the county in the south presents a succession of richly wooded hills, alternating with picturesque dales, and terminating on the south-east border with a branch of the Chiltern Hills, which, near Nuffield, attain a height of nearly 700 feet above the sea-level. Foremost, however, among the natural beauties of Oxfordshire are the numerous rivers by which it is watered, notably the Thames, with its affluents the Windrush, Evenlode, Cherwell, and Thame. The soil in general is fertile. Ironstone is extensively worked near Banbury, whilst there are manufactures of blankets at Witney, paper at Shiplake and Henley, and, to a certain extent, gloves at Woodstock. The county contains fourteen hundreds, the whole or part of the municipal boroughs of Abingdon, Banbury, Chipping Norton, Henley-on-Thames, Oxford, and Woodstock, and 292 civil parishes, all in the diocese of Oxford. Three members are returned for the county, as also one for the city of Oxford and two for the university. The battlefields of Chalgrove (1643) and Cropredy Bridge (1644) may be mentioned; and among Oxfordshire worthies are Edward the Confessor, Leland (the antiquary), Viscount Falkland, 'Doctor' Fell, Warren Hastings, Miss Edgeworth, Charles Reade, and Green (the historian). See works by Skelton (1823) and Davenport (1869).

Oxus, the ancient name of the Amu or Amu-Daria, a river in western Asia, called by Arab writers the Jihûn. It rises in the elevated tablelands between the Tian-Shan Mountains and the Hindu-Kush, and flows west as far as 66° E. long. through Badakshan, and then north-west through Bokhara and Khiva, and empties itself by several mouths into the southern end of the Sea of Aral. There are two main head-streams issuing at 13,042 and 14,177 feet respectively, and uniting in 71° 20′ E. long. at 7500 feet. The Oxus receives few tributaries after it turns north-west, its course then running through the deserts of Turkestan. The delta is 90 miles long, and embraces many lakes and marshes. The principal use made of the river is for irrigation; Khiva owes its prosperity to its waters. In 1894 it was navigated by a Russian steamer as far as Faizabad Kali on the Afghan frontier. It is believed that before the Christian era the Oxus flowed into the Caspian, and that since 600 A.D. it has twice changed its course. Between Merv and Bokhara it is spanned by a railway viaduct (1888), 6804 feet long. See works by J. Wood (1841; new ed. by Colonel Yule, 1872) and MacGahan (1876).

Oykell. See OIKELL.

Oyster Bay, a watering-place of New York State, on an inlet of Long Island Sound, 30 miles E. by N. of New York. Pop. 1600.

PAARL, capital of a district in Cape Colony, 40 miles NE. of Capetown by rail. Pop. 8500.

Pabbay, an Inverness-shire island, 6½ miles S. of Barra. Pop. 7.

Pabna, a town of Bengal, on an arm of the Ganges, 115 miles N. of Calcutta. Pop. 16,500.

Pachacamac', a village of Peru, 18 miles SE. of Lima, with the ruins of a temple from which Pizarro took immense treasure.

Pachmarhi, a sanatorium in the Central Provinces, India, 2500 feet above the plains, and 110 miles SW. of Jabalpur.

Pacific Ocean, the largest of the great divisions of the ocean, occupying about one-half of the water-surface of the globe and more than one-third of the area of the world. It is almost landlocked towards the north, communicating with the Arctic Ocean by the narrow (40 miles) and shallow Behring Strait, whereas it opens widely into the deep Southern and Antarctic Oceans. Its length from north to south (the Antarctic Circle) is about 9000 miles; its greatest breadth, at the equator, is over 10,000 miles; its area is approximately 70,000,000 sq. m. It was first seen by Europeans in 1513, when Balboa, with a few followers, viewed its waters from the summit of a peak in Darien; the first European to sail upon it was Magellan (1520), who gave it the name Pacific. Sir Francis Drake was the first Englishman to sail upon it (1577). The area of land draining into it—7,500,000 sq. m.—is less than half of that draining into the Atlantic. The largest American river flowing into it is the Yukon (2000 miles); others are the Fraser, Columbia or Oregon, Sacramento, and Colorado. The South American rivers are little more than mountain-streams. The Asiatic rivers include some of the largest rivers of the world—the Amur,

Hoang-ho, Yang-tse-kiang, Mekong, and Menam. Generally speaking, the American and Australian coasts bordering the Pacific are mountainous and free from indentations, while the Asiatic coasts are low and fertile, with many gulfs and bays, and fringed with island groups.

The Pacific Ocean is remarkable for the innumerable small islands and island groups which stud its surface, but the area occupied by the truly oceanic islands is very small; they are principally congregated towards the central and western portions of its basin, while the eastern portion is comparatively free from islands. The larger islands—Borneo, New Guinea, Celebes, Java, Sumatra, &c.—are continental. The oceanic islands—the Sandwich Islands, Ladrones, Carolines, Gilbert Islands, Solomons, Fiji, Friendly Islands, Samoa, &c.—of the Pacific are all either of volcanic or coral origin, the volcanic islands within the zone of coral-reef builders being fringed with coral reefs, while many are entirely of coral formation. Some of the greatest depths in the world occur in the Pacific, in its western basin; on the whole it is deeper than the Atlantic, its mean depth being about 2500 fathoms. The eastern basin is comparatively uniform in depth, between 2000 and 3000 fathoms. The western basin is much more diversified, numerous groups of islands, shallow water, and immense depths occurring irregularly. The *Challenger's* deepest sounding, 4575 fathoms (nearly 5¼ miles), was in the sea between the Caroline and Ladrone Islands, while the American ship *Tuscarora* found a depth of 4655 fathoms to the north-east of Japan. The surface-currents of the Pacific Ocean depend to a great extent upon the direction of the prevailing winds, the principal of which are the two trade-winds, blowing more or less constantly, the one from the north-east, the other from the south-east. Between these two regions is what is called the equatorial belt of calms. In addition to the trade-winds, there are the monsoons, which blow with great regularity, but the direction of which changes according to the season. A cold surface-current flows constantly northwards from the Antarctic. The great equatorial current flows to the westward. The temperature of the surface-waters of the Pacific varies with the season, but in the tropical regions the variation is very small. The highest temperature occurs among the islands of the Malay Archipelago and off the Mexican coast, where the mean temperature rises to 85° F. The temperature of the water below the surface as a general rule decreases as the depth increases, the lowest temperature occurring at great depths, where the bottom temperature appears to be nearly constant all the year round, usually about 35° F.

Pacto'lus (mod. *Sarabat*), anciently the name of a small brook of Lydia, in Asia Minor, flowing to the Hermus, and famous for its gold-dust.

Padang, capital of a residency on the west coast of Sumatra, at the mouth of the Padang River. Pop. 35,000.

Paddington, a parliamentary and metropolitan borough of London. Pop. (1901) 143,976.

Paderborn, a town of Westphalia, 50 miles SW. of Hanover. It has been largely rebuilt since a destructive fire in 1875. The fine Romanesque cathedral (R. C.), completed in 1163, is built over the sources of the Pader (a feeder of the Lippe), and contains the silver coffin of St Liborius. Other edifices are St Bartholomew's Chapel (1017) and the town-house (1615; restored 1870–76). There are glass, soap, and tobacco factories, breweries, railway and printing works, and mineral springs close by. Pop. 23,600.

Padiham, a town of Lancashire, 3 miles W. of Burnley and 8 NE. of Blackburn. Cotton is the staple manufacture, with coal-mining and stone-quarrying. Pop., with Hapton, 12,250.

Padstow, a Cornish seaport, on the Camel's estuary, 12 miles WNW. of Bodmin. Pop. 1559.

Pad'ua (Ital. *Pad'ova*), a city of north Italy, 23 miles by rail W. by S. of Venice and 18 SE. of Vicenza, is still surrounded with walls. The municipal palace (1172–1219) is a huge structure resting on arches, with balconies running round the upper story. The roof (1420) of its great hall (267½ feet long, by 89 wide, and 78 high) is perhaps (with the exception of King's Chapel, Cambridge) the largest in Europe unsupported by pillars. The churches (nearly fifty) include the cathedral (1552–1754); St Antony (1230–1307); St Justina (16th century); and the chapel of the Annunciation (1303), with frescoes by Giotto. The 'saint's school' is adorned with frescoes by Titian and his pupils, illustrating the life of St Antony. Donatello's fine equestrian statue of Gattamelata, the Venetian captain, stands in front of the church of St Antony. Padua has enjoyed greatest fame from her university, founded by the emperor Frederick II. in 1221, though the fine Renaissance buildings date only from 1493–1552; there are now 68 teachers and over 1200 students. To it is attached one of the oldest botanical gardens in Europe, and a library (1629) of 158,500 vols. and 2500 MSS. The city museum (1881) contains antiquarian, art, and numismatic collections, a library, and archives. Pop. (1901) 82,300. Padua's most celebrated natives were Livy and the painter Mantegna. *Patavia* came under the Roman supremacy in 215 B.C. Venice held it from 1405 to 1797, and then Austria, until it was incorporated in Italy in 1866.

Padu'cah, capital of McCracken county, Kentucky, on the Ohio River, 48 miles above its mouth, just below the entrance of the Tennessee, and 226 miles WSW. of Louisville. It has shipyards, foundries, railway-shops, flour, saw, and planing mills, and manufactures soap, vinegar, ice, furniture, tobacco, &c. Pop. 19,500.

Pæstum, an ancient Greek city of southern Italy, on the Gulf of Salerno, with three well-preserved Doric temples.

Pago-Pago, or PANGO-PANGO, an excellent harbour and coaling-station on Tutuila, one of the Samoan islands belonging to the United States.

Pahang. See STRAITS SETTLEMENTS.

Paignton (*Pain'ton*), a Devon watering-place, 2½ miles S. of Torquay. Near it is a ruined palace of the bishops of Exeter. Pop. of the urban district (1901) 8385.

Painswick, a Gloucestershire town, 6 miles SSE. of Gloucester. Pop. of urb. dist. 8385.

Paisley, a busy manufacturing town of Renfrewshire, stands, backed by the Braes of Gleniffer (749 feet), on the White Cart, 3 miles above its influx to the Clyde, 7 WSW. of Glasgow and 16 ESE. of Greenock. Although commonly identified with the *Vanduara* or *Vindogara* of Ptolemy, which Skene places rather at Loudoun Hill in Ayrshire, it first is heard of certainly about 1157 as *Passeleth*, a possession of Walter Fitzalan, the first Scottish ancestor of the royal Stewarts. He six years later founded here a Clugniac priory, which was dedicated to SS. James, Mirin, and Milburga, and which in 1219

was raised to the rank of an abbey. It was burned by the English in 1307; suffered much at the Reformation in 1561, and still more by subsequent vandalism; and now is represented chiefly by the aisled Decorated nave (15th century: the Abbey parish church, restored since 1862), and by the chapel of St Mirin, called the 'Sounding Aisle' (1499), with the altar-tomb of Marjory Bruce. Near the abbey are statues of Wilson the ornithologist and Tannahill, who, like Professor Wilson ('Christopher North'), were natives of Paisley. There are also statues of George A. Clark, founder of the town-hall, and (since 1891) of Sir Peter and Thomas Coats. Motherwell and Alexander Smith were residents; Elderslie, 2 miles W., is the traditional birthplace of Wallace. Public edifices are the municipal (formerly county) buildings (1818); sheriff court-house (1885); the Clark town-hall, Italian in style, and built in 1879–82 at a cost of £110,000; the new county buildings (1891), containing one of the finest council halls in Scotland; the Coats free library and museum (1871), with a picture-gallery and an observatory; the grammar-school (1576; rebuilt 1864); and the Neilson educational institution (1852). The Coats Memorial Baptist Church (1891–94), Early English in style, with a Gothic crown completing the central tower, is, it is claimed, the finest ecclesiastical edifice built in Scotland since the Reformation, having cost £100,000. The Fountain Gardens (1868), the Brodie Park (1877), and St James's Park, round which is the racecourse, have an area respectively of 6, 22, and 40 acres.

The linen, lawn, and silk-gauze industries, important during the 18th century, are now extinct; as, too, are the 'Paisley shawls,' so celebrated between 1805 and the middle of the century, their sale sometimes exceeding £1,000,000 per annum. The manufacture of linen sewing-thread, introduced in 1722 by the witch-denouncer Christian Shaw of Bargarran, has been nearly superseded since 1812 by that of cotton thread, which has assumed gigantic proportions. There are also works for dyeing, bleaching, tartans, woollen shawls, carpets, distilling and brewing, chemicals, starch, corn-flour, preserves, engineering, &c. Paisley is connected with Glasgow by electric tramway, and the electric light has been introduced. The Cart since 1786 has been deepened (to 18 feet in 1888–90); and water-works (1834–90) furnish 6,000,000 gallons per diem to Paisley and Johnstone. Paisley was made a free burgh of barony in 1488, the fourth centenary of that event in 1888 being graced by the presence of Queen Victoria, who afterwards placed a memorial of the Stewarts in the ruined choir of the abbey. Since 1833 it has returned one member to parliament. In 1843 the corporation had to suspend payment, nor was the burgh clear of debt until 1877. Pop. (1801) 24,324; (1841) 48,125; (1881) 55,627; (1901) 79,350. See Cosmo Innes' *Registrum Monasterii de Passelet* (Maitland Club, 1832), two works by Semple (1872–74), Dr Cameron Lees' *Abbey of Paisley* (1878), and Robert Brown's *History of Paisley* (2 vols. 1886).

Pakenham, a Suffolk parish, 5 miles ENE. of Bury St Edmunds. Pop. 943.

Pakhoi, a seaport of China, opened to trade in 1876, stands on the northern shore of the Gulf of Tonking. Pop. 25,000.

Palamcottah, a town of India, in Madras, 50 miles NNE. of Cape Comorin. Pop. 40,000.

Palanpur', capital of a native state in Gujarat, lies 83 miles N. of Ahmedabad by rail. Pop. 17,800. The state has an area of 3177 sq. m. and a pop. of 222,700.

Palap'we, or **Palap'ye**, capital of the Bechuanaland protectorate, is 60 miles NE. of Shoshong, long Khama's chief town, near the Transvaal frontier, and on the trade route and telegraph line to Matabeleland. Pop. 10,000.

Palat'inate (so called because governed originally by a Count Palatine—i.e. 'of the palace;' Ger. *Pfalz*), two German states, which were united previously to the year 1623. They were distinguished as the Upper and Lower Palatinates, having Amberg and Heidelberg as their capitals; and they are now divided among Bavaria, Prussia, Baden, and Hesse.

Pal'atine Hill (*Palatium* or *Mons Palatinus*), the central hill of the famous seven on which ancient Rome (q.v.) was built.

Palem'bang, capital of a residency (formerly an independent kingdom) near the south end of Sumatra, stands on the river Musi, 50 miles from its mouth; the houses of the town are built on great log rafts on either bank. Pop. 50,000.

Palencia (anc. *Pallantia*), a walled city of Spain, in Old Castile, 180 miles by rail NNW. of Madrid and 29 NNE. of Valladolid. The Gothic cathedral was built 1321–1504. The university founded here in 1208 was removed to Salamanca in 1239. Pop. 16,277. Area of the *province* of Palencia, 3256 sq. m.; pop. 195,000.

Palenque (*Palen'kay*), great ruins in Mexico, between the Michol and Chacamas rivers, in the north of the state of Chiapas, 6½ miles E. of the village of Santo Domingo de Palenque. They extend over 20 to 30 acres, are buried in a dense tropical forest, and consist of vast terraced truncated pyramids, surmounted by solid edifices of cut stone, covered with figures in relief, or figures and hieroglyphics in stucco, with remains of brilliant colours. 'The Palace' is 228 feet long, 180 feet deep, and 25 feet high, not reckoning the terrace. See works by Charnay (Eng. trans. 1887) and La Rochefoucauld (Paris, 1888).

Paler'mo, formerly the capital of Sicily, now in point of population the fifth city of Italy, an archbishopric, and a seaport. It stands on a bay in the north-west corner of the island, at the mouth of a fertile valley called the Conca d'Oro ('Golden Shell'), 120 miles by rail W. of Messina, and occupies a picturesque site backed by mountains—on the north by Mount Pellegrino. The cathedral of St Rosalia, built (1169–85) by an Englishman, Archbishop Walter, contains the tombs of Roger I. and the emperors Henry VI. and Frederick II. There are close upon three hundred churches and chapels in Palermo. The royal palace, built by Roger I., is principally of Spanish construction; other public buildings are the archbishop's palace, town-house, law-courts, university, arsenal, &c. The university (1447) has 70 teachers and over 1100 students. There are also a national museum, the town library (1775) with 141,000 vols. and 2640 MSS., and the national library (1804) with 110,000 vols. and 12,000 MSS. Machinery, essences, sumach, turnery, iron-founding, books, gloves, and shoes represent the industries. But Palermo is an important seaport, with a large, though not growing, trade. Oranges, lemons, dried fruits, sumach, tartar, grain, oils, manna, sulphur, wine, animal produce, and lemon-juice are the principal exports. The imports include grain and vegetables, cottons and woollens, coals, live-stock, iron, timber, groceries, silk, hides, petroleum, machinery, linen, metals,

and glassware. Population, 310,000. *Panormus*, the stronghold of Carthage in Sicily, was conquered successively by Pyrrhus (276 B.C.), the Romans (254 B.C.), the Vandals (440 A.D.), Belisarius (535), the Saracens (835), the Pisans (1063), and the Normans from Apulia (1071). Henceforward it was the capital of the kingdom of Sicily, first of the Norman kingdom, then of that of the Angevins and their Spanish successors. It suffered severely from earthquakes in 1693, 1726, and 1823. The city revolted against the Bourbon kings of Naples in 1820 and 1848, and was freed from them in 1860 by Garibaldi.

Pal'estine, Canaan, the Land of Israel, or the Holy Land, scene of most of the great events of sacred story, is a country in the SW. of Syria. Palestine proper (i.e. without the territory beyond Jordan) contains an area of about 6000 sq. m., or less than Yorkshire. The territory beyond Jordan may be reckoned at 2000–3000 sq. m. in addition. It is bounded N. by the river Kasimiyeh, E. by the Jordan, and W. by the sea. At first sight the map shows ridge upon ridge of hills running east and west, sloping gradually to the west, and descending steeply to the east. On the west is a long strip of low seaboard varying in breadth, vanishing altogether at the foot of Carmel, and broadening southward into the Plain of Philistia. Palestine, as a whole, is physically divisible into four parts: (1) The maritime district, extending along the Mediterranean, and including Philistia; (2) the central tableland or 'hill-country' of Judæa, culminating in the Lebanon towards the north and spreading out into the great plain of the Badiet-et-Tih to the south; (3) the depression of the Jordan Valley and Dead Sea, separating Eastern from Western Palestine; and (4) the tableland of Edom, Moab, and the region of Trachonitis to the east of the Jordan Valley, bounded by an abrupt and lofty escarpment, and stretching away towards the east into the Desert of Arabia. In North Galilee the watershed runs at an average height of 2800 feet above the sea, while the highest peak rises to a height of 3934 feet. In Samaria the hills are lower, not rising above 3000 feet, while south of Jerusalem the hills again rise to over 3300 feet. The north country contains the Plains of Buttauf and the rich plain of Esdraelon, 20 miles long and 9 miles broad, elevated, at its highest point, 250 feet above the sea. The principal elevations are Jebel Jermûk, 3934 feet; Carmel, 1740 feet (12 miles long); Mount Ebal, 3084 feet, and Mount Gerizim, 2849 feet; Tell Asûr, 3318 feet; and Râs esh Sherifeh, 3258 feet. The Maritime Plain, formed partly by the denudation of the mountains and partly by accumulation of sand, possesses a fertile soil; deep gullies run across it, with, in some cases, perennial streams. The Jordan Valley begins with the rise of the stream 1000 feet above the Mediterranean, and in 100 miles falls to 1292 feet below it. This is a drop of nearly 2300 feet, or 23 feet in a mile. The valley itself varies in width from 5 miles, where it begins, to 13 miles in the Plain of Jericho. The country terminates southward with the Jeshimon, the 'Solitude' of the Old Testament or the 'Wilderness of Judæa' of the New, a plateau of white chalk rising in cliffs 2000 feet high above the Dead Sea. Palestine is poorly supplied with rivers. Among the best known are the Kishon (Mukatta), flowing to the Mediterranean; the Jalud and the Farah flowing into the Jordan from the west; the Jabbok (Zerka) and the Arnon (Mojib) flowing into the Jordan from the east. There are the three lakes of Huleh (the 'Waters of Merom'), the Sea of Galilee, and the Dead Sea, and plenty of springs.

The climate of Palestine is extremely hot in summer, when the temperature reaches 100° F., and in winter it is wet and cold, though frost does not occur on the plains. There are heavy dews. The 'former rain' and the 'latter rain' are those which occur at the autumnal and vernal equinoxes. The distinctive trees of the country are the terebinth, the olive, the cedar, and the sycamore. The shittim-wood is supposed to have been the acacia. The rose of Sharon is a white narcissus; and the lily of the valley is the blue iris. The crocodile is still found in one or two of the rivers. The wild-goat—*ibex*—is found in large herds in the southern wilderness; the lion is extinct; the bear lingers in the mountains; the hyæna is common; the wolf is rare; the dog is an unclean creature living in the outskirts of towns, and feeding on garbage. Of birds, all those mentioned in the Bible which can be identified may yet be found. The locust still devastates the crops, and the grasshopper serves for food.

Since the 2d century, Palestine has been a land of pilgrimage, and many early Christian writers describe the country. After the Moslem conquest, Mohammedans wrote largely of it. The Crusaders left accounts of their wars. Modern exploration began in the 19th century with Seetzen, Burckhardt, Buckingham, Irby and Mangles, Tobler, De Saulcy, Van de Velde, and Williams. The researches of Robinson in the years 1838–52, forced upon the world the necessity for an exhaustive survey of the country, which was carried out (1865–77 as regards Western Palestine) for the Palestine Exploration Fund (1865), chiefly by Major Conder, R.E. The whole of Western Palestine was (1880–81) mapped on a scale which includes every ruin as well as every spring, every watercourse, every wood, and every hillock. At least 150 lost Biblical sites have been recovered; by means of these the boundaries of the tribes can now be laid down; one-fourth only of the Bible names remain to be identified. The topography of Josephus, of the Talmud, of the pilgrims, and of the chroniclers has also been illustrated and recovered. All important heights have been ascertained; the levels of the Dead Sea and the Sea of Galilee are laid down; all the remaining ruins have been planned and drawn. The survey of Eastern Palestine was begun under the same auspices in 1881.

The present condition of the country shows the beginning of rapid changes in every direction. There is a railway from Jaffa to Jerusalem; other railways, from Acre and Haifa to Damascus, and from Beyrout to Damascus, are in progress; there are many practicable roads; and there is even an hotel at Jericho. As regards Jerusalem, a new town has sprung up outside the walls; it is said that there are close upon 50,000 Jews in and about the Holy City; the Mount of Olives is being covered with buildings. There are Jewish colonies between Ramleh, Lydda, and Jaffa; there are German colonies in the same region; Circassians occupy Ammân, and are settling in the Haurân; the people from the Lebanon are coming down and covering the country east of the Jordan.

The name Palestine originally belonged merely to the coast strip occupied by the Philistines. The rest of the country west of the Jordan was, prior to the Jewish Conquest (1274 B.C.), occupied by some six or seven Canaanitish nations, all except the Hittites apparently of Semitic stock. East of the Jordan were the peoples of Moab, Ammon, Edom, and Midian, also Semitic, like

the Israelites themselves. Jerusalem became the capital of a southern kingdom of Judah; the northern Israelite kingdom of the Ten Tribes had its capital at Shechem, Tirzah, and Samaria in succession. The Ten Tribes mostly disappeared during the captivity in Assyria (after 720 B.C.), a small remnant mixed with Assyrian colonists forming the Samaritan people. After the people of the southern kingdom returned from the great captivity in Babylon (538 B.C.), they occupied most of the country formerly belonging to the whole people of Israel, and are henceforward known to history as the Jews. The kingdom of Herod the Great (37–4 B.C.) covered most of the land divided by Joshua among the twelve tribes, but was now divided into Galilee, Samaria and Judæa, Idumæa and east of Jordan, Peræa, Gaulonitis, Auranitis, and Trachonitis. A period of prosperity ended with the siege and capture of Jerusalem by the Romans (70 A.D.), whereupon the Jews were scattered to the four winds; and Palestine, held by Persians, Saracens, Latin Crusaders, Turks, has never since been the home of a nation. In its palmiest days Palestine may have had from 2 to 3 millions of inhabitants; the present pop., estimated at 650,000, is very mixed in origin, but consists mainly of Syro-Arabian fellahin, speaking the Syrian dialect of Arabic.

See the *Survey of Western Palestine* (8 vols. 1881 *et. seq.*; discussing excavations, fauna, flora, geology, &c., by Conder, Kitchener, Warren, Tristram, Hull, &c.); *The Survey of Eastern Palestine*; Tristram, *The Land of Israel* (2d ed. 1872); Conder, *Palestine* (1889), and *Tent Work in Palestine* (1878); Thomson, *The Land and the Book* (1859; new ed. 1880–86); Guy le Strange, *Palestine under the Moslems* (1892); G. A. Smith, *Historical Geography of the Holy Land* (1894); Baedeker's guide by Socin, and Cook's; books by Temple (1888), Henderson (1893), A. W. Cooke (1901), Kelman and Fulleylove (illustrated, 1902); and works cited under JERUSALEM.

Palestine, capital of Anderson county, Texas, 151 miles by rail N. of Houston. Pop. 8300.

Palestrina (*Pa-les-tree'na*; anc. *Præneste*), an Italian city, 22 miles E. by S. of Rome, on the slope of an offset of the Apennines, contains the chief castle of the Colonnas and the palace of the Barberini, the owners after 1630. It is built almost entirely upon the gigantic substructions of the ancient Temple of Fortune. Pop. 5855.

Palghat, a town of Malabar district, 68 miles SE. of Calicut by rail. Pop. 44,200.

Páli, the commercial capital of Jodhpur (q.v.), 45 miles by rail SE. of Jodhpur city.

Palikao, a place on the canal between Peking and its port on the Peiho. Here in 1860 was fought an engagement between the Anglo-French troops and the Chinese.

Palk Strait, the northern portion of the shallow passage between south India and Ceylon (q.v.).

Pallas, in Co. Longford, 2½ miles SE. of Ballymahon, was the birthplace of Oliver Goldsmith.

Pallice, LA, a harbour opened in 1889 for large vessels trading to La Rochelle (3 miles distant).

Palma, (1) capital of Majorca (q.v.) and of the Balearic Islands, stands on the Bay of Palma, on the south coast. The Gothic cathedral dates from 1232–1601. The tomb of Raymond Lully is in the church of St Francis. There is a beautiful exchange (1426–46), an old Moorish palace, and a 16th-century town-hall. Population, 65,000, manufacturing silks, woollens, jewellery, &c. The port is protected by a mole, and the town by a wall and batteries.—(2) A town of Sicily, 14 miles SE. of Girgenti. Pop. 14,702.—(3) The name of one of the larger of the Canary Islands (q.v.).

Palmbeach, a fashionable watering-place of Dade county, on the Atlantic coast of Florida, 65 miles N. of Miami. Pop. 300, multiplied many times in the season.

Palmerston. See also PORT DARWIN.

Palmy'ra, in the 2d and 3d centuries a magnificent city of northern Syria, situated in an oasis on the edge of the Arabian desert, 150 miles NE. of Damascus. The Semitic name was Tadmor, Palmyra (='city of palms') being the Greek and Latin equivalent. Magnificent remains of the ancient city still exist, chief among them being the great temple of the Sun (or Baal); the great colonnade, nearly a mile long, and consisting originally of some 1500 Corinthian columns; and sepulchral towers, overlooking the city.

Palni Hills, a range of southern India, linking the southern ends of the Eastern and Western Ghâts; height of the higher ridge, 7000 feet.

Palo Alto (*Pâh-lo*), 33 miles SE. of San Francisco, the seat of a university founded by Senator Leland Stanford, opened in 1891, and destroyed by the earthquake of April 1906.

Palos (*Pâh'lōs*), a Spanish port at the mouth of the Rio Tinto, 5 miles SE. of Huelva. Once an important place, whence Columbus started on his great voyage, it has now sunk to a village of 1422 inhabitants.

Pamir (*Pameer'*; 'roof of the world;' often called the Pamirs), the nucleus of the Central Asian highland system, is a lofty plateau-region, with a mean elevation of 13,000 feet, uniting the western terminations of the Himalaya and the Tian-Shan Mountains, and both with the Hindu-Kush. It is traversed by mountain-ridges which rise from 4000 to 5000 feet above the plateaus, and whose culminating points attain 25,500 feet above sea-level. Between these ridges are a series of broad valleys. On the west side the Pamir sinks rapidly in terraces to the deserts of Turkestan. These lofty plateaus are exposed to great extremes of heat and cold, and are visited by terrible snow and sand storms. Nevertheless the Kirghiz drive up their flocks and herds for summer pasture, and from time immemorial their passes have been traversed by traders and travellers—e.g. by the famous Marco Polo on his journey to the court of Kublai Khan. Among the lakes are Karakul, 120 sq. m., and Shivakul, 100 sq. m. The Pamir occupies the frontiers of Russian, Chinese, and Afghan Turkestan, Bokhara, and Cashmere; and Russian movements there are watched with jealousy by China as well as by Britain. See Geiger, *Die Pamirgebiete* (1887); and the Earl of Dunmore, *The Pamirs* (1893).

Pam'lico Sound, a shallow body of water, some 75 by 10 to 25 miles, on the coast of North Carolina, separated from the ocean by long, narrow islands of sand, with narrow passages.

Pampelu'na, or PAMPLONA, a fortified city of northern Spain, stands on a tributary of the Ebro, 111 miles by rail NW. of Saragossa, and 50 S. by W. of Bayonne in France. It has a citadel (a copy of that of Antwerp), a Gothic cathedral (1397), a viceregal palace, a fine aqueduct, and some manufactures. *Pompeiopolis* was built by Pompey in 68 B.C. From 907 it was the capital of Navarre. Pop. 30,988.

Pamphylia, anciently a country on the south coast of Asia Minor, between Lycia and Cilicia.

Panamá, ISTHMUS OF, formerly called the

Isthmus of Darien (q.v.), embraces the narrowest part (35 miles) of Central America, connecting Costa Rica on the W. with Colombia on the E. Formerly a department of Colombia, it asserted its independence in 1903 and formed a republic, which was at once recognised by the United States, and since by the chief European powers. With an area of 31,570 sq. m., and a pop. of about 340,000, it is traversed by a low chain of mountains, forming the barrier between the Atlantic and Pacific oceans. The chief trading ports are Panamá and Colon (Aspinwall).

Panamá, capital of the dep., stands on a projecting volcanic rock on the Pacific side; the massive walls the Spaniards built to protect their treasure city still stand in places. Old Panamá, founded in 1518, was captured and destroyed by the buccaneers under Morgan (1671). Modern Panamá was built two years later, 4½ miles distant from the old city; pop. 28,000, the majority of Indian and negro descent, and half-breeds. Fires have destroyed Panamá repeatedly, as well as its sister city Colon. The principal buildings are the cathedral (1760), town-hall, and bishop's palace (1880). Panamá is connected with Colon on the Atlantic by the Panamá Railway (48 miles long), built by Americans in 1850–55.

Panamá Canal.—The idea of connecting the Atlantic and Pacific Oceans by a canal across the Central American isthmus is as old as the 16th century; but no steps were taken to carry out any plan until Ferdinand de Lesseps, of Suez fame, convened in Paris in 1879 an international congress to discuss the plan of cutting through the Isthmus of Panamá. On February 28, 1881, the first detachment of canal employés arrived at Colon; in 1882 the Canal Company purchased the Panamá Railway. An expert commission to Panamá in 1880 estimated that a canal could be made for 843,000,000 francs, but later De Lesseps announced that a tide-level canal without locks could be completed for 600,000,000 francs. Work was begun, and loans followed year after year, until the company was forced into liquidation in 1889. The Panamá scandals followed (1892–93), with prosecutions and imprisonments (Lesseps, Eiffel, &c.). In 1902 the United States arranged to purchase the existing works, with the right to finish the canal; but the necessary treaty was rejected by Colombia in 1903, whereon the department of Panamá revolted (see above), and the new republic signed a treaty with the States in November 1903, giving the Americans full control of a strip of land on either side the canal, which is practically a dependency of the United States. The total cost of the canal to the United States is estimated to be about $200,000,000.

Pancsova, a town of Hungary, on the Temes, near its junction with the Danube, 9 miles NE. of Belgrade. Pop. 19,000.

Pandharpur, a town of India, 112 miles SE. of Poona, on a branch of the Kistna. Pop. 36,910.

Pangbourne, a Berkshire parish, on the Thames, here joined by the Pang, 5½ miles WNW. of Reading. Pop. 885.

Panipat, a town of the Punjab, 53 miles N. of Delhi, near the old bank of the Jumna, and on the great military road of northern India to Afghanistan. Hence it has been the scene of three great battles (1526, 1556, 1761) between the people of India and her invaders, the two first Mongol victories, and the third an Afghan victory over the Mahrattas. Pop. 27,547.

Panjab. See Punjab.

Panjdeh. See Penjdeh.

Panjim. See Goa.

Panna, capital of a native state (area, 2568 sq. m.; pop. 239,333) in Bundelkhand, 173 miles SW. of Allahabad. Pop. 14,676.

Pannanich Wells. See Ballater.

Pannonia, an ancient Roman province, bounded N. and E. by the Danube, and including most of modern Hungary, Slavonia, Bosnia, Croatia, Carniola, Styria, and Lower Austria.

Panormus. See Palermo.

Panshanger, the seat of Earl Cowper, 2½ miles W. by N. of Hertford.

Panteg, a Monmouthshire parish, with ironworks, 2 miles SE. of Pontypool. Pop. 7746.

Pantellaria, a volcanic island in the Mediterranean, 36 miles in circumference, and 60 miles SW. of Sicily. It is a great convict prison.

Papal States. See Church (States of the).

Pap'a Stour, a Shetland island, 34 miles NW. of Lerwick. Pop. 274.

Pap'a Westray, an Orkney island, 25 miles N. by E. of Kirkwall. Pop. 295.

Papenburg (*Pâ-pen-hoorg'*), a small port of Hanover, 25 miles W. of Oldenburg by rail and near the Ems. Pop. 6916.

Paphlagonia, anciently a province of Asia Minor, along the south shore of the Black Sea.

Paphos, two ancient cities in Cyprus. Old Paphos (now *Kyklia*) was in the western part of the island, 1½ mile from the coast, and was famous for a temple of Venus, who was said to have risen from the sea close by. The other Paphos (*Papho* or *Baffa*) was on the sea-coast, 8 miles W., and was the place in which Paul preached.

Papua (*Papoo'a*). See New Guinea.

Par, a Cornish seaport, 4¼ miles SSW. of Lostwithiel. Pop. 1634.

Pará, the name which the river Tocantins (q.v.) receives in its lower course (138 miles), 20 miles wide opposite the city of Pará. The Paranan, an arm of the Amazon, which isolates Marajó Island, runs into it.

Pará (official name *Belém*), a seaport of Brazil, on the east bank of the river Pará, 70 miles from its mouth. The harbour is nearly landlocked by wooded islands. Tram-cars and telephones are in general use, and there is a railway to Bragança (108 miles). The principal buildings are the theatre, the government building, custom-house, and cathedral (1720). Pará is the emporium of the Amazon river-trade, supplying the interior with foreign goods, and exporting india-rubber, cacao, Brazil nuts, fish, &c. Pop. 50,600.—Area of the *state* of Pará, 443,653 sq. m.; pop. 335,000.

Paraguay (*Paragway'* or *Paragwī*), an important river of South America, an affluent of the Paraná (q.v.), rises in the Brazilian state of Matto Grosso, pursues a generally southward course of about 1800 miles through plains, swamps, and forests in Brazil, between Brazil and Bolivia, and then through Paraguay to its junction with the Paraná, a few miles above Corrientes. Its chief affluents are the Cuyabá, Tacuary, Mondego, and Apa on the left, and the Jaurn, Pilcomayo, and Vermejo on the right. It is navigable for steamers to the mouth of the Cuyabá.

Paraguay, an inland republic of South America, divided into two distinct portions by the Paraguay River. Eastern Paraguay, or Para-

guay proper, is a parallelogram between the Paraguay and Paraná rivers, and is bordered by the Brazilian and Argentine republics. Western Paraguay, or the Chaco (see GRAN CHACO), the smaller part, lies mainly between the Paraguay and its tributary the Pilcomayo. The total area of Paraguay is estimated at about 142,000 sq. m. —a territory considerably larger than Great Britain and Ireland. The population of Paraguay is composed of whites of Spanish descent, Indians, a few negroes, and a mixture of these several races, and in 1905 was estimated at 535,000, exclusive of the Indians in the Chaco. The northern portion of Paraguay is in general undulating, covered by low, gently-swelling ridges, separated by large grass plains, dotted with palms. There are mountains in the north-east and north-west corners. The southern portion is one of the most fertile districts of South America, consisting of hills and gentle slopes richly wooded, of wide savannahs, which afford excellent pasture-ground, and of rich alluvial plains, some of which are marshy, but a large proportion are of extraordinary fertility and highly cultivated. The banks of the rivers Paraná and Paraguay are occasionally belted with forest; but in general the lowlands are destitute of trees. The temperature occasionally rises to 100° in summer, but in winter is usually about 45°. The natural productions are very varied, although they do not include the precious metals or other minerals. Much valuable timber is found in the forests, also dye-woods, india-rubber, orange-trees, gum-yielding trees, the maté, or Paraguay tea shrub (growing wild in the NE.), which yields one of the chief articles of commerce. Wax and honey are collected, as is also cochineal, and the medicinal plants are very numerous. The chief cultivated crops are maize, rice, coffee, cocoa, indigo, manioc, tobacco, and sugar-cane. Tapirs, jaguars, pumas, ant-eaters, wild-boars, peccaries, and deer abound; birds are innumerable; the rivers teem with fish, and their banks are the resort of alligators and coypus. Snakes, including enormous boas, are numerous, but very few of them are venomous. The commerce of the country has greatly increased since 1880. In 1880 the value of exports was £252,000, that of imports less; in 1903 their respective values were £850,350 and £710,360. The chief exports are yerba-maté, tobacco, hides, oranges, timber, bark for tanning, and lace; the imports, cotton goods, hardware, wine, grain, rice, linen, silk, petroleum, &c.—32 per cent. of the imports being from Britain, mostly passing through Brazil and the Argentine Republic. There are no direct exports to Britain. The revenue fluctuates much—from about $9,000,000 to $15,000,000; the expenditure generally exceeds the revenue. The foreign debt is about £6,500,000, the interest of which is sometimes seriously in arrears or unpaid. Trade in the towns is almost wholly in the hands of Italians, French, and Germans. The military force consists of 1500 men. The established religion is the Roman Catholic. Education is free and compulsory; but of the adult Paraguayans only one in five can read and write.

Paraguay was discovered by Juan Diaz de Solis in 1515, and settled as a province of the viceroyalty of Peru in 1535. The warlike Guaranis long successfully resisted the Spanish arms. In the 17th century the home government placed in the Jesuits' hands the entire administration, civil as well as religious. From this time forward the progress of civilisation as well as of Christianity was rapid. On the expulsion of the Jesuits from Paraguay in 1768, the province was again made subject to the Spanish viceroys. In 1810 Paraguay joined with the other states in declaring its independence. In 1814 Dr Francia was proclaimed dictator, and exercised absolute power till his death in 1840. In 1865–70 the Paraguayans made a heroic but unavailing fight against the combined forces of Brazil, the Argentine Confederation, and Uruguay, closed by the defeat and death of the president Lopez at the battle of Aquidaban, March 1, 1870. The results of the war may be read in the returns of the pop.—(1857) 1,337,439; (1873) 221,079, including only 28,746 men and 106,254 women over fifteen years of age. Of late the country has made considerable progress. In 1870 a new constitution was adopted. It is modelled on that of the Argentine Confederation. Asuncion (the capital) has a pop. of 53,000, and is connected by railway (92 miles) with Villa Rica. See works by Robertson (1840), Mansfield (1856), Page (New York, 1867), Kennedy (1869), Masterman (1869), Thompson (New York, 1869), Washburn (Boston, 1871), and Mulhall (1885).

Parahyba (*Par-a-ee'ba*), capital of the Brazilian state of Parahyba, on the Parahyba River, 10 miles from the sea. It has a cathedral, government palace (formerly the Jesuit college), and large sugar-mill (1889). At the mouth of the river is a bar; but a railway (12 miles) was built in 1889 to the port and pier of Cabedello. The exports include sugar, cotton, and cotton-seed, chiefly to Great Britain. Pop. 18,000.—The *state*, the easternmost in the republic, has an area of 28,854 sq. m. and a population of 460,000. —A more important Parahyba River, farther south, enters the Atlantic in the state of Rio de Janeiro, after a course of nearly 500 miles. It is navigable for 50 miles from its mouth.

Paramar'ibo, capital of Dutch Guiana, on the Surinam, 10 miles from its mouth. Pop. 32,000.

Paramatta. See PARRAMATTA.

Paraná, (1) a river of South America, rises as the Rio Grande in the Brazilian state of Minas Geraes, and is known as Paraná after its junction with the Paranahyba (not the Parnahyba, q.v.). Thence its course is S., SW., and W., separating Paraná state from Matto Grosso and from Paraguay, round the southern border of which republic it sweeps westward to its confluence with the Paraguay River. It then rolls southward through the Argentine provinces, past Santa Fé, below which its channel frequently divides and encloses numerous islands, and finally southeastward, till it unites with the Uruguay, above Buenos Ayres, to form the Rio de la Plata. The entire length is over 2000 miles; it drains 1,100,000 sq. m. At San Pedro (33° 40′ S. lat.) a delta begins. The principal towns on its banks are Corrientes, Paraná, Santa Fé, and Rosario—all Argentinian. The river is navigable to the influx of the Paraguay (705 miles), and except at low water to the mouth of the Iguassu (460 miles). Immediately above this point occurs one of the most remarkable rapids in the world, extending for 100 miles between ranges of frowning cliffs.—(2) A southern state of Brazil, on the coast, with an area of 85,453 sq. m., and a pop. of 250,000, including several colonies of Germans and Italians. The capital is Curitiba (14,000), with a railway (69 miles) to the port of Paranaguá.—(3) Capital of the Argentinian province of Entre Rios, stands on a high bluff overlooking the Paraná, opposite Santa Fé, 410 miles by steamer from Buenos Ayres; pop. 25,000.

Paray-le-Monial (*Par-ay-leh-Mon-ee-ahl'*), a

town in the French dep. of Saône-et-Loire, 48 miles by rail W. by N. of Mâcon. In its chapel Mary Alacoque (d. 1690) believed herself to have had a vision of the Saviour, and it is now the object of pilgrimages. Pop. 4141.

Parchim (*Par-hheem*), a town of Mecklenburg-Schwerin, 23 miles SE. of Schwerin. Pop. 10,250.

Par'dubitz, a town of Bohemia, on the Elbe's left bank, 55 miles E. of Prague. Pop. 17,292.

Parham, a Suffolk village, 2¼ miles SSE. of Framlingham. Moated Parham Hall here was the seat of the Willoughbys.

Paris (Fr. pron. *Par-ee'*), capital of France, and the largest city in Europe after London, is situated in 48° 50′ N. lat. and 2° 20′ E. long., on the river Seine, about 110 miles from its mouth. It lies in the midst of the fertile plain of the Île-de-France, at a point to which converge the chief tributaries of the river, the Yonne, the Marne, and the Oise; and is the centre of a great network of rivers, canals, roads, and railways; hence its commercial importance. The present city is bounded by fortifications—a rampart (1840–60) upwards of 22 miles in length. The extension of the city boundary to this line explains the increase of pop. from 1,174,346 in 1856 to 1,696,741 in 1861; subsequent pop. (1866) 1,825,274; (1881) 2,269,023; (1901) 2,714,068. Montmartre, within the fortifications, is 400 feet high; the city is encircled at a distance of from two to five miles by an outer range of heights, including Villejuif, Meudon, St Cloud, and Mont-Valérien (650 feet), some of which are crowned by the detached forts which now form the main defences of the city. At the fifty-six gates in the walls of Paris are paid the octroi dues. The Seine divides the city into two parts, and forms the islands of La Cité and St Louis, both covered with buildings.

France has long been the most highly centralised country in Europe, and Paris as its heart contains a great population of government functionaries. Paris is a city of pleasure, and attracts the wealthy from all parts of the world; hence it is a city of capitalists and a great financial centre. The provincial universities of France have been deprived of their attraction by the schools of Paris, to which flock the youth of France. The publishing trade has followed the same course. The chief and peculiar industries of Paris produce articles which derive their value from the skill and taste bestowed on them by individual workmen, and include jewellery, bronzes, artistic furniture, and decorative articles known as 'articles de Paris.' The private houses as well as the public buildings of Paris are built of a light-coloured limestone, quarried in the neighbourhood of the city. With this material they are reared in huge blocks to a height of six or seven stories, each floor constituting a distinct dwelling; access to all the floors in a tenement being gained by a common stair, which is usually placed under the charge of a porter or *concierge* at the entrance. Very frequently the tenements surround an open quadrangle. Among the great new streets formed in the time of Napoleon III. are the Rue de Rivoli, two miles in length, the Rue de la Paix, the Rue du Faubourg St Honoré, and the Rue Royale. The Boulevards, which extend in a semicircular line on the right side of the Seine, between the nucleus of the city and its surrounding quarters, present the most striking feature of Paris life. In all the better parts of the city they are lined with trees, seats, stalls, and kiosques. Among the public squares or *places* the most noteworthy is the Place de la Concorde, which connects the Gardens of the Tuileries with the Champs-Elysées, and embraces a magnificent view of some of the finest buildings and gardens of Paris. In the centre is the famous obelisk of Luxor (73 feet), brought hither in 1836. On the site of this obelisk stood the revolutionary guillotine, at which perished Louis XVI., Marie Antoinette, Philippe Egalité, Charlotte Corday, Danton, and Robespierre. Of the other squares the following are some of the finest: the Place du Carrousel, including the site of the Tuileries burned by the Commune and not restored; the Place Vendôme, with Napoleon's Column of Victory; the Place de la Bastille, where once stood that famous prison-fortress; the Place Royale; and the Place de l'Hôtel de Ville. Triumphal arches are a feature in the architecture of Paris. The Porte St Martin and Porte St Denis were erected by Louis XIV. to commemorate his victories in the Low Countries; the Arc de Triomphe de l'Étoile, built in 1806–36 at a cost of more than £400,000, is profusely adorned with bas-reliefs and alto-reliefs. The great streets which radiate from the Arc de Triomphe were among the most magnificent of those constructed by Napoleon III. The Seine in passing through Paris is spanned by twenty-eight bridges. The most celebrated and ancient are the Pont Notre Dame (1500), and the Pont-Neuf (1578–1604), which crosses the Seine at the north of the Île-de-la-Cité. The bridges all communicate directly with spacious quays, planted with trees, which line both banks of the Seine. Among the churches the grandest and most interesting is the cathedral of Notre Dame, which stands on a site successively occupied by a pagan temple and a Christian basilica of the Merovingian time. The main building, begun in the 12th century, is 400 feet long, 150 wide, and 110 high. The height of two towers is 218 feet, that of the flèche 300. It has been said that if the pillars of Notre Dame could speak they might tell the whole history of France. In 1793 it was converted into a 'Temple of Reason.' The building was carefully restored in 1845. The Sainte Chapelle, built by St Louis in 1245–48, is perhaps the greatest existing masterpiece of Gothic art, and was restored by Napoleon III. at a cost of £50,000. St Séverin is partly in the English Gothic of the 15th century; it was erected during the English occupation of Paris. St-Germain-des-Prés, probably the most ancient church in Paris, was completed in 1163; St Étienne du Mont contains the tomb of St Geneviève; and St Germain l'Auxerrois has very fine decorations. Among modern churches is the Madeleine (1806–42), like a Corinthian temple; also the imposing Romanesque-Byzantine Sacré Cœur (1875–1900), crowning the height of Montmartre. The Panthéon (1764) was begun as a church, but converted by the Constituent Assembly into a temple dedicated to the great men of the nation, next restored to the church by Napoleon III. and rededicated to St Geneviève, but once more, on the occasion of the funeral of Victor Hugo (1885), reconverted into a valhalla; here are the tombs also of Voltaire, Rousseau, and Carnot.

Paris has upwards of forty theatres. The leading houses are the Opéra, the Théâtre Français—chiefly devoted to classical French drama—the Opera Comique, and the Odéon, which receive a subvention from government. The new opera-house, completed in 1875, cost, exclusive of the site, £1,120,000. Beyond the fortifications at the west of Paris is the Bois de Boulogne, converted

by Napoleon III. from a wood covered with stunted trees into one of the most beautiful gardens in Europe. East of Paris is the Bois de Vincennes. Paris has three large and twelve lesser cemeteries, of which the principal one is Père-la-Chaise (over 200 acres). The Morgue at the upper end of the Île-de-la-Cité is a building in which the bodies of unknown persons found in the Seine are placed temporarily for recognition. The vast caverns under southern Paris, whence the limestone for building has been quarried, were converted in 1784 into catacombs, in which are deposited the bones of the dead, collected from the ancient cemeteries of Paris. Two most interesting civil buildings of the 15th century still exist—the Hôtel de Cluny, one of the finest existing monuments of the Gothic Flamboyant style; and the Hôtel de Sens, the old palace of the archbishops of Sens, now used for business purposes. The Palace of the Tuileries was begun in 1566 by Catharine de Medicis, and enlarged by successive monarchs, until it formed a structure nearly ¼ mile long, running at right angles to the Seine. It was connected with the Louvre (begun 1541 on the site of a 13th-century castle, and completed by Louis XIV.) by a great picture-gallery; between the two palaces lay the Place du Carrousel. The Tuileries continued to be occupied as the residence of the imperial family; but the Louvre proper formed a series of great galleries filled with pictures, sculptures, and collections of Egyptian, Greek, and Roman antiquities. The Commune attempted to burn the whole pile, but only succeeded in destroying the Tuileries and a corner of the Louvre. North of the Louvre is the Palais Royal, a mass of buildings, including the old palace of the Orleans family, the Théâtre Français, and a quadrangle of shops, restaurants, and cafés, enclosing a park or garden open to the public, 700 feet long by 300 feet wide. The Palace of the Luxembourg, south of the Seine, since 1879 the meeting-place of the French senate, was built by Marie de Medicis in the Florentine style. Close to it a gallery has been constructed for the reception of the works of living artists acquired by the state. The Hôtel de Ville, north of the Seine, was burned by the Commune, but has been rebuilt and restored in the style of its predecessor. On the island of La Cité stands the Palais de Justice, a vast pile, also set fire to by the Commune; some parts of it date from the 14th century (the Sainte Chapelle being within its precincts), and others are modern. The old Conciergerie here constitutes one of the eight prisons of Paris. The largest of the numerous hospices or almshouses is La Salpêtrière for old women; Bicêtre receives only men. The Hospice des Enfans Trouvés is the famous Parisian foundling hospital. The Crèches receive the infants of poor women for the day at the cost of 20 centimes. The oldest and most noted hospitals are the Hôtel Dieu, La Charité, and La Pitié.

The chief institutions connected with the University of France, and with education generally, are still situated in the Quartier Latin. The Sorbonne, the seat of the Paris faculties of letters, science, and Protestant theology, has been rebuilt and increased in size (1885–93). Near the Sorbonne is the Collége de France, where gratuitous lectures are also delivered by eminent scholars and men of letters. The Scotch College stands as it did in the 17th century. The École Polytechnique, the School of Medicine and the School of Law, the Observatory, and the Jardin des Plantes are situated in the same quarter of Paris. The principal of the public libraries are those of the Rue Richelieu, now called the Bibliothèque Nationale, rivalled only by the British Museum in the number of its books and manuscripts. No city on this side of the Alps is richer than Paris in fine-art collections, and among these the museums at the Louvre stand pre-eminent. Among its chief treasures may be mentioned the famous Venus of Milo, and the great works of the Italian, Flemish, and Spanish masters; there is a long succession of galleries in which are exhibited Egyptian, Assyrian, Elamitic, Greek, Roman, mediæval, and Renaissance relics and works of art. The Musée Carnivalet is the historical museum of the municipality. The Palais des Beaux-Arts is used as an exhibition of art, manufactures, and architectural models. The Hôtel de Cluny contains curious relics of the arts and usages of the French people from the earliest ages. The Museum of Artillery at the Hôtel des Invalides is devoted to arms and armour, flags and war dresses. The Musée Guimet includes objects used in religious ceremonies, savage, Indian, Chinese, &c. The Mint deserves notice for the perfection of its machinery; and the Gobelins, or tapestry manufactory, may be included under the fine arts. The Conservatoire des Arts et Métiers contains a great collection of models of machinery, and class-rooms for workmen. The Palace of Industry, built for the exhibition of 1854, now forms a permanent exhibition. The building for the exhibition of 1878, named Palace of the Trocadéro, is now used for musical entertainments and as an architectural and ethnological museum. For the exhibition of 1889 was erected the Eiffel Tower, of iron, 985 feet high. On the left bank of the Seine is the École Militaire (1752); near it is the Hôtel des Invalides, founded in 1670 for disabled soldiers, containing in its crypt the remains of Napoleon, deposited there in 1840. The prefect of the Seine is the chief of the municipal government, and is appointed by the government. There is a large elected municipal council. Each of the 20 arrondissements has a maire and two assistant-councillors. The prefect of police is at the head of the civic guard or gensdarmes, the fire-brigade, and the sergents de ville or city police, who are armed with swords. The cleaning, sewerage, and water-supplies of Paris are under the charge of the prefect. Paris is now abundantly supplied with pure and wholesome water. Large cattle-markets are held near the licensed abattoirs or slaughter-houses, since 1818 all in the suburbs. There are in the heart of the city numerous *halles*, or wholesale, and *marchés*, or retail markets; the principal, the Halles Centrales, near the church of St Eustache, covering nearly 20 acres.

The small town of *Lutetia*, on the Île-de-Cité, was the capital of the Parisii, an unimportant tribe of Gauls, and did not take their name till the time of the Roman emperors, of whom Constantius Chlorus and Julian lived much at Paris. Christianity came to the banks of the Seine with St Denis in the 2d or 3d century; St Geneviève settled here in the 5th. Clovis, the Frank emperor, made it his home and the capital of the Frankish states. Philip Augustus in the 13th century greatly extended the city and increased its privileges; and Paris has down the centuries been not merely the capital of France and the centre of its social and political history, but in a very special sense the headquarters of French literature and art. Of recent episodes, the most notable was the siege by the German

armies, from September 1870 till the capitulation in January 1871. The disastrous Communist outbreak was suppressed in May 1871.

See the guidebooks of Murray, Baedeker, Joanne, and topographical works by Du Camp (7th ed. 6 vols. 1884), Colin (1885), Pontich (1884), and the official *Annuaire Statistique* (since 1883); G. A. Sala, *Paris Herself Again* (1879); P. G. Hamerton, *Paris in Old and Present Times* (1884; new ed. 1892); books by A. J. C. Hare (1888), De Amicis (1892), Grant Allen (1897), H. Belloc (1900), T. Okey (1904); besides historical works by French authors, such as Piton (1891), Hoffbauer (1890), Lebeuf (15 vols. 1863), Dulaure (7 vols. new ed. 1874), De Gaulle (1840), Gabourd (1863–65), Arago (2d ed. 1867); and the copious *Histoire Générale de la Ville de Paris*, issued, since 1866, by the municipal authorities.

Paris, (1) capital of Bourbon county, Kentucky, on Stoner Creek, 19 miles by rail NE. of Lexington. It has a military institute, and manufactures whisky, flour, cordage, &c. Pop. 6000. —(2) Capital of Lamar county, Texas, 98 miles by rail NE. of Dallas, making brooms, furniture, sashes, wagons, ploughs, &c. Pop. 9354.

Parkersburg, capital of Wood county, West Virginia, on the Ohio River (here crossed by a railway bridge 1¼ mile long), at the mouth of the Little Kanawha, 195 miles by rail E. by N. of Cincinnati. It has great oil-refineries, chemical works, lumber-mills, and manufactories of furniture, barrels, &c. Pop. 11,850.

Parma, a town of Italy, from 1545 to 1860 the capital of the duchy of Parma, is situated on the ancient Via Emilia, and on the river Parma, 12½ miles S. from the Po, and by rail 56 miles NW. of Bologna and 79 SE. of Milan. It is surrounded by walls and has a citadel (1591); the streets are straight and wide. Of some sixty churches the chief is the Lombardo-Romanesque cathedral (1059–74), with frescoes by Correggio. Other notable edifices are the splendid baptistery (1196–1281); the church of Madonna della Steccata (1521–39), containing the tombs of the Farnese dukes; the ducal palace, containing art-galleries (Correggio's works), a library (214,000 vols. and 4500 MSS.), the archives, &c.; and numerous other palaces, public and private. There are also a university (1599), with 45 teachers and over 250 students, a music school, a museum of antiquities, &c. The principal industrial products are pianofortes, silks, cast-iron wares, woollens, earthenware, paper, soap, &c. Pop. 49,370. Founded by the Etruscans, Parma became a Roman colony in 183 B.C. It was besieged and taken by Frederick II. in 1245, and again invested, but without success, in 1248. It then belonged successively to the houses of Correggio, Este, Visconti, and in 1511 to the pope.

Parnahyba (*Pârnâee'ba*), a river of Brazil, rises in the Serra Mangabeiras, about 9° S. lat., throughout its course (650 miles) forms the boundary between the states of Maranhão and Piauhy, and enters the Atlantic by six mouths. Fourteen miles from its mouth is the unhealthy town of Parnahyba; pop. 8000. See also PARANÁ.

Parnassus, a mountain in Phocis, on whose southern slope lay Delphi (q.v.), the seat of the famous oracle, and the fountain of Castalia. The highest peak (8036 feet) was the scene of the orgies of the worship of Dionysus (Bacchus); all the rest was sacred to Apollo and the Muses.

Paropami'sus, an ancient name still used for a ridge, less than 1000 feet above the adjacent country, which forms part of the northern edge of the great plateau of Persia and Afghanistan, almost connecting the Hindu Kush (q.v.) on the east with the Elburz Mountains to the west.

Paros, one of the larger Cyclades (q.v.); it has an area of 64 sq. m. and a pop. of nearly 7800, of whom some 2500 live in the capital, Parœkia. The quarries of the famous white Parian marble, near the summit of Mount St Elias (anc. *Marpessa*), are not yet exhausted.

Parramatta, a town of New South Wales, stands on a western extension of Port Jackson, 14 miles W. of Sydney. The streets are wide and regular. 'Colonial tweeds,' 'Parramatta cloths' (first made at Bradford from wool exported hence), beer, soap, candles, and tiles are manufactured. Much fruit, especially the orange, is grown here. Pop. (1881) 8433; (1901) 12,560. Parramatta is, after Sydney, the oldest town in the colony, having been laid out (as 'Rosehill') in 1790.

Parret, a river of Dorset and Somerset, running 35 miles N. and NW. to the Bristol Channel at Stert Point.

Parry Islands, a name sometimes given to Melville Islands, and adjoining Arctic Islands.

Parsonstown, or BIRR, a market-town of King's County, on the Brosna, 89 miles by rail W. of Dublin. The castle, anciently the seat of the O'Carrols, was granted by James I. to Laurence Parsons, ancestor of the present proprietor, the Earl of Rosse. There are barracks, a statue (1747) of the Duke of Cumberland, and another in bronze (1876) by Foley of the Earl of Rosse, the astronomer. Pop. 4513.

Partabgarh, (1) a division of Oude, east of Allahabad. Area, 1439 sq. m.; pop. 910,895. There is a town of Partabgarh; pop. 13,000.—(2) A native state of Rajputana, bordering on Gwalior. Area, 959 sq. m.; pop. 53,000. Its capital is Partabgarh, in the centre.

Parthia, anciently a district in what is now northern Persia, lying between Media on the west and Bactria on the east. Parthia had been subject successively to the Assyrians, Medes, Persians, Greeks (Alexander the Great and his generals), and the Seleucids of Syria, when from 250 B.C. to 224 A.D. it became an independent kingdom, its most famous ruler Mithridates I. (171–138 B.C.). The capital was Ctesiphon. The Parthian empire was finally overthrown by Ardashir, who founded the dynasty of the Sassanids. See histories of Parthia by Rawlinson (1873 and 1893).

Partick, a town of Lanarkshire, situated chiefly on a rising ground on the Kelvin, immediately above its junction with the Clyde, and 3 miles WNW. of the Cross of Glasgow, of which city it now forms a suburb. Nine-tenths of the workmen of Partick are engaged in shipbuilding-yards, but there is also brass-founding, machine-making, &c. A large proportion of the inhabitants are engaged in business in Glasgow. Partick was made a police-burgh in 1852–66; it has its own police, fire-brigade, &c., but depends on Glasgow for its gas and water supply. Pop. (1851) 3131; (1881) 27,410; (1901) 54,274. See Wallace's *Parish of Govan* (1877).

Partinico (*Partinee'ko*), a town of Sicily, 32 miles SW. of Palermo by rail. Pop. 23,000.

Parton, a Cumberland seaport, 1½ mile N. of Whitehaven. Pop. of parish, 1452.

Pasade'na, a town of California, 10 miles E. of Los Angeles. Pop. (1880) 391; (1900) 9117.

Pascagoula (*ou* as *oo*), a navigable river of SE.

Mississippi, formed by the junction of the Leaf and Chickasawha. It flows 85 miles south to a small bay on the Gulf of Mexico.

Pasco. See CERRO DE PASCO.

Pas-de-Calais (*Pâh-de-Calay'*; originally the name of the Strait of Dover), a dep. in the north of France, formed out of Artois and Picardy. Area, 2550 sq. m.; pop. (1861) 724,338; (1901) 949,968. There are six arrondissements—Arras (the capital), Béthune, St Omer, St Pol, Boulogne, and Montreuil.

Pasewalk (*Pâ-ze-valk'*), a town of Prussia, 26 miles by rail WNW. of Stettin. Pop. 10,450.

Passage, a fishing-village, 6 miles SE. of Waterford. Pop. 530.

Passage West, a seaport, 7 miles SE. of Cork. Pop. 2030.

Passa'ic, a city of New Jersey, on the Passaic River, 11 miles by rail NW. of Jersey City. It has foundries and print-works, and manufactures woollens and shoddy, whips, india-rubber, chemicals, &c. Pop. (1880) 6532; (1900) 27,777.

Passamaquoddy Bay, in North America, opens out of the Bay of Fundy, at the mouth of the St Croix River, between Maine and New Brunswick. It is 15 miles long by 10 wide, and shut in by a cluster of islands.

Passar'ovitz, a town of Servia, 9 miles S. of the Danube and 40 SE. of Belgrade. Pop. 13,000.

Passau (*Passow'*), a town of Bavaria, stands on a rocky tongue of land, on the right bank of the Danube, beside the influx of the Inn, close to the Austrian frontier, 72 miles by rail SE. of Ratisbon. The cathedral was rebuilt after a fire in 1680; the bishop's palace is now in part public offices. Passau was long an important fortified post, being the key of the Danube in that part of its course. There were two strong citadels, one dating from 737, the other from 1215–19. The town grew up around an old Roman camp, and in 739 was made the seat of a bishopric founded by St Boniface. Bavarian since 1803, it manufactures leather, porcelain, parquet-floors, boats, metal-ware, and mirrors. Pop. 18,633.

Passy, a western suburb of Paris (q.v.).

Pasto, a town in the south-west of Colombia, in a fertile valley 8350 feet above sea-level. Above it rises the volcano of Pasto (14,000 feet above the sea). Pop. 10,000.

Paston, a Norfolk coast parish, 8 miles NNE. of Norwich.

Patagonia (from *patagones*, the large 'footsteps' seen by early Spanish voyagers; or from the Indian *patacuna*, 'terraces'), the most southern region of the South American continent, extending from S. lat. 39° southwards to the Strait of Magellan. Length, upwards of 1000 miles; greatest breadth, 480 miles; area, 322,550 sq. m.; pop. about 20,000. Like the rest of the continent, Patagonia is divided by the Andes into two very unequal and dissimilar territories. Since 1881 nearly the whole country east of the watershed is recognised as part of the Argentina; Chili has contented herself with the country to the west and a strip along the southern coast.

Western or Chilian Patagonia (63,000 sq. m.), a narrow strip between the mountains and the sea, is rugged and mountainous. Along the coast are numerous islands, the principal being Chiloe, the Chonos Archipelago (q.v.), and Wellington Island. In the Cordilleras proper the summits are less lofty towards the south; the volcanoes of Minchinmavida and Corcovado are 8000 and 7510 feet high, and Monte San Valentin 12,697 feet. In Chiloe the mean temperature of winter is about 40°, that of summer rather above 50°. The atmosphere is very damp; prevailing western winds constantly deposit their burden of rain. South of 47° S. lat. hardly a day passes without rain, snow, or sleet. This continual dampness has produced luxuriant forests. Coal is mined near Punta Arenas (Sandy Point), where there is a Chilian penal settlement (pop. 6500). The population consists of small nomadic tribes of Araucanian stock, and a few Chilian settlers.

Eastern or Argentine Patagonia consists mainly of high undulating plains or plateaus rising in successive terraces, and frequently intersected by valleys and ravines. These plateaus are occasionally covered with coarse grass, or stunted bushes and herbs; elsewhere the surface is rugged with heaps of stones or ridges of bare rock. Keen blasts sweep chiefly from the west; and as this wind has already parted with its moisture on the other side of the mountains, hardly any rain falls in Argentine Patagonia during seven or eight months of the year. The soil in many places is strongly impregnated with saltpetre, and salt-lakes and lagoons are numerous. Along the eastern base of the Andes there is a great tract of picturesque and fertile forest-clad territory. The principal rivers of Argentine Patagonia rising in the Andes are the Rio Negro (q.v.), which forms its northern boundary, the Chubut (q.v.), and Deseado. Herds of horses and, in the more favoured regions, cattle are bred; guanacos, pumas, foxes, armadillos, skunks, and tucotucos (a peculiar rodent) are met with; and among the birds are rheas, condors, hawks, partridges, flamingoes, and ducks. Argentine herdsmen are beginning to pasture their cattle in the northern valleys, and Chilian immigrants are moving eastwards. The Patagonians proper or Tehuelche Indians, who are confined to Eastern Patagonia, are now almost quite extinct. They are often large but not gigantic men, sometimes over, generally under, 6 feet. Patagones, 18 miles from the mouth of the Rio Negro, has a pop. of about 2000, composed of Spanish settlers, negroes, and convicts. There is a Welsh colony on the Chubut (q.v.). Magellan sailed along the Patagonian coast in 1520. English works on Patagonia are Falkner's (1774), Snow's (1857), Musters' (1871), Beerbohm's (1878), Lady Florence Dixie's (1880), and Coan's (1880).

Patan, a town of India, in Baroda, 64 miles NW. of Ahmadabad, with lofty walls and ancient ruins. It manufactures swords, pottery, silks, and cottons. Pop. 42,646.

Pateley Bridge, a town of Yorkshire, on the Nidd, 11 miles WSW. of Ripon. Pop. 7910.

Paterno, a town of Sicily, 11 miles NW. of Catania, at the base of Mt. Etna. Pop. 25,230.

Paterson, capital of Passaic county, New Jersey, is on the Passaic River (which here has a perpendicular fall of 50 feet), and on the Morris Canal (connecting it with the Delaware River), 15 miles by rail NW. of New York City. It has locomotive-works, an iron-forge and rolling-mill, and manufactures cotton, paper, linens, and woollens, &c.; but chiefly it is famous for its more than 100 silk-factories, which have made it 'the Lyons of America.' Pop. (1870) 33,579; (1880) 51,031; (1890) 78,347; (1900) 105,171.

Pathhead, a village, on the Tyne, 11 miles SE. of Edinburgh. Pop. 466.

Patiala (*Putteeâh'la*), a native Indian Punjab

state, partly S. of the Sutlej, partly in hills. Area, 5951 sq. m.; pop. 1,583,521. The capital, Patiala, has a pop. of 55,856.

Patmos (mod. *Patino*), a rocky and barren island, in the Ægean Sea, one of the Sporades, lies to the south of Samos. Area, 16 sq. m. The apostle John, exiled hither, saw here the visions of the Apocalypse. On a mountain stands the monastery of 'John the Divine,' built in 1088. The island is under Turkish rule, but is inhabited by about 4000 Greek sponge-fishers.

Patna, an Ayrshire village, on the Doon, 10 miles SE. of Ayr. Pop. 486.

Patna, called also AZIMABAD, a city of Bengal, 140 miles E. of Benares by rail, extends 9 miles along the Ganges and 2 miles back from the river. The chief buildings are the Gola or government granary (1786), the government opium-factories, Patna College, the shrine of Shah Arzani, the mosque of Sher Shah, a Roman Catholic church, and a Mohammedan college. Its railway communication, and its central position at the junction of three great rivers, the Son, Gandak, and Ganges, render Patna of great importance as a commercial centre. *Pataliputra* was founded about 600 B.C. The massacre here of British prisoners in 1763 led to annexation; and mutiny broke out at Dinapur, the military station west of Patna, in 1857. Bankipur, the civil station, between the city and Dinapur, was in 1905 made a sub-capital for Western Bengal. Pop. (1872) 158,900; (1881) 170,654; (1901) 134,785.

Patna, a native state of the Central Provinces, India; area, 2399 sq. m.; pop. 287,959. Patna, the chief town, has a pop. of 2053.

Patras', or PATRÆ, the chief seaport in the west of Greece, on the S. shore of the Gulf of Patras, by rail 81 miles W. by N. of Corinth and 137 W. by N. of Athens, is the seat of an archbishop, and has a spacious harbour (1880) protected by a mole. It ships great quantities of currants, also olive-oil, wine, valonia, &c. Pop. (1879) 25,494; (1897) 37,960. *Patræ* alone of the 'twelve cities' of Achaia still exists as a town.

Patricroft, a town of Lancashire, 5 miles W. of Manchester, with a huge iron-foundry, machine-works, &c. Pop. 15,902.

Patrington, a decayed town of Yorkshire, 15 miles ESE. of Hull. Pop. of parish, 1107.

Pattan. See PATAN.

Patterdale, a village of Westmorland, at the head of Ullswater, 8¼ miles N. of Ambleside.

Pau (*Po*), the chief town of the French dep. of Basses-Pyrénées, on the right bank of the Gave-de-Pau, 66 miles by rail ESE. of Bayonne and 143 SSE. of Bordeaux. It occupies a rocky height, 623 feet above sea-level, and commands magnificent views of the Pyrenees. The ancient capital of the kingdom of Béarn and French Navarre, it has a noble five-towered castle. Rebuilt about 1363 by the Comte de Foix, and restored by Louis-Philippe and Napoleon III., this castle was the birthplace of Henri IV., as also of his mother Jeanne d'Albret; and Abd-el-Kader was a prisoner here in 1848. Bernadotte was a native. Linen and chocolate are manufactured; and in the vicinity Jurançon wine is grown, and many swine are fed. Pau is a great English resort, especially during the winter season (October to May), and is famous for its golf-links. Pop. (1872) 25,607; (1901) 30,811. See a work by Count Henry Russell (new ed. 1891).

Pauillac (*Po-eel'yac*), a French port on the left bank of the Gironde's estuary, 30 miles N. by W. of Bordeaux by rail. Pop. 5332.

Paul, a town and urban district of Cornwall, 2 miles S. of Penzance. Pop. (1901) 6332.

Pavia (Ital. *Pave'a*), a city of northern Italy and a bishop's see, on the left bank of the Ticino, 2 miles above its confluence with the Po, and 21 miles by rail S. of Milan, is still partly surrounded by walls, and was called the 'city of a hundred towers.' The Lombard basilica of San Michele is mentioned as early as 661; in it the old 'kings of Italy' were crowned; in 1863 it was granted the title of 'royal basilica,' and was restored 1863–76. The unfinished cathedral, commenced in 1488, shelters the ashes of St Augustine and Boëtius and also Roland's lance. The Certosa, 5 miles N., is a celebrated Carthusian monastery (1396). The castle of the Visconti (begun in 1360) is a massive square arcaded structure. The university, said to have been founded by Charlemagne, but not formally constituted until 1361, has 1100 students and 57 teachers. Attached to it are two colleges—Borromeo (1563) and Ghislieri (1569)—for poor students, and a library (1772) of 185,000 vols., a botanic garden, &c. Pop. 35,500. Pavia (anc. *Ticinum;* later *Papia,* whence the modern name), was founded by Gallic tribes, and was sacked by Attila (452) and by Odoacer (476); Theodoric selected it as his capital after 489. Later on the Lombards made it their capital, and then it became the chief city of the kingdom of Italy. It was sacked in 1500 and 1527–28 by the French, who in 1525 were defeated here by the imperialists, Francis I. being taken prisoner. It fell to Austria in 1814, and to Italy in 1859. Lanfranc and Pope John XIV. were natives.

Pavlograd, a town of South Russia, 45 miles by rail ENE. of Ekaterinoslav. Pop. 17,442.

Pawtuck'et, a city of Rhode Island, on the Pawtucket River, 4 miles by rail N. of Providence. On account of a fall of nearly 50 feet on the river, it was made in 1790 the site of the first cotton-factory in the United States. It now contains numerous large mills, where cottons, woollens, haircloth, and thread are manufactured, besides great calico-printing works, and bleaching and dyeing establishments, &c. Pawtucket, settled about 1655, became a city in 1886. Pop. (1870) 6619; (1900) 39,231.

Paxo, an Ionian island, has with Antipaxo an area of 8½ sq. m. and a pop. of 4000.

Paysandú, the chief town of a Uruguayan department (pop. 38,507), on the Uruguay River, 280 miles by rail NW. of Montevideo. It exports tinned meat. Pop. 24,000.

Payta, or PAITA, a good port in the north of Peru, only 370 miles distant from the point on the Maranon to which steamers from the Atlantic come. Pop. 5000.

Paz, LA. See LA PAZ.

Pea'body, a town of Massachusetts, 16 miles NNE. of Boston. Formerly called South Danvers, it was in 1868 named after the philanthropist Peabody, who was born here. Pop. 15,000.

Peace River, a large river of Canada, rises in two branches in the Rocky Mountains, in British Columbia, and, flowing 1100 miles north-east, joins the Slave River by five widely separate mouths. The delta thus formed is, with that of the Athabasca River, the most fertile part of the country. The river, which is much encumbered with rapids, was followed by Sir A. Mackenzie in his expedition of 1792–93.

Peak, the hilly district of north-west Derbyshire, having Castleton for its capital, 10 miles NE. of Buxton. Measuring some 30 by 22 miles, it is watered by the Dove, Derwent, and Wye, and culminates in Kinderscout (2082 feet), other eminences being Axe Edge (1810 feet) and Mam Tor (1710). The Peak Cavern or Devil's Hole near Castleton penetrates 750 yards; and crowning a rock above the village is Peveril Castle, so named from its first lord, a bastard of William the Conqueror's. The wonders of the Peak were celebrated early by Thomas Hobbes (1666) and Charles Cotton (1683); recent works are by Croston (1862; new ed. 1889), Bradbury (1879), Jennings (1880), and Leyland (1891), besides others cited at DERBYSHIRE.

Pe'-chi-li, GULF OF, a land-locked extension of the Yellow Sea (q.v.), between Corea and the Chinese province of Shan-tung, into which the Pei-ho (q.v.) discharges.

Pechora. See PETCHORA.

Peckforton Castle, the Cheshire seat (1851) of Lord Tollemache, 4 miles SSW. of Tarperley.

Pecos, a river of New Mexico and Texas, flowing 800 miles SSE. to the Rio Grande.

Pedrotallagalla. See CEYLON.

Peeblesshire, or TWEEDDALE, a southern county of Scotland, bounded by Edinburgh, Selkirk, Dumfries, and Lanark shires. Irregular in outline, it has a maximum length and breadth of 29 and 21 miles, and an area of 356 sq. m. or 227,869 acres. The Tweed, rising in the extreme south, winds 36 miles NNE. and E., descending therein from 1500 to 450 feet; and from it the surface rises into big, round, grassy hills—Windlestraw Law (2161 feet), Minchmoor (1856), Hartfell (2651), Broad Law (2754), &c. Among the Tweed's numberless affluents are Talla, Biggar, Lyne, Manor, Eddleston, Leithen, and Quair Waters; and St Mary's Loch touches the southern boundary. Less than one-fifteenth of the entire area is under corn and root crops; but nearly 200,000 sheep graze on the hillsides. The antiquities include over fifty hill-forts, the 'Romanno terraces,' a Roman camp at Lyne, the ruined castles of Neidpath and Drochil, and the old mansion of Traquair. Peebles and Innerleithen are the towns. The county unites with Selkirkshire to return one member. Pop. (1801) 8735; (1841) 10,499; (1901) 15,066.

PEEBLES, the pleasant county town, stands on the Tweed, 22 miles S. of Edinburgh. It has a new parish church (1887) and five other modern churches; the Chambers Institution (1859), with library, museum, &c., in the old house of the Yester and Queensberry families; a hydropathic (1881); a public park (1887); tweed-manufactures; and the tower of St Andrew's Church (1196), restored in 1882 by Dr William Chambers, who rests beneath its shadow, and who, like his brother Robert, was a native. Mungo Park was a surgeon here. Peebles was made a royal burgh in 1367, and till 1832 returned one member. Pop. 5500.

See Dr A. Pennicuik's *Description of Tweeddale* (3d ed. 1875), Dr W. Chambers's *History of Peeblesshire* (1864), Dr John Brown's *Minchmoor* (1864), and *Charters of Peebles* (1873).

Peekskill, a manufacturing village, on a beautiful point of the Hudson River, 42 miles N. of New York. Pop. 10,360.

Peel, a coast-town of the Isle of Man, 11½ miles by rail NW. of Douglas. On Peel Hill (450 feet) is a tower called Corrin's Folly; and on an island sheltering the harbour stand the beautiful ruins of Peel Castle, celebrated by both Scott and Wordsworth. It dates from the 12th century, but was mainly rebuilt by the fourth Earl of Derby in 1593. St German's Cathedral, a cruciform ruin, with a crypt and low central tower, is included in its area. Fishing is Peel's chief industry, but the place attracts yearly more and more visitors. Pop. 3331.

Pegu', a town of Lower Burma, on the river Pegu, 46 miles NE. of Rangoon, was long the capital of a powerful kingdom; travellers in the 16th century speak of its magnificence. It was destroyed in the middle of the 18th century. A celebrated pagoda still stands within part of the old walls. Pop. 10,700.—The *river* flows 180 miles S. to the Rangoon or Hlaing River.

Pei-ho, a river of China, rises near the borders of Mongolia, flows NE. and SE., past Peking and Tien-tsin, and falls into the Gulf of Pe-chi-li after a course of more than 350 miles. Its mouth is defended by the forts of Taku.

Peipus (*Pī-poos*), LAKE, in NW. Russia, lies between the government of St Petersburg and Livonia. On the south it is connected with Lake Pskoff by a long, narrow channel, the length of both lakes being 87 miles, the greatest breadth 30, the area 1356 sq. m., and the depth from 14 to 49 feet. Their waters, which abound in fish, are carried to the Gulf of Finland by the Narova. The shores are marshy and flat.

Pekin, capital of Tazewell county, Illinois, on the Illinois River, 10 miles S. of Peoria. It has foundries, flour-mills, distilleries, and manufactures organs, ploughs, wagons, &c. Pop. 8993.

Peking, or PEI-CHING ('Northern Capital'), the capital of the Chinese empire, is in 39° 54′ 36″ N. lat. and 116° 27′ E. long. It is situated in a sandy plain, and is surrounded by walls with sixteen gates, each surmounted by towers 100 feet high; and it consists, in fact, of two cities —the Inner and the Outer—known also as the Manchu or Tartar and the Chinese, the Northern and the Southern. The walls of the Manchu city average 50 feet in height, and are fully 60 feet wide at the bottom; those of the Chinese city (rectangular in plan) are 30 feet high and 25 wide. The circuit of the two cities measures 21 miles, including an area of nearly 26 sq. m. Peking is one of the most ancient cities of the world; in the 13th century A.D. its Tartar conquerors fell before the invading Mongols; Kublai, a grandson of Genghis Khan, made Peking his capital in 1280, and there he was found by Marco Polo, who styles the city *Khan-baligh*, 'city of the Khan'—hence *Cambaluc*. Soon the Mongols were driven out by the Chinese Ming dynasty, the founder of which fixed his capital at Nanking (q.v.). The third Ming emperor returned to Peking in 1421. The Manchus, who became masters of the empire in 1643, found this city ready for them. A new era in its history commenced in 1860, when it surrendered to the English and French allies.

The Manchu or Inner City is divided into three portions; and at the heart of it are two enclosures, into the innermost of which entrance is forbidden to all except such as have official connection with the court. It is called the Purple Forbidden City, is very nearly 2½ miles in circuit, and in it are the palaces of the emperor, his empress, and other members of the imperial family. The *T'ai Ho*, or 'Hall of Grand Harmony,' is built of marble on a terrace 20 feet high, and rising itself other 110 feet; its principal apartment is 200 feet long and 90 wide.

Surrounding the Forbidden City is the 'Imperial' or 'August,' about 6 miles in circuit, and encompassed by a wall 20 feet high. In the W. part of the 'August City' is the 'Western Park' with a large artificial lake, a summer-house, gardens, the copper statue of Buddha (60 feet high), and the temple of 'Great Happiness.' In the General City are the principal offices of the government, the observatory, the Provincial Hall for literary examinations, the Colonial Office, and the 'National Academy.' In the north-eastern corner is the Russian mission, and west from it the 'Palace of Everlasting Harmony,' a grand lamasery for over a thousand Mongol and Tibetan monks. A little farther W. stands, amidst cypresses, the temple of Confucius. To the 'Temple of Emperors and Kings,' near the south wall, the emperor goes to worship the spirits of nearly two hundred predecessors; the great Tutelary Temple of the capital is grimy, and full of fortune-tellers. All the foreign legations and Christian missions are within the Inner City. The new R. C. cathedral (1888) is conspicuous.

The Chinese or Outer City is very sparsely populated; much of the ground is under cultivation or wooded. The 'Altar to Heaven,' with its adjunct the 'Altar of Prayer for Grain,' and the 'Altar of Agriculture,' are both near the southern wall. The 'Altar to Heaven' stands on a splendid triple circular terrace of white marble, richly carved, in a grove of fine trees. The 'Altar of Prayer for Grain,' a similar but smaller structure, was burned down in 1889. The principal streets of the Chinese City are more than 100 feet wide, but the side streets are mere lanes. The streets are seldom paved, and are deep either in mud or in dust. In the smaller streets the houses are miserable shanties; in the main streets both private houses and shops are one-story brick edifices, the shops gay with paint and gilding. There are three Catholic cemeteries (Portuguese, French, and native) and a Russian one; and there are mission buildings, Russian and other, and hospitals. Free schools and charitable institutions are not infrequent. The climate of Peking is severe, the temperature in winter being from 25° to 10° F., and in summer the heat is great, the thermometer rising to 105°, though the usual summer temperature is 75° to 90°. The population is usually believed to be a million or somewhat less; the Chinese outnumbering both Manchus and Mongols. Peking was connected by railway with Tien-tsin in 1897; the line to Hankow, on the Yang-tsze-kiang, was completed in 1902. There are also lines to Tang-ku (British) and to the hill coal-mines. There is also direct telegraphic communication with Europe. Since 1868 there is an imperial university with American and European professors. Peking was the scene of the troubles connected with the 'Boxer' rising in 1900, the siege of the legations, and their relief by the allied forces, who occupied the 'Forbidden City' after the flight of the Chinese court to Singanfoo. See works cited under China.

Pelesch, a royal castle of Roumania, built in 1873–84, on the south side of the Transylvanian Alps, 70 miles N. of Bucharest.

Pelew Islands, also Palau, a group in the Pacific, SE. of the Philippines, purchased by Germany from Spain in 1899. There are twenty-five islands, mountainous, wooded, and surrounded with coral-reefs; total area, 170 sq. m. The 10,000 inhabitants are Malays.

Pelion, the ancient name of a wooded mountain-range in Thessaly, extending along the east coast. According to the myth, the Titans, to scale Olympus, the gods' abode, piled Ossa on Pelion, the highest peak (5310 feet) of the range.

Pella, capital of Macedonia and birthplace of Philip II. and Alexander the Great, stood amidst marshes, a few miles NW. of Thessalonica.

Peloponnesus. See Greece, Morea.

Pemba, a coral island off the east coast of Africa, lies 50 miles NE. of Zanzibar Island; area, 372 sq. m. With Zanzibar it forms, since 1890, the British Zanzibar protectorate. Pop. 50,000.

Pemberton, a town in Lancashire, 2 miles from Wigan, with collieries and cotton-mills. Pop. (1901) 21,664.

Pembina, capital of Pembina county, North Dakota, on the Red River of the North, at the mouth of the Pembina River, 68 miles by rail SW. of Winnipeg and 293 NW. of St Paul.

Pembrey, a Carmarthen port, on the Burry, 5½ miles W. of Llanelly. Pop. of parish, 6435.

Pembroke, the county town of Pembrokeshire, on a navigable creek of Milford Haven, 9 miles W. of Tenby and 80 W. by N. of Cardiff. On the extremity of the ridge on which the town is built stands Pembroke Castle, founded in 1094 by Arnulf de Montgomery, a very imposing ruin, with a Norman keep 75 feet high and 52 in diameter. Beneath is a huge natural cavern, 70 by 50 feet. The birthplace of Henry VII., this castle in 1648 was taken by Cromwell after a six weeks' siege. Monkton Priory, with its roofless Decorated choir, is another interesting structure. The Pembroke district of boroughs, returning one member, comprises Pembroke, Milford, Tenby, Wiston, and also (since 1885) Haverfordwest, Fishguard, and Narberth. Pembroke for more than four centuries has given the title of earl to the House of Herbert. At Pembroke Dock, or Pater, 2½ miles north-west, is the naval dockyard and arsenal, established in 1814. With an area of 70 acres, it has since 1861 been fortified at a cost of more than a quarter of a million. Pop. of Pembroke (1861) 15,071; (1901) 15,853; of Pembroke district of boroughs, 36,880.

Pembrokeshire, a maritime county of South Wales, the westernmost of the Principality. Measuring 30 by 25 miles, it has an area of 611 sq. m., or 391,181 acres, of which three-fourths is arable. The coast-line is much of it rugged and precipitous; and inland the surface is undulating, green hills alternating with fertile valleys, and attaining a maximum altitude of 1754 feet in the Precelly range, which traverses the north of the county from east to west. Rivers are the Teifi, separating Pembrokeshire from Cardigan, and the East and the West Cleddau. Coal, slate, lead, and iron have been worked. St David's Cathedral and half-a-dozen mediæval castles make up the antiquities with Ogam inscriptions, neolithic implements, and Roman coins. At Haverfordwest and Tenby a colony of Flemings was established in 1107. They adopted the English tongue; and Pembrokeshire, or 'Little England beyond Wales,' is now over more than half its area inhabited by an English-speaking population, although it is the remotest of all the Welsh counties. It was harried by Owen Glendower in 1405; and on 22d February 1797 it witnessed the last French invasion, when 600 regulars and 800 jail-birds landed near Fishguard, only to surrender to some militia and yeomanry under Lord Cawdor. Pembrokeshire returns one member. Pop. (1801) 56,280; (1861) 96,278; (1901) 88,732. See a work by Fenton (1811).

Penang (*Pulo Pin'ang*, 'Betel-nut Island'), officially PRINCE OF WALES ISLAND, one of the British Straits Settlements (q.v.), lies at the northern extremity of the Strait of Malacca, 2 to 10 miles from the west coast of the Malay Peninsula, and 360 miles NNW. of Singapore. Length, 15 miles; breadth, 5 to 10 miles; area, 107 sq. m., three-fifths being hilly. A sanatorium crowns the highest point, 2920 feet above sea-level. The whole is covered with forest and vegetation, cocoa-nut and areca palms predominating. In the low lands the thermometer ranges from 70° to 95°, and at the sanatorium from 60° to 75°. The rainfall averages 111 inches a year. The exports include tin, spices, sugar, and tobacco. Pop. 90,951, of whom one-half were Chinese, nearly one-fourth Malays, and one-sixth Tamils and others from India. Georgetown, the capital, is situated at the NE. extremity, and is defended by forts. Pop. 30,000. Province Wellesley, on the peninsula opposite, forms part of this same settlement, and is 45 miles in length by 4 to 11 in breadth, with an area of 270 sq. m. It produces tapioca, sugar, rice, and cocoa-nuts. Another dependency is the Dindings, including the island of Pangkor, 80 miles S. of Penang. The native raja ceded Penang to Britain in 1785 for a pension of £1000; Province Wellesley was acquired in 1798. Pop. (including Province Wellesley and the Dindings, 1901) 248,207.

Penarth, a Glamorganshire seaport, 3 miles S. of Cardiff, with a large dock (1851–65). Pop. in 1851, 105; now, 15,000.

Pendennis Castle. See FALMOUTH.

Pendle Hill. See CLITHEROE.

Pendleton, a NW. suburb of Manchester, wholly within the borough of Salford.

Penge, a township in the Dulwich division of Camberwell, 6 miles S. of London Bridge Station.

Peniche (*Pay-nee'shay*), a seaport in the Portuguese province of Estremadura. Pop. 2969.

Penicuik (*Pennycook*), a town of Edinburghshire, on the North Esk, 10 miles S. of Edinburgh by road, but 16 by a branch line (1872). It has a Romanesque church-tower and large paper-mills, dating from 1709; whilst 2 miles NNE. are Glencorse barracks (1804–82), originally a depôt for French prisoners. Pop. (1841) 907; (1901) 3574. See Wilson's *Annals of Penicuik* (1891).

Penielheugh, an eminence (774 feet) in Roxburghshire, 4½ miles NE. of Jedburgh, crowned by a Waterloo column, 150 feet high.

Penistone, a market-town in the West Riding of Yorkshire, on the Don, 13¼ miles NNW. of Sheffield. It has steel-works, collieries, &c., and a railway viaduct 76 feet high. Pop. 3080.

Penjdeh, an important strategical position, near the fork of the Khushk and Murghab rivers, was seized from Afghanistan by the Russians in March 1885, and since 1887 has been formally included in Russian Turkestan.

Penkill Castle, an Ayrshire mansion, 3 miles E. by N. of Girvan, with paintings by W. B. Scott and memories of Rossetti.

Penkridge, a town of Staffordshire, on the Penk, 6 miles S. of Stafford by rail. Pop. 2343.

Penmaenmawr, a Carnarvonshire watering-place (pop. 3510) 4 miles SW. of Conway by rail. On Penmaenmawr mountain (1553 feet), the northern extremity of the Snowdon group, are remains of a great British fort, Dinas Penmaen.

Pennar, or PUNNAIR, two rivers of southern India, both running eastwards through Madras Presidency to the Indian Ocean—the first (355 miles) a little N. of Nellore, the second (245) N. of Cuddalore.

Pennine Alps. See ALPS.

Pennine Range, 'the backbone of England,' a chain running southward from Northumberland to Derbyshire, and varying in height from 1200 feet to near 3000 (in Cross Fell).

Pennsylvania, since 1830 the second in population of the United States, is a parallelogram lying between New York and Maryland, Ohio and New Jersey. The Delaware is the boundary on the E.; and in the NW. the state has 45 miles of coast on Lake Erie. It is 160 miles wide and 302 long (E. to W.); in area (45,215 sq. m.) it is the twenty-ninth state of the Union. The Appalachians (q.v.) cross the state from NE. to SW.; between the Blue or Kittatinny Mountains on the east and the higher Alleghany range (some peaks 2500 feet) on the west lie numerous minor forest-clad chains. The surface is naturally divided into three sections, the low district south-east of the mountains containing some of the best farming land; the mountainous region embracing a fourth of the area of the state, and celebrated for its picturesque scenery (especially for the gaps cut by the rivers *through* the ranges of hills); and the broken hilly plateau in the west, covering half the state, much of it heavily wooded. The geology is remarkable for the great development of the different periods of Palæozoic. The breaking of the strata and the enormous pressure to which the eastern coal-deposits have been subjected has resulted in giving Pennsylvania the most valuable anthracite basins of the country. The excellent bituminous coal (especially around Pittsburgh) is practically inexhaustible; iron ore has contributed materially to the prosperity of the state; petroleum and natural gas are important products of western Pennsylvania; her anthracite coal-basins are, however, the specialty. The anthracite tract covers an area of 472 sq. m., and is situated in the highland district between the Delaware and Susquehanna rivers. The proximity of coal and iron in such vast quantities has made Pennsylvania a great mining and manufacturing state; it leads in the manufacture of pig-iron. The successful boring for petroleum in 1859 produced an excitement hardly surpassed by the discovery of gold in California. There has been extensive utilisation of natural gas for heating and manufacturing purposes. Gold, silver, copper, and tin exist, but not in paying quantities; there are large zinc-works at South Bethlehem, and nickel is obtained in Lancaster county. The eastern part of the state is drained by the Delaware and its tributaries the Schuylkill and Lehigh. The Susquehanna, with its affluents, occupies the central drainage area. The greater part of western Pennsylvania is drained by the Alleghany and Monongahela rivers, uniting at Pittsburgh to form the Ohio. The climate is subject to extremes, and much modified by differences of elevation. Nearly one-fourth of the state is wooded; lumbering is one of the sources of wealth in the north, and farther south and west are great forests of hemlock, which maintain some of the largest tanneries in the world. The soil, except in the mountains, is rich and fertile. The mountain regions and the western plateau are well suited for grazing. The most important industries of Pennsylvania are mining and manufacturing. Shipbuilding is an important interest.

The first permanent settlement was made in

1643 at Chester by Swedes, whose colony of New Sweden was twelve years later conquered by the Dutch. In 1664 the English obtained possession, and the territory now called Pennsylvania was in 1681 granted by Charles II. to William Penn. In the revolutionary and in the civil war Pennsylvania took a prominent part. Many of the miners and ironworkers are of Irish, Hungarian, and Italian birth, and serious riots have not seldom occurred; a large proportion of the farmers are of German descent, and still speak the *patois* known as 'Pennsylvania Dutch.' Philadelphia, chief manufacturing city of the Union, ranks third in population (1,293,697). Other cities are Pittsburgh (321,616), Allegheny (129,896), Scranton (102,026), Reading (78,961), Erie (52,733), Wilkesbarre (51,721), Harrisburg, the capital (50,167), Lancaster (41,459), Altoona (38,973), Johnstown (35,936), Allentown (35,416). Pop. of the state (1800) 602,365; (1840) 1,724,033; (1880) 4,282,891; (1900) 6,302,115.

Pennsylvania Castle. See PORTLAND (ISLE).

Penob'scot, a river of Maine. The West Branch rises near the Canadian frontier, and flows E. and SE. to meet the East Branch or Seboois River. Afterwards its course is SSW. to Penobscot Bay, a broad and sheltered inlet of the Atlantic, 35 miles long and 20 wide, with numerous islands. The river is tidal and navigable for large vessels to Bangor, 60 miles from its mouth.

Penrhyn, great slate-quarries in Carnarvonshire, near Bethesda (q.v.). Penrhyn Castle, close to Bangor, is the seat of Lord Penrhyn.

Penrith, a market-town of Cumberland, in a picturesque and fertile valley, on the outskirts of the Lake District, 18 miles SSE. of Carlisle. It has a fine old ruined castle, where Richard III. (then Duke of Gloucester) is said to have resided, and a grammar-school (1895; refounded 1564). In the churchyard are two ancient monuments, the 'Giant's Grave' and the 'Giant's Thumb,' often visited by Sir Walter Scott; and north-east of the town is the wooded Beacon (937 feet). There are sawmills, tanneries, and breweries, but the chief trade is agricultural. Pop. (1851) 6668; (1881) 9268; (1901) 9182. See works by J. Walker (1856), and G. Watson (1893).

Penryn (Corn. 'head of the river'), a town of Cornwall, at the head of a creek of Falmouth harbour, 3 miles NW. of Falmouth town, with which it returns one member to parliament (till 1885 two). Scarce a trace remains of Glasney College, founded in 1264 for thirteen Black Augustinian Canons; and none of a palace of the bishops of Exeter. Neighbouring quarries supply the famous Penryn granite—the material of Waterloo Bridge, the Chatham Docks, &c.; and the town has besides some manufactures of paper, woollen cloth, gunpowder, &c. Incorporated by James I., it was taken by Fairfax in 1646. Pop. (1851) 3959; (1901) 3190.

Pensacola, the capital of Escambia county, Florida, is 244 miles by rail ENE. of New Orleans, on the west shore of a deep bay opening into the Gulf of Mexico. The entrance is defended by Fort McRee and Fort Pickens, the latter on Santa Rosa Island; and near by is a navy-yard. Pensacola contains foundries and lumber and planing mills, and ships much yellow pine. It was settled by the Spaniards before 1700, occupied by the British in 1763–81, taken from them by Andrew Jackson in 1814, and passed with Florida to the United States in 1819. Pop. (1880) 6845; (1900) 17,747.

Penshurst, a parish of Kent, 4 miles SW. of Tunbridge; pop. 1677. Penshurst Place, a splendid old mansion, was the birthplace of Sir Philip Sidney and Algernon Sidney.

Pentland Firth, a dangerous but much navigated channel between the Atlantic and German Oceans, separating the mainland of Scotland from the Orkney Islands. It is 14 miles long and 6¼ broad at the narrowest. The Pentland Skerries, 5 miles NE. of Duncansbay Head, consist of two islets and several rocks. On the larger of the islets is a lighthouse (1794).

Pentland Hills, Scotland, extend 16 miles SW. from a point 3 miles S. of Edinburgh, through the counties of Midlothian, Peebles, and Lanark, have a breadth of 4 to 6 miles, and attain a maximum height in Carnethy (1890 feet) and Scald Law (1898). In the battle of the Pentlands or Rullion Green, 2 miles NNW. of Penicuik, Sir Thomas Dalyell routed 900 westland Covenanters, 28th November 1666.

Pentonville, a populous district in London in the parish of St James's, Clerkenwell, the first buildings in which were erected in 1773 on fields belonging to Henry Penton, Esq. The name has since been extended to part of Islington parish, in which stands (in Caledonian Road) *Pentonville Prison*, built in 1840–42.

Penza, a large rural town of Russia, 330 miles by rail SE. of Moscow, has a cathedral (17th century), a botanical garden, and manufactures of paper, soap, &c. Pop. 60,000.—The *government* has an area of 14,992 sq. m., and a pop. of 1,470,500.

Penzance' (Corn., 'holy headland'), a town of Cornwall, the most westerly in England, at the head of Mount's Bay, 10 miles ENE. of Land's End, 80 W. by S. of Plymouth, and 328 (by road 281) WSW. of London. Standing on a finely-curved shore surrounded by rocky eminences, it is famous for its mild, equable climate, though the annual rainfall is heavy (43 inches). Its fine esplanade commands splendid land and sea views; and its chief buildings, constructed largely of granite, include a market-hall (1837) with a statue before it of Sir Humphry Davy (a native), an infirmary (1874), a post-office (1883), and public rooms (1867), Italian Renaissance in style, and comprising a guildhall, museum, library, &c. The harbour has two piers (1772–1845) half a mile long, forming a tidal basin of 21 acres; and docks have been added since 1882. Penzance is a headquarters of the mackerel and pilchard fisheries; market-gardening is an important industry; and of recent years the place has grown much in favour as a watering-place. Burned by Spaniards in 1595, and sacked by Fairfax in 1646, it was incorporated in 1614, and from 1663 to 1838 was one of the five 'coinage towns.' Pop. (1851) 9214; (1901) 13,136. See works by Lach-Szyrma (1878) and Millett (1876–80).

Peo'ria, capital of Peoria county, Illinois, on the west bank of the Illinois River, at the outlet of Peoria Lake, 161 miles by rail SW. of Chicago. It is an important railway centre, and is connected by steamboat navigation with the Mississippi and by canal with Lake Michigan. It has a Roman Catholic cathedral, a high school, a medical college, three hospitals, and ten parks, the largest Jefferson (35 acres). Mines of bituminous coal supply the great distilleries, breweries, foundries, manufactories of flour, oatmeal, starch, glucose, pottery, &c. In the lower city are large stockyards. Pop. (1880) 29,259; (1900) 56,100.

Pera, a suburb of Constantinople (q.v.).

Perak', a Malay state on the west side of the

Malay peninsula, since 1874 under the protection of Britain. Area, 7950 sq. m.; pop. (1879) 55,880; (1901) 329,665. The interior attains 8000 feet above sea-level. The soil is fertile, and covered mostly with luxuriant vegetation. Tin is the chief product, and after it lead, besides rice, sugar, tobacco, coffee, tea, spices, &c. See M'Nair's *Perak and the Malays* (1877).

Percy's Cross, a Northumbrian monument, 6 miles SSE. of Wooler, to Sir Ralph Percy, who fell fighting against Edward IV. (1463).

Perekop, Isthmus of, connecting the Crimea (q.v.) with the mainland of Russia. In the north of it is the small town of Perekop; pop. 5000.

Pereslavl, a town of Russia, 96 miles NE. of Moscow by rail. It has a 12th-c. cathedral, cotton-manufactures, and lake-fisheries. Pop. 7466.

Per'gamus, or Pergamum, an ancient city of Mysia in Asia Minor, on the river Caïcus, 15 miles from its mouth. It still exists as *Bergama*, and is noted for the splendour of its ruined temples, palaces, aqueducts, gymnasia, amphitheatres, and city walls. These were excavated for the Prussian government in 1878–86.

Périgueux (*Payr-ee-guh'*), a town of France, formerly capital of Périgord, now in the dep. of Dordogne, and situated on the right bank of the Isle, a tributary of the Dordogne, 95 miles by rail NE. of Bordeaux. The cathedral of St Front is a Byzantine edifice, built in 984–1047, but spoilt by 'restoration' in 1865. The town museum is especially rich in Roman and other antiquities. Statues of Montaigne, Fénelon, and the soldiers Daumesnil and Bugeaud adorn the town. Iron is mined and worked, and woollens are manufactured. The celebrated *pâtés de Périgueux*, made of partridges and truffles, are largely exported. Pop. (1872) 21,316; (1901) 28,875. The Romans built another town on the opposite side of the river to the Gallic *Vesunna*, at the junction of five Roman roads. Close to the modern town are remains of a vast amphitheatre, aqueducts, baths, and temples. The tower of Vesunna, 89 feet high and 200 in circumference, has walls 6 feet thick, but has neither doors nor windows. The district of Périgord is noted for its caves and archæological finds.

Perim (*Per-eem'*), a barren island, since 1883 a coaling and telegraph station belonging to Britain, in the Strait of Bab-el-Mandeb, at the southern entrance to the Red Sea, 97 miles W. of Aden, 1½ from the Arabian shore, and 9 from the African. It is 3½ miles long by 2½ wide, and crescent shaped, the two horns embracing a deep and spacious harbour. The island, held by the British in 1799–1800, and again occupied in 1857, is under the jurisdiction of Bombay Presidency. Pop. about 400, mostly coolie coal-heavers. See H. Spalding, *Perim as it is* (1890).

Perleberg (*Per'leh-berg*), a Prussian town, in Brandenburg, 80 miles NW. of Berlin. Pop. 7825.

Perm, a town of Russia, on the Kama, by which it is 685 miles NE. of Kazan. It is the chief seat of the extensive transit trade between European Russia and Siberia, and has a cathedral, tanneries, distilleries, flour-mills, oil-works, and a government arsenal and cannon-foundry. Pop. 45,400.—The *government* has an area of 128,173 sq. m. and a pop. of 3,003,300.

Pernambu'co, or Recife (*Re-see'feh*), the busiest seaport of North Brazil, stands at the eastern-most point of the coast. It consists of three portions, connected by bridges—*Recife* ('the reef') proper, with narrow, winding streets, the chief seat of commerce, on a peninsula; *San Antonio*, with straight, wide streets, on an island between the peninsula and the mainland; and *Boa Vista*, where are the merchants' villas, on the mainland. The principal buildings embrace two arsenals, an observatory, the palace of the Bishop of Olinda (8 miles to the north), a law school, &c. The harbour, formed by a reef, has been much improved since 1889. Cottons, machinery, and tobacco are manufactured, and shipbuilding is carried on. The principal exports are sugar and cotton, with rum, hides, dye-woods, &c.; the principal imports are cottons and woollens, fish and meat, vegetables, minerals, wines, &c. Britain, the United States, and France have the largest shares in this trade. Pop. (1878) 94,493; (1905) 130,000. Recife was founded by the Spaniards in the second half of the 16th century. Sir James Lancaster captured it in 1595, the Dutch in 1630, and the Portuguese in 1654.—The *province* has an area of 49,625 sq. m. and a pop. of 1,254,000.

Pernow (Ger. *Pernau*), a seaport of the Baltic Provinces of Russia, stands at the mouth of the river Pernow, at the northern extremity of the Gulf of Riga, 100 miles N. of Riga. Besides linseed and barley, it ships large quantities of flax, principally to Great Britain. Pop. 12,918.

Perpignan (*Per-peen-yon^g'*), a town and a fortress in the French dep. of Pyrénées-Orientales, stands on the river Têt, 7 miles from the Mediterranean, 40 by rail S. of Narbonne, and 17 from the Spanish frontier. It commands the passes of the Eastern Pyrenees, and is defended on the south by a citadel, which encloses the old castle of the Counts of Roussillon, and by a detached fort. There are a cathedral (begun in 1324), the Moorish-Gothic cloth-hall or bourse (1396), a town-house (1692), the building of a former university (1349—French Revolution), a palace of justice, and a college. The industries include the making of good red wine, brandy, cloth, &c. As capital of the former county of Roussillon, Perpignan was in the hands of the kings of Aragon from 1172 to its capture by France in 1475; it was restored to Spain in 1493; but Richelieu retook it in 1642. Pop. 32,950.

Perranza'buloe ('Perran in the sands'), a Cornish coast parish, 10 miles N. by W. of Truro. The rude little stone oratory (25 by 12½ feet) of St Piran, sent to Cornwall by St Patrick in the 5th century, had been buried in the sands for a thousand years, when it was discovered in 1835. Perran Round is a circular enclosure, with seven rows of seats that could seat 2000, in which miracle plays were performed of old. See works by Haslam (1844) and Trelawny (8th ed. 1884).

Perryville, a village of Kentucky, 40 miles SW. of Lexington, was the scene of a hard-fought battle between the Union and Confederate armies of Buell and Bragg, 8th October 1862.

Persep'olis ('Persian City'), the Greek name for the capital of ancient Persia, was situated to the east of the river Medus (Murghab), 14 miles above its confluence with the Araxes (Bendemir), 35 miles NE. of Shiraz. A series of most remarkable ruins is now all that remains of that city, with which 'no other city could be compared either in beauty or in wealth,' and which was called 'The Glory of the East.' Three groups are chiefly distinguishable in the vast ruins existing on the spot. First, the Great Hall of Xerxes, or Chehel-Minár (Forty Pillars), with the Mountain of the Tombs (Rachmed), also called Takht-i-Jamshíd or the throne of Jamshíd, after

the reputed founder of Persepolis. The next in order is Naksh-i-Rustam, to the north-west, with its tombs; and the last, the building called the Haram of Jamshíd. See the travels of Chardin, Niebuhr, Ker Porter, Rich, &c.; Fergusson's *Palaces of Nineveh and Persepolis Restored*, Vaux's *Nineveh and Persepolis*, Rawlinson's *Five Great Monarchies*, and for photographic views, *Persepolis*, by Stolze and Nöldeke (Berlin, 1882).

Pershore, a pleasant, old-fashioned market-town of Worcestershire (q.v.), in a fruit-growing district, on the Avon, 9 miles SE. of Worcester. Holy Cross, the church of a Benedictine abbey, originally founded in 689, is but a fragment—choir, south transept, and central tower, mainly Decorated in style. It was restored by Scott in 1863–65. Pershore manufactures stockings and farm implements. Pop. of parish, 2500. See a work by Styles (1838).

Persia, called by the natives IRÁN, the most important native kingdom of western Asia, is bounded by Russian Caucasia, the Caspian Sea, the Russian Transcaspian provinces, Afghanistan, Beluchistan, the Strait of Ormuz, the Persian Gulf, and Asiatic Turkey. Extending 900 miles from E. to W. and 700 miles from N. to S., it has an area of about 638,000 sq. m., consisting for the most part of a great tableland from 2000 to 5000 feet in height. North of this the majestic range of Elburz (with its peak Demavend, q.v.) runs, south of the low Caspian shores, eastward towards Afghanistan and the Paropamisus; and a mountain belt running from the NW. to SE. with snow-capped peaks, descends by steep terraces towards the Persian Gulf, and bounds it on the W. (see ASIA). Demavend is an extinct volcano; and earthquakes occasionally occur. A great part of Khorassan, the north half of Kerman, the east of Irak-Ajemi, which form the great central plain, and detached portions of all the other provinces, with the exception of those on the Caspian Sea, forming more than three-fourths of the surface of Persia, are desert—that is to say, are uncultivated owing to the want of rain; but by far the greater portion of this region consists of light dry soil, which only requires irrigation to become fruitful. This great central desert contains a few oases. A narrow strip of low and level country extends along the Persian Gulf and the Strait of Ormuz. Some parts of the country are of exceeding fertility and beauty; the immense valleys, some of them 100 miles in length, between the various ranges of the Kerman Mountains, abound with the rarest and most valuable vegetable products. Great portions of the provinces of Fars, Khuzistan, Ardelan, and Azerbijan have been lavishly endowed by nature with the most luxuriant vegetation; while the provinces of Ghilan and Mazanderan, which lie between the Elburz and the Caspian Sea, and the southern slopes of the Elburz are as beautiful as wood, water, and a moderately hot climate can make them.

Persia has hardly one river that can properly be termed navigable, though some of them are several hundred miles in length, and of great width and volume of water. The Karun (q.v.) was opened to foreign steam-navigation from its mouth to Ahwaz in 1889. Most of the ancient irrigation works are ruins. Persia abounds with saline lakes, the chief being Urmia (q.v.) and Bakhtegan (60 miles by 9). Persia possesses three climates—that of the Dushtistan, of the elevated plateau, and of the Caspian provinces. In the Dushtistan, the southern lowland, the autumnal heats are excessive, those of summer more tolerable, while in winter and spring the climate is delightful. On the plateau the climate of Fars is temperate. To the north and north-west the winters are severe. The desert-region of the centre and east, and the country on its border, endure most oppressive heat during summer and piercing cold in winter. The Caspian provinces, from their general depression below the sea-level, are exposed to a degree of heat in summer almost equal to that of the West Indies, and their winters are mild. Rains, however, are frequent and heavy, and many tracts of low country are marshy and extremely unhealthy. Except in the Caspian provinces, the atmosphere of Persia is remarkable above that of all other countries for its dryness and purity. The cultivated portions of Persia, when supplied with moisture, are very fertile, producing an immense variety of crops. The chief cultivated products are admirable wheat, barley, and other cereals, cotton, sugar and rice (in Mazanderan), and *tumbaku* or tobacco for the *narghileh* or water pipe. The vine flourishes in several provinces, and the wines of Shiraz are celebrated. Mulberries are also largely cultivated, and silk is a most important product. The forests of the Elburz swarm with wild animals, as wolves, tigers, jackals, boars, buffaloes, foxes, and the Caspian cat. Leopards abound in Mazanderan, and lions in parts of Fars and Arabistan. The horses have always been celebrated for their beauty, speed, and endurance. The Caspian rivers abound with fish, especially sturgeon, great quantities of which are cured and exported to Russia. Except only salt, the mineral products are insignificant, though iron, copper, lead, antimony, coal, sulphur, and naphtha exist in plenty.

The settled population are chiefly Tajiks, the descendants of the ancient Persian race, with an intermixture of foreign blood. To this class belong the agriculturists, merchants, artisans, &c. The Tajiks are Mohammedans of the Shiite sect, with the exception of the remaining Parsees (some 9000 in number), who are found chiefly at Yezd, and still retain their purity of race and religious faith. The nomad or pastoral tribes are of four distinct races—Turks (not Osmanli Turk), Kurds, Lúurs, and Arabs. Of the four the Turk is the most numerous, and to it belongs the present Kajar dynasty. There is a small population of native Christians—the Nestorians of Urmia and Telmais, and Armenians, whose principal settlement is at Julfa (Ispahan), where there is an archbishop and a cathedral. Including a few Roman Catholics and Protestants, the whole number of Christians can hardly exceed 50,000. The Jews number 35,000. There can be no doubt that in antiquity, and even during the middle ages, while the irrigation-works still fertilised large tracts of country, Persia supported a great population; in the 17th century it was estimated at 40 millions. In 1905 the population was estimated at about 9½ millions, and the principal cities thus: Teheran, 250,000; Tabriz, 180,000; Ispahan, 80,000; Meshhed and Kermán, 70,000 each; Yezd, 55,000; Barfurush and Shiraz, 50,000 each; Hamadan, Kazvin, Kom, Kashan, Resht, from 30,000 to 40,000 each. Of the nomads 260,000 are Arabs, 720,000 Turks, 675,000 Kurds and Leks, 234,000 Lúurs, and 20,700 Beluchis and gypsies. The houses are generally built of mud, and, seen from without, look contemptible, but the interiors of the houses of the wealthy are sometimes perfect paradises of elegance. The miserable look of the towns is greatly redeemed by the

beauty of the gardens which surround them. The roads are utterly neglected.

Persian trade is comparatively small. Silk has declined, opium is increasing, cottons and woollens, shawls, carpets, and felts are manufactured both for home use and for export. The exports mainly consist of wheat, rice, wine, raisins, almonds and nuts, olive-oil, tobacco, drugs, gums, resins, manna, opium, colouring matters, boxwood, walnut-wood, silk, wool, carpets, skins and furs, wax, pearls, turquoises, sulphur, naphtha, salt; the chief imports are cotton goods from Britain, and broadcloths, jewellery, arms, cutlery, watches, earthen, glass, and metal wares, &c. The whole foreign trade has been estimated roughly at—imports, £5,500,000; exports, £3,000,000. The imports of British produce have of late years varied from £300,000 to £500,000; while the exports to Britain were worth from £100,000 to £250,000, without reckoning the much greater value sent to India and other British dependencies. In the north-west, north, and north-east districts a decided Russian superiority in trade is in parts disputed by British and Indian competition; in the south and west British ascendency is established. Many projects of railways have been formed, but up to 1894 only one of them had been carried out—viz. from Teheran to Shah Abul Azim (6 miles). Tramways have been laid down in Teheran. The Karun river has been open since 1888 to foreign (mainly British) navigation. Russia has easy access by the Caspian. The principal centres of trade are Tabriz, Teheran, and Ispahan; the chief ports Gombroon (Bender-Abbas), Lingah, and Bushire on the Persian Gulf, and Enzeli, Meshed-i-Sar, and Bender-i-Gez on the Caspian. The government of Persia is a pure despotism, limited only by the power and influence of the Mohammedan mollahs or priests, domestic intrigues, dread of private vengeance, and an occasional insurrection. The 'Shah,' or 'Padishah,' possesses absolute authority over the lives and property of his subjects. His deputies, the governors of provinces and districts, possess similar authority over those under them; their actions are, however, liable to revision by the Shah, who may summarily inflict any punishment upon them for real or alleged misgovernment. Frightful bribery and extortion prevail. It is believed that the irregular exactions amount to a sum equal to the legal assessments, and that not a penny of the money so extorted is applied to public purposes. The annual revenue in 1890–1905 may be stated at from £1,400,000 to £1,775,000. The regular army is really composed of about 30,000 infantry and 1000 artillery, while there are about 10,000 irregular cavalry, a few thousand irregular infantry, and the guards.

The Medes (akin to the Persians), who occupied the NE. of Persia, rebelled against the Assyrians and founded a kingdom in 708 B.C., subverted in 537 by the Persians under Cyrus, who established a vast and mighty empire, extending from the Ægean to the Oxus and Indus. Cambyses conquered Egypt (525 B.C.); Darius I. and Xerxes I. failed in 490 and 480 to subdue Greece. After the reign of Artaxerxes I. (465–425) decay set in, and Alexander the Great reconstructed a new Persia under Greek influence. At his death Persia fell to the Seleucidæ, but Bactria and Parthia soon became independent; and then the Arsacidæ, a Parthian dynasty, ruled all Persia from 138 B.C. to 218 A.D., when the Sassanian princes, of the old Persian stock, restored a real Persian empire, which contended with Rome on equal terms, repeatedly defeated Roman armies, and took a Roman emperor captive (260 A.D.). The Sassanians were crushed in 639 A.D. by the Mohammedan Arabs, under whom Persia became a favoured province of the Caliphs. After the 9th century various Turkish, Persian, or Tartar dynasties ruled over portions of Persia, but were swept away by the Mongols of Genghis Khan (1335). Timur the Tartar made Persia part of his dominion (1370). A Turkish dynasty had great representatives in Ismail (1500–23) and Abbas the Great (1585–1628). The present Turkoman dynasty was established by Aga-Mohammed in 1795. See books on Persia by Arnold (1876), Wills (1883–86), Benjamin (1886), Curzon (1891), and Browne (1893); Morier's tale of *Hajji Baba;* and histories by Rawlinson (of ancient Persia, 1876), Malcolm (1828), Watson (1866), and Clements Markham (1874).

Persian Gulf, an arm of the Indian Ocean which penetrates 650 miles north-westward between Arabia and Persia. Its breadth varies from 55 miles at the mouth to 250 miles, and the area is estimated at 77,450 sq. m., not including the islands, which are scattered over the western half, or lie close inshore along the eastern side. The chief of these islands are Ormuz, at the mouth; Kishm, 810 sq. m. in extent; and the Bahrein Islands. The Great Pearl Bank stretches along the western side from Ras Hassan to nearly half way up the gulf. On the Arabian side the coast is low and sandy, occasionally broken by mountains and cliffs; while on the Persian side it is higher and abrupt, with deep water close inshore, owing to the mountain-ranges of Fars and Laristan running close to the water's edge. The islands, mostly barren and destitute of springs, present numerous traces of volcanic eruptions. With the exception of the Shat-el-Arab (see EUPHRATES), the Persian Gulf receives only insignificant streams. Its eastern side offers good anchorage, either in the numerous bays or in the lee of islands. The greater portion of its southern shores now belongs to the Imam of Muscat, while the whole of the northern shore belongs to Persia. The greatest depth does not exceed 50 fathoms. The submarine telegraph cables of the government of India traverse the whole length of the Persian Gulf, and connect with the systems of Persia and India.

Perth, the county town of Perthshire, on the right bank of the tidal Tay, 43 miles NNW. of Edinburgh, 22 WSW. of Dundee, and 62 NE. of Glasgow. The beauty of its surroundings—the noble river; the two wooded heights, Moncreiffe and Kinnoull Hills, 725 and 730 feet high; and away to the north, the Grampians—makes the 'Fair City' worthy of the name. A handsome nine-arch bridge (1772; widened 1871), 840 feet long, and stretching over a waterway of 590 feet, leads to the suburb of Bridgend, where Ruskin spent much of his childhood; along the Tay's west bank extend two beautiful public parks, the North and South Inches, 98 and 72 acres in area. St John's Church is the only old building—a cruciform Decorated pile, with an earlier central square tower. Other edifices are St Ninian's Episcopal Cathedral (1850–90), an Early Middle Pointed structure; the Tudor municipal buildings (1879), the Grecian county buildings (1819–67), the city hall (1844), the infirmary (1837–69), and the penitentiary and general prison for Scotland (1812–59), besides the water-works (1830–80), two museums, the Albert statue (1864), and the auction-mart (1875). Railways have largely diverted the river-trade; and dyeing is now the leading industry, with manufactures of ink, gauge-

glasses, linen, iron, beer, &c. A royal burgh since 1210 or earlier, and taking precedence of all others save Edinburgh, Perth returns one member. Pop. (1831) 19,238; (1901) 32,873.

Perth, or St Johnstoun, as it was formerly called, has a wealth of historic memories—the bloody combat on the North Inch between sixty members of the clans Chattan and Kay (1396); the murder of James I. (1437); Knox's 'thundering sermon against idolatry' in St John's (1559); the Gowrie Conspiracy (1600); and Montrose's victory of Tippermuir (1644); besides sixteen ecclesiastical councils and fourteen parliaments, and visits innumerable from royal personages, including the two Pretenders and Queen Victoria. See *Perth Memorabilia* (1806), Maidment's *Chronicle of Perth* (Maitland Club, 1831), and works by Penny (1836), Lawson (1847), Peacock (1849), and J. Wilson (1860).

Perth, the capital of Western Australia, occupies a picturesque site on the north bank of the Swan River, 12 miles from Fremantle, its port, at the mouth. The buildings include a town-hall, Protestant (1888) and R. C. cathedrals, mechanics' institute and museum, and the governor's residence. Pop. (1881) 5044; (1901) 36,274.

Perth, capital of Lanark county, Ontario, on the river Tay, 141 miles by rail WSW. of Montreal, contains mills and manufactories of machinery, leather, woollens, &c. Pop. 4467.

Perth Amboy, a port of entry of New Jersey, opposite South Amboy on the other side of the mouth of the Raritan River, on the Kill van Kull, 26 miles by rail SW. of New York. There is a steam-ferry to Tottenville on Staten Island opposite. The manufactures include corks, bricks, white-ware, and drain-pipes. Pop. 17,700.

Perthshire, the fourth largest county of Scotland, bounded by Inverness, Aberdeen, Forfar, Fife, Kinross, Clackmannan, Stirling, Dumbarton, and Argyll shires. Its greatest length, from east to west, is 77 miles; its greatest breadth, from north to south, 68 miles; and till 1891 its area was 2601 sq. m., or 1,664,690 acres, of which 38,274 were water. In that year no fewer than eighteen alterations were made by the boundary commissioners, Perthshire receiving eight small enclaves from Forfar, Fife, Kinross, and Stirling shires, whilst giving off to the last three a like number, including the Culross and Tullibllan portion (13,125 acres). Partly Lowland, but mainly Highland (Strathmore the dividing line), it is called by Scott 'the fairest portion of the northern kingdom,' and such, indeed, it is, with its mountains and glens, its rivers and lakes, its forests and fertile vales. The chief rivers are the Forth and Tay, the former receiving the Teith, Allan, and Devon, the latter the Tummel, Lyon, Isla, Braan, Almond, and Earn; whilst amongst upwards of eighty lakes are Lochs Tay, Ericht, Earn, Rannoch, Lydoch, Katrine, Achray, Vennachar, and Menteith. In the south rise the Ochils, with Dunmyat (1375 feet), and Blairdenon Hill (2072); in the south-east the Sidlaw Hills, with Dunsinane (1012) and King's Seat (1235); and the Highland area is largely occupied by the Grampians, of whose forty-six summits exceeding 2300 feet may be mentioned Ben Lawers (with cairn, 4004), Benmore (3843), Ben-y-Gloe (3671), Schiehallion (3547), Ben Vorlich (3224), Ben Ledi (2875), Ben Vrackie (2757), and Ben Venue (2393). The soil is extremely varied, in places of great fertility—e.g. in Strathearn and in the Carse of Gowrie, which skirts the north side of the Tay's estuary; but barely a fifth of the entire surface is in tillage, the rest being pasture, woods, deer-forests, mountain, and desolate moorland, such as Rannoch. The woods cover nearly 100,000 acres; and the annual rental of the Perthshire deer-forests, grouse-moors, and rod- and net-fishings exceeds in some years £70,000. Ancient divisions were Athole (N.), Rannoch (NW.), Breadalbane (W.), Balquhidder (SW.), Menteith (S.), Perth (SE.), Gowrie (E.), Stormont and Strathearn (central). The county since 1885 returns two members, one for the eastern and one for the western division, besides one for Perth. Other towns and villages are Aberfeldy, Abernethy, Auchterarder, Birnam, Blair-Athole, Blairgowrie, Callander, Comrie, Coupar-Angus, Crieff, Doune, Dunblane, Dunkeld, Pitlochry, Scone, and Stanley. The Roman camp at Ardoch is famous; and Perthshire contains the battlefields of the Grampians, Tippermuir, Killiecrankie, and Sheriffmuir; whilst possessing memories of Bruce, Queen Mary, Rob Roy, Burns, Scott, Lady Nairne, Wordsworth, and Queen Victoria. The mansions, which are very numerous, include Taymouth, Drummond, and Blair castles. Pop. (1801) 125,583 (1831) 142,166; (1881) 129,007; (1901) 123,283, of whom 11,524 were Gaelic-speaking. See works by Drummond (1879), Marshall (1880), Hunter (1883), and Millar (1890).

Peru (*Per-oo'*), a republic of South America, extending from near 2° to 17° 20′ S. lat. Previous to the annexations by Chili, the Peruvian territory stretched southward to 22° 10′, with a length along the Pacific coast of 1400 miles, and a width of 300 miles. It borders on the Pacific, Ecuador, Brazil, Bolivia, and Chili. The area is roughly estimated at 500,000 sq. m. The population was in 1900 estimated to be about 4,600,000, the aboriginal Inca Indians forming 57 per cent., the *Mestizos* or half-castes 23 per cent., and the rest being of pure Spanish descent, negroes, Chinese, &c. The *Coast* extends from the base of the Andes to the Pacific Ocean, and consists of a sandy desert crossed by some forty rivers along whose banks there are fertile valleys; the *Sierra*, or region of the Andes, about 250 miles wide, contains stupendous chains of mountains, elevated plains and tablelands, warm and fertile valleys and ravines; and the *Montaña*, skirting the eastern slopes of the Andes, consists of tropical forests traversed by great tributaries of the Amazon. The absence of rain on the coast strip of land between the mountains and the sea is caused by the action of the lofty uplands of the Andes on the trade-wind; the last particle of moisture is wrung out of the wind by the very low temperature, and deposited as snow, and the wind rushes down to the Pacific coast, cool and dry. From November to April there is usually constant dryness on the coast, from June to September the sky is obscured for weeks by mist, sometimes accompanied by drizzling rain. The maximum temperature is about 78° in summer and 60° in winter. Since 1570 there have been seventy destructive earthquakes recorded on the west coast, including those of 1868 and 1877.

The Peruvian Andes attain 22,000 feet. The mountain-system consists of three chains or *cordilleras*. Two of these chains, running parallel and near each other, are of identical origin. The western one is the maritime cordillera and comprises the volcanoes. The eastern cordillera is a magnificent and almost continuous range, in great part of Silurian formation, with clay-slates and eruptive granitic rocks. The western cordillera is cut through by several streams which flow into the Pacific, and the eastern cordillera by six

tributaries of the Amazon, but the central chain is an unbroken water-parting, consisting mainly of crystalline and volcanic rocks. The valleys and plateaus between these ranges form the *Sierra* of Peru, and include every variety of climate and scenery. They may be divided into four sections, commencing from the north; in the third is Cuzco, the capital of the Incas, while the fourth section is the basin of Lake Titicaca, about 150 miles in length and breadth. The lake itself is 80 miles long, and 12,545 feet above the level of the sea. The Sierra of Peru is the original home of the potato. The animals which specially belong to the Peruvian Sierra are the domestic llamas and alpacas, and the wild vicuñas, the viscacha, the chinchilla, deer, dogs, and foxes; notable among birds are the condor and the flamingoes, geese and wading birds of Lake Titicaca.

The *Montaña* is the region of tropical forests within the basin of the river Amazon; the forests drained by the Marañon, Huallaga, and Ucayali forming the northern portion. The whole length of the Montaña, from the Marañon to the Bolivian frontier, is 800 miles. The subtropical portion, comprising the eastern slopes of the Andes, is the region of the cinchona-trees, and of the coca, and here coffee and cacao of the finest quality are cultivated. From the forest-covered plains come india-rubber, sarsaparilla, and a great variety of useful and ornamental timber. The *fauna* of the forests includes monkeys, bats, bears, pumas, jaguars, tapirs, wild cats, deer, and many rodents; with curassows, ibises, cranes, spoonbills, parrots, toucans, and many snakes. The chief crops of the fertile valleys on the coast of Peru are sugar, cotton, and grapes. Good wine and spirits are made; and before the disastrous Chilian war (1879) mulberries, silkworms, and cochineal were successfully cultivated. The exportation of guano from the Chincha Islands began in 1846 and ended in 1872, the supply being exhausted; and the nitrates of Tarapacá were seized and annexed by Chili. The staple exports of the Sierra of Peru are silver and wool, the great centre of mining industry being at Cerro Pasco. Copper is also exported; and there are rich gold washings. The total value of metals exported in 1903 was £952,812. From the Montaña the exports are cinchona bark, coca, coffee, cacao, tobacco, india-rubber, and sarsaparilla, besides maize and wheat.

In the five years 1899-1903 the exports varied from $33,600,000 to $47,300,000, and the imports from $21,230,000 to $34,300,000 (10 'soles' or dollars = £1), about one-half of the total trade being with Great Britain. The exports to Britain are chiefly copper and silver ore, wool, cotton, rubber, sugar, and guano; the imports from Britain being cotton and woollen manufactures, iron-work and machinery, and jute goods. In the five years to 1903 the revenue varied from $13,500,000 to $16,472,000, and the expenditure from $12,630,000 to $14,800,000. The system of railways consists of a dozen short lines in the coast-valleys, and of two long lines across the Andes. The first of these, from Callao and Lima to Oroya, was commenced in 1870, and tunnels the Andes at an altitude of 15,645 feet. The other great line across the Andes connects the port of Mollendo with Puno on the shores of Lake Titicaca, passing by Arequipa. The summit is crossed at a height of 14,660 feet, and the line is 346 miles long. Great public works were mainly responsible for raising the debt from £4,400,000 (1868) to £49,000,000 (1872). The financial difficulties culminated with the disastrous war with Chili, when the nitrate of Tarapacá, the chief resource of Peru, passed into the hands of the enemy. The payment of interest ceased in 1876, having been regularly paid since 1849; in 1890, when the outstanding interest of the debt amounted to £23,000,000, the bondholders had the railways, mines of guano deposits, and state lands ceded to them for 66 years; and Chili made itself responsible for some part of the payment.

The bulk of the Peruvian population is composed of the aboriginal Inca Indians, whose language, called Quichua, is still spoken in the Sierra. The Incas had attained to a high state of civilisation before the arrival of the Spaniards: they cultivated many of the arts, and had some knowledge of astronomy. Three centuries of oppression under Spanish rule have deteriorated the character of the Inca Indian, but he is still industrious and honest. The wild Indians of the Montaña were never subjugated by the Spaniards. Spanish administration caused a rapid diminution of the population. The Indians of the Sierra were decimated, while those of the coast-valleys disappeared altogether. Negro slaves were then introduced, and kept in bondage until 1855, when slavery was abolished. From 1860 to 1872 as many as 58,646 Chinese coolies were imported. Lima (q.v.), the capital of Peru, is nearly in the centre of the coast region, and has a population of almost 150,000. Trujillo is the chief coast town to the north, and Arequipa to the south; there are many ports, including Callao and Mollendo. The Roman Catholic is the religion of the state, but practically (not legally) there is tolerance for dissent. Besides the university of Lima, there are lesser universities at Cuzco, Arequipa, and Trujillo, besides several state-supported high schools, and about 1870 primary schools with 105,000 enrolled pupils.

For four centuries before the Spanish Conquest under Pizarro (1532) the Incas swayed a mighty empire, under a highly civilised and centralised system of government. After the rapid conquest, there were many quarrels between the Spanish occupants and the mother-country; but the people were incessantly ground down in order to satisfy the continual demands of Spain for treasure. A great national rising in 1780 was crushed, but left the seeds of the desire for national independence, secured by the liberation wars of 1821–24. Subsequently Peru repeatedly had considerable spells of peace and prosperity. But the quarrel with Chili led to war in 1879, invasion and disastrous defeats ending in 1884 in the permanent cession of Tarapacá, the occupation (to be terminated after 10 years on a plebiscite to that effect) of Tacna and Arica, and other concessions favourable to Chili.

See works on Peru, its exploration and antiquities by Markham (1862 and 1880), Hutchinson (1873), Duffield (1877), Squier (1877), and others; the histories of the conquest by Prescott (1847; new ed. 1889), Robertson, Helps, &c.; for the war of independence, works by Stevenson, the autobiography of Lord Dundonald; for the war with Chili, Markham (on the Peruvian side, 1883).

Peru, (1) a city of Illinois, at the head of navigation on the Illinois River, 100 miles by rail WSW. of Chicago. It contains zinc-works, a foundry, a plough-factory, and several ice-houses. Pop. 7000.—(2) Capital of Miami county, Indiana, on the Wabash River, and on the Wabash and Erie Canal, 75 miles by rail N. of Indianapolis. Its factories produce woollens, bagging, furniture, basket-ware, &c. Pop. 8500.

Perugia (*Per-oo'ja*), a city of Italy, stands (1600 feet above sea-level) on the Tiber's right bank, 11 miles E. of the Lake of Perugia (anc. *Lacus Trasimenus*) and 127 miles by rail N. of Rome. It is surrounded with walls pierced by gates, one of them very ancient. The broad Corso unites two squares, in one of which stands the Gothic cathedral, dating from the end of the 15th century, and adorned with many paintings, carvings, &c. The church of St Dominic (1632) contains the tomb of Pope Benedict XI. by Giovanni Pisano, and stained windows (1402); the remarkable church of St Peter (11th c.) has granite pillars and pictures by Raphael, Perugino, Parmigiano. In the cathedral square stand also the Gothic municipal palace (1281); the great fountain, adorned with statues by Niccolo and Giovanni Pisano; the statue of Pope Julius III. (1555), described in Hawthorne's *Marble Faun;* and the old money-changers' hall (1453–57), decorated with some of Perugino's best works. In the vicinity of the city many Etruscan tombs were discovered in 1840; they contained cinerary urns, lamps, vases, bronze armour, ornaments, &c. The university (1307) has 21 teachers and 160 students, a botanical garden, an observatory, a library (1852) of 30,000 vols., &c. Silk and woollen goods, wax-candles, and liqueurs are manufactured. Pop. 61,385. Perugia (anc. *Perusia*) was one of the twelve Etrurian cities. It was captured by the Romans in 310 B.C. and in 40 B.C., and by Totila (549 A.D.). At different periods it was subjected to the popes, at other times it was in the power of native despots, and in 1860 it was made a part of the kingdom of Italy. In the 15th century it became the centre of the Umbrian school of painting.

Perugia, Lake of. See Trasimene Lake.

Pes'aro (anc. *Pisaurum*), a town of Italy, on the right bank of the Foglia, here crossed by a bridge of Trajan's age, 1 mile from the Adriatic and 37 miles NW. of Ancona by rail. Walled and defended by a citadel (1474) and a fort, it has two cathedrals. Pop. 25,100. Pesaro is associated with Tasso, and was Rossini's birthplace.

Pescadores Islands. See Formosa.

Peschiera (*Pes-kee-ay'ra*), a fortress of Italy, a member of the Quadrilateral, stands partly on an island in the Mincio and partly on the right bank of that river, at its outlet from the Lake of Garda, 14 miles by rail W. of Verona. Pop. 2360.

Peshaw'ar, or Peshawur, a town of India, 10½ miles from the entrance of the Khyber Pass, 190 E. by S. of Kabul, and 276 by rail NW. of Lahore. It is since 1903 the capital of the North-west Frontier Province (formerly in the Punjab). Although occupying a strategic position of the utmost importance, its fortifications are inconsiderable. Pop. about 100,000.

Pesth (*Pest*), or more correctly Budapest, because since 1873 it has been united with Buda (Ger. *Ofen*) into one municipality, is the capital of Hungary, and next after Vienna the second city of the Austrian-Hungarian empire. It stands on the Danube, Buda on the right bank and Pesth on the left, 173 miles by rail SSE. of Vienna. The two towns are connected by three bridges, a chain bridge (designed by Clark Brothers of England in 1842–49), 1280 feet long, uniting the busiest quarters of the two; another, built in 1872–75, a little higher up (1555 feet long); and a railway bridge. Pesth is essentially a modern place, the growth principally of the 19th century; it has many fine streets and squares, the magnificent quays (3 miles long) beside the Danube being the favourite promenades. The buildings include the Jewish synagogue; the parish church (1500) and the new Leopold basilica (1851–68); the national museum (1850), with valuable picture-galleries and a library of 400,000 volumes and 63,000 MSS.; the academy of sciences (1862); the university (1635), established first at Tyrnau, then at Buda in 1777, and lastly at Pesth in 1873, with 316 lecturers and about 5000 students, equipped with laboratories, &c., and a library of 250,000 volumes; the parliament house, the old town-house, the redoubt (1859–65), the custom-house (1870–74), barracks, the military academy (1872), the slaughter-house (1870–72), &c. Whilst Pesth stands on a plain, Buda straggles over steep hills. It is a much older town, its central features being the castle on the citadel (1749–71), with the chapel of St Sigismund, in which are preserved the regalia of Hungary and the hand of St Stephen; the church of the Ascension and that of St John (13th century); the palaces of the premier and Archduke Joseph; the monumental tomb of Gul Babas (1543–48), a Turkish saint; and the lunatic asylum (1860–68).

Both towns are exceptionally well provided with baths, which are supplied both by the Danube and by natural springs of mineral waters. Some of these last—Hunyadi Janos, Rakoczy, &c.—are exported. The artesian well (1868–79) in the public garden of Pesth yields, at a depth of 3182 feet, water of a temperature of 165° F. The water-works of Pesth were planned and built by the English engineer Lindley in 1868. There is in Pesth a polytechnic (in Buda, 1846–72), with faculties of chemistry, architecture, and engineering. There are two beautiful public gardens, one in Pesth, the other on Margaret Island in the Danube, just above the town. The squares and streets of both Pesth and Buda are adorned with many monuments, among them the Honved Memorial (1893). The manufacture of machinery and agricultural implements, wagons, ships, small-arms, spirits, tobacco, beer, gold and silver wares, cutlery, starch, glass, &c., the grinding of corn, washing of wool, and printing are all prosecuted on the large scale. But the commerce is even more important: immense quantities of corn are brought into the town, and exported further either as corn or flour; wool, wine and spirits, seeds, hemp, tobacco, plums, honey and wax, bacon, hides, feathers, timber, coal, and manufactured wares are the principal articles of the extensive trade. Vast numbers of swine are fattened and killed in huge yards just outside Pesth. Pop. of Budapest (1813) 36,153; (1857) 116,683; (1900) 716,476. The Romans had a military colony on the site of Buda. In the 13th c. there existed here a flourishing German town, Old Buda, destroyed by the Mongols in 1241; but it soon recovered, and Buda was regarded as the capital down to its capture by the Turks in 1527. From 1541 to 1686 the Turks held Buda, though it was often besieged. Pesth meanwhile was reduced to a heap of ruins.

Petcho'ra, a large river in the north of European Russia, rises on the western slope of the Urals, flows N. through the eastern parts of the governments of Vologda and Archangel, then SE. for 150 miles, and finally sweeping northward, and expanding into an isleted estuary 30 miles wide, falls into the Arctic Ocean, after a course of 975 miles. See a work by Seebohm (1880).

Peterborough, a city partly in Huntingdonshire, but chiefly in Northamptonshire, the latter portion being on the left or north bank of the

river Nen, at the edge of the fen-country, 76 miles N. of London and 42 NE. of Northampton. Here, at Medeshamstede, in 655, was founded a great Benedictine abbey, which, destroyed by the Danes in 870, was restored in 966, plundered by Hereward in 1069, and again burned down in 1116. Its noble church, the cathedral since 1541 of a new diocese carved out of that of Lincoln, was built between 1118 and 1528, and thus, whilst essentially Norman, offers every variety of architecture down to the Perpendicular. It is 471 feet long, by 202 across the transept, and 81 high. The Early English west front (*c.* 1200–22) consists of three mighty arches, and 'is perhaps,' says Freeman, 'the grandest conception for a single feature which mediæval architecture has produced, a Greek portico translated into Gothic language.' Noteworthy also are the flat painted wooden ceiling of the 12th century, the portrait of 'Old Scarlett' the sexton (1496–1594), the blue slab inscribed 'Queen Catharine, A.D. 1536,' and the grave for twenty-five years (1587–1612) of Mary Queen of Scots. In 1643 Cromwell and his troopers did hideous havoc to monuments, stained glass, and cloisters. In 1883 the fine central tower was condemned as unsafe; but it has been lovingly rebuilt, and in 1890 the cathedral was reopened after restoration. Paley was a native. Two ancient gateways, the bishop's palace and the deanery (once the abbot's and prior's houses), and the chancel of a Becket chapel (now a museum) make up the remaining objects of interest. A training-college for schoolmasters (1864), a grammar-school, the town-hall (1671), the corn exchange (1848), a cattle-market of five acres (1867), and the bridge over the Nen (dating from 1140, but in its present form from only 1872) may be mentioned. Peterborough is an important railway centre, has manufactures of agricultural implements, and carries on a large trade in malt, coal, farm-produce, &c. Incorporated as a municipal borough in 1874, it has returned two members from 1547 till 1885, and since then one. Pop. (1841) 6959; (1881) 22,394; (1901) 30,872. See works by Gunton (1686; new ed. 1825), Britton (1828), Paley (1849), Davys (3d ed. 1863), Sweeting (1869), and Poole (1881).

Peterborough, chief town of Peterborough county, Ontario, on the Otanabee River, 82 miles by rail NE. of Toronto. It exports lumber and agricultural products, and manufactures flour, woollens, farming implements, machinery, furniture, canoes, &c. Pop. 11,250.

Peterhead', a seaport and burgh of barony of Buchan, Aberdeenshire, on a peninsula, 32 miles by road, but 44 by a branch-line (1862), NNE. of Aberdeen. Founded in 1593, it is somewhat irregular in plan, but clean and largely built of the celebrated 'Peterhead granite,' whose reddish variety is so much used for monumental purposes. The Keiths, Earls Marischal, were superiors of the place till the '15, when the Old Pretender landed here, and after which their forfeited estates were purchased by the Edinburgh Merchant Maiden Hospital, to whose governors many improvements are owing. Of Marshal Keith a bronze statue was presented to the town in 1869 by King William of Prussia; and the market-cross, a granite Tuscan pillar (1833), bears the arms of the Earls Marischal. The public buildings include the town-hall (1788), with a spire 125 feet high; the parish church (1803), with one of 118 feet; the free library and museum (1891); the academy (1846); and convict-prison (1889). Industries are woollen manufacture, boat-building, and granite-polishing. Peterhead was made a head-port in 1838. From 1788 it gradually became the chief British seat of the seal and whale fisheries, until in 1852 it sent out 30 ships; but since then there has been a great decline. At present Peterhead is chiefly important for its great herring-fishery, which during the herring season brings some 5000 persons to the place. The south harbour was commenced in 1773, and the north harbour in 1818, a canal being formed between them in 1850; whilst a new harbour was formed and the south harbour deepened under Acts of 1873 and 1876. Their three basins, hewn out of the solid rock, together cover about 22 acres, and have cost £300,000; but all three are as nothing compared with the great harbour of refuge, commenced in 1886, and to be completed in 1921 (by convict labour), at a cost of £1,044,520. In the neighbourhood are the ruins of Inverugie, Ravenscraig, and Boddam castles, all strongholds of different branches of the Keiths; Buchan Ness, the most easterly point of Scotland, with a lighthouse (1827); and the Bullers of Buchan (q.v.). Since 1833 Peterhead has united with Elgin, &c. to return one member. Pop. (1801) 3264; (1851) 7298; (1901) 11,794. See works by W. Laing (1793), Arbuthnot (1815), and Peter Buchan (1819).

Peterhof (*Payter-hof*), a palace of the emperor of Russia, on the S. shore of the Gulf of Finland, 18 miles W. of St Petersburg. Built by Peter the Great in 1711, it contains fine paintings, and is surrounded by beautiful parks. The town of Peterhof has 14,298 inhabitants.

Petersburg. See St Petersburg.

Petersburg, the third city of Virginia, on the south bank of the Appomattox River, 23 miles by rail S. of Richmond. The falls above supply water-power for tobacco-factories, foundries, cotton, flour, and paper mills. In 1864 Grant, failing to take Richmond, besieged Petersburg, and was repulsed with heavy loss. Pop. 22,680.

Petersfield, a Hampshire market-town, 20 miles NNE. of Portsmouth by rail. Till 1832 it returned two members, and then till 1885 one. Pop. of parish, 3270.

Peterwardein (*Paytervar'dine*), one of the strongest fortresses in the Austrian dominions, is situated in a marshy, unhealthy locality on the Danube's right bank, 44 miles by rail NW. of Belgrade, and is connected with Neusatz opposite by a bridge of boats. Pop. of town, 5603.

Petherton, South, a Somerset town, on the Parret, 4½ miles N. of Crewkerne. Pop. 2250.

Petra (the Greek equivalent of the Heb. Sela, 'Rock'), the ancient stronghold of the Nabatæans was situated in the 'desert of Edom' in northern Arabia, near the points of intersection of great caravan-routes from Palmyra, Gaza, Egypt, and the Persian Gulf, four days' journey from the Mediterranean and five from the Red Sea. From it Arabia Petræa got its name.

Petropavlovsk', (1) a town of Asiatic Russia, on the river Ishim, 175 miles WNW. of Omsk. Pop. 25,000.—(2) A small port on the east coast of Kamchatka, with an admirable harbour.

Petropolis, a town of Brazil, 25 miles N. of Rio. It was originally a colony of Germans (1845), and superseded Nictheroy as capital of the state of Rio de Janeiro in 1894. Pop. 12,000, mainly Germans.

Petrovsk', a town of Russia, 65 miles NW. of Saratov, on a tributary of the Don. Pop. 18,316.

Petrozavodsk', a town of Russia, on the west shore of Lake Onega, 300 miles NE. of St Petersburg, has a cannon-foundry and small-arms factory. Pop. 13,027.

Pettigoe, a village of Donegal and Fermanagh, 23½ miles NW. of Enniskillen.

Petworth, a market-town of Sussex, on an eminence near the West Rother River, 14 miles NNE. of Chichester. Petworth House, the seat of Lord Leconfield, is an 18th-century mansion, with a fine park and many portraits and other relics of the Percies and Wyndhams. Pop. of parish, 2967. See F. H. Arnold's *Petworth* (1864).

Pev'ensey, a village of Sussex, on the English Channel, 12 miles by rail W. by S. of Hastings. The Romans built here a castle, whose walls enclose a Norman keep. The church is Early English. William the Conqueror landed on the shore of Pevensey Bay. Pop. of parish, 467. See Lower's *Chronicles of Pevensey* (3d ed. 1880).

Peveril Castle. See PEAK.

Pewsey, a small market-town of Wiltshire, in a fertile vale, 18 miles E. of Devizes and 7 SSW. of Marlborough. Pop. of parish, 1781.

Pézenas (*Payz-na'*), a town of France (dep. Hérault), on the left bank of the river Hérault, 32 miles by rail SW. of Montpellier. The vicinity produces excellent wine and brandy, and makes woollen and linen goods. Here Molière wrote *Les Précieuses Ridicules*. Pop. 6991.

Pfäfers (*P'fay'fers*), hot springs in the Swiss canton of St Gall, in the deep and gloomy gorge of the Tamina torrent, which joins the Rhine at Ragatz, 2½ miles to the north.

Pfalz, German for the Palatinate (q.v.).

Pfalzburg. See PHALSBOURG.

Pforzheim (*P'fortz'hime*), the chief manufacturing town of Baden, at the northern border of the Black Forest, 20 miles SE. of Carlsruhe by rail. It contains the remains of an ancient castle, from 1300 to 1565 the residence of the Margraves of Baden-Durlach, and was the birthplace of Reuchlin. The town is famous for the manufacture of gold and silver ornaments, in which 8000 people are employed, and has further chemical and iron works, machine-shops, tanneries, paper-mills, &c. Pop. (1871) 19,801; (1900) 43,351.

Phalsbourg, or PFALZBURG, a town of Lorraine, stands on the north-west shoulder of the Vosges, 25 miles NW. of Strasburg. It was fortified by Vauban in 1680; invested, but not taken, by the Allies in 1814–15; and bombarded and taken by the Germans in 1870, after which they razed the fortifications. It was the birthplace of Erckmann, and is widely known through the Erckmann-Chatrian novels. Pop. 3680.

Phantassie, a Haddingtonshire seat, near East Linton, was the birthplace of Rennie.

Pharsa'lus, now FERSALA, a town of Thessaly, to the south of Larissa, on a branch of the Salambria, notable for Cæsar's great victory over Pompey, 9th August 48 B.C.

Pha'sis, a river in Colchis, now called Rion or Faz. It rises in the Caucasus, and flows west into the Euxine near the ancient city of Phasis.

Phigalia, an ancient town of SW. Arcadia. From its temple of Apollo, at Bassæ, 6 miles distant, a sculptured frieze was brought to the British Museum in 1812. Next to the Theseum at Athens it is the most perfect architectural ruin in all Greece. See Cockerell, *Temples of Ægina and Bassæ* (1860).

Philadelphia. See ALA-SHEHR.

Philadelphia, the chief city of Pennsylvania and the third city of the United States, is situated on the Delaware River, about 100 miles by ship-channel (*viâ* Delaware Bay and River) from the Atlantic Ocean, 90 by rail SW. of New York City and 136 NE. of Washington. It lies along the Delaware from the mouth of the Schuylkill River at League Island, northward, for about 15 miles, and has an average breadth of some 8 miles. Philadelphia is notably a 'city of homes' of the well-to-do middle class. The dominant architecture of the older sections is of the severely plain, substantial style (mainly in red brick) which characterised its Quaker founders, and is laid out with the regularity of a chessboard. A marked departure has, however, lately taken place in the style of both the public and the private buildings of Philadelphia, as shown in the city hall and public buildings (1871 *et seq.*), built, at a cost of $20,000,000, of white marble upon a granite base, in French Renaissance style, and covering an area of 486 by 470 feet. The height of the tower and dome is 537 ft. 4½ in.; or 573 ft. 4½ in. with the colossal figure of Penn (36 ft.), to surmount the whole, the structure being thus the second highest in the world. Other buildings are the Masonic Temple, of granite (cost $1,500,000); a United States government building of granite—containing the Post-office, court-rooms, &c.—(cost $8,000,000); a custom-house of marble, modelled after the Parthenon at Athens; a naval asylum; the United States Mint; the Academy of Fine Arts; the Academy of Natural Science (Gothic), with a scientific library and museum; the Academy of Music; and the buildings of the University of Pennsylvania.

Nearly every street of importance is traversed by electric tramways, on the overhead trolley system. There are numerous well-shaded commons in the older portion of the city. In the Fairmount Park, some 3000 acres in extent, and bisected by the Schuylkill River and its affluent the Wissahickon, was held in 1876 the Centennial Exhibition; and in its environs are the Zoological Garden, the Fairmount Water-works (supplying 100,000,000 gallons daily), the beautiful Horticultural Hall and Memorial Hall—remains of the Centennial Exhibition—the Laurel Hill Cemetery, &c. Among the statues are bronze equestrian figures of Generals Meade, McClellan, and Reynolds. The churches include the old Swedes' Church (1700), Christ Church (Episcopal, 1727–54), where Washington's pew is preserved, and a R. C. cathedral. Philadelphia is noted for its benevolent institutions: prominent are the Pennsylvania Hospital (1751); Episcopal, Presbyterian, and Methodist hospitals, and the St Joseph's and St Agnes' hospitals; the hospitals in connection with the university and the several medical schools, &c. Besides the Girard College, founded in 1831 by the miser-philanthropist Stephen Girard for poor male white orphans, the city contains the Drexel Industrial Institute (endowed with $2,000,000) and the Cahill R. C. High School; whilst in Philadelphia or its immediate environs are the Williamson Free School of Mechanical Trades (endowed with some $2,200,000), state institutions for the blind and deaf and dumb, the Franklin Institute (1824, for the mechanic arts), Spring Garden Institute (for drawing, painting, and mechanical handiwork), the Episcopal Academy (1785), several R. C. colleges and convents, and Episcopal, Lutheran, and R. C. theological seminaries. Crowning all these is the University of Penn-

sylvania, founded as an academy by the sons of William Penn, which became a college in 1755, and a university in 1779; now it has over 2600 students and 270 professors and instructors, and embraces faculties of arts, science, architecture, natural history, finance and economy, medicine, dentistry, veterinary medicine, law, and physical education. The Jefferson Medical College (1825), with nearly 600 students, is a famous medical school; others are the Hahnemann Medical College (1869), the Medico-Chirurgical College (1880), the Woman's Medical College (1850), and the Philadelphia Polyclinic and College. The capital employed in manufacturing is estimated at $477,000,000, the number of hands employed at 260,000, and the value of the annual products at $733,000,000. Among prominent industries are the manufacture of locomotives, carpets, woollens, and worsteds, upholstery, cottons, and iron and steel products (saws, principally made by one firm, employ 5000 workmen, and have an annual value of $2,500,000). There are sugar-refineries, oil-refineries, chemical works, and many breweries. The imports are of the annual value of about $50,000,000, and the exports about $80,000,000.

Founded in 1682, Philadelphia the year after was made the capital of Pennsylvania. It was the central point in the war of independence, and the city still preserves the Carpenters' Hall (1770), where the first congress met (1774), and the old State House (1735) or Independence Hall, where the Declaration of Independence was adopted in 1776. At Philadelphia the federal union was signed in 1778; and here, too, the constitution was framed in 1787. From 1790 to 1800 Philadelphia was the federal capital. Franklin, Paine, and Cobbett lived here; C. G. Leland was a native. Pop. (1700) 4500; (1800) 70,287; (1860) 568,034; (1880) 847,170; (1900) 1,293,697. See Scharf and Thompson's *History of Philadelphia* (3 vols. 1884); *Philadelphia and its Environs* (Lippincott, 1890); and works by W. P. Hazard (1879), T. Westcott (1877), F. Cook (1882), S. C. Woolsey (1888), and Agnes Repplier (1899).

Philæ (*Fye'lee*; Egyptian *Pâlek*), a Nile island of Nubia, near Assouan and S. of Syene. It is a small granite rock, fringed with rich verdure, about 400 yards long and 150 broad, almost covered with ancient buildings of great architectural beauty. They include a hypæthral or roofless hall, commonly called 'Pharaoh's bed;' the great temple of Isis, to whom the island was sacred; and the propylon or gateway, 60 feet high and over 120 wide, which is the oldest part of the temple (about 361 B.C.). The great irrigation dam at Assouan, completed in 1902, does not submerge or injure the ruins, which have been carefully protected.

Philiphaugh (*Philiphawhh'*), on Yarrow Water, 3 miles WSW. of Selkirk, the property from 1461 till 1889 of the line of the 'Outlaw Murray' of the ballad. Here, on 13th September 1645, Montrose was defeated by David Leslie, who butchered more than a hundred Irish prisoners.

Philippeville (*Philipveel'*), a seaport of Algeria, the harbour of Constantine, from which it lies 54 miles NNE. by rail. There is a magnificent harbour (1882) protected by two moles, one 4590 feet long, the other 1310. The town was built since 1838. Pop. 25,788.

Philippi (Gk. pron. *Fil'ipee*), a city of Macedonia, named after Philip II. of Macedon, who enlarged it because of the neighbouring gold-mines. Two battles were fought in 42 B.C. between Antony and Octavianus on the one side and the republicans under Brutus and Cassius on the other, in the second of which the republic finally perished. The apostle Paul addressed an epistle to the church he had founded here.

Philippine Islands, a large insular group forming a northern section of the Eastern Archipelago, from which it is separated by the two profound abysses of the Sulu (Mindoro) and Celebes Seas, 2000 to 4000 fathoms deep. It is washed on the east side by the Pacific Ocean and on the northwest by the China Sea, lies in 4°—21° N. lat. and 117°—127° E. long., and comprises a vast aggregate of over 2000 islands of all sizes, ranging from mere rocks and reefs to Luzon and Mindanao, the former rather more, the latter somewhat less, than 40,000 sq. m. in area. The other chief members of the group, collectively called Visayas, are Mindoro, 9000 sq. m.; Palawan (Paragua), 5500; Samar, 5000; Panay, 4500; Negros, 4300; Leyte, 3000; Cebu and Bohol, both 1500; and Masbate, 1200. The total area is 116,000; the pop. is variously estimated at from 7,500,000 to 9,500,000. The archipelago is disposed nearly due north and south, and is essentially mountainous and volcanic. Two main ridges ramify through the group, and comprise several volcanoes; the highest peak being Apo in the SE. of Mindanao (10,400 feet). The underground forces are still active, and reveal themselves by tremendous eruptions, and especially by earthquakes, which are almost continuous. Manilla was nearly destroyed by the earthquake of 1863. Cyclones, here called typhoons, range as far south as about 10° N. lat. Thanks to the general elevation of the land and the prevailing sea-breezes, the climate, although moist and hot, is less insalubrious than that of most tropical lands. The temperature varies from about 77° F. in December to 86° F. in May. The rainfall is 68 to 70 inches. The magnificent primeval forests contain dye-woods, hard-grained timbers, and medicinal and other useful plants. On the plantations are grown rice, maize, sugar-cane, cotton, coffee, and tobacco (second only to that of Cuba). The largest wild mammal is the buffalo, and next to it the gibbon; there are several other species of apes and lemurs, antelopes and deer. The carnivora are chiefly represented by several species of civet, the insectivora by the porcupine. The only dangerous animals are the crocodile, snakes, and some other reptiles. Birds are very numerous, of the gallinacean family especially. Insects are very various; and the fresh and marine waters abound in fishes, turtles, molluscs, and sponges. Of minerals the most widely diffused are coal and iron; copper also occurs, as well as gold, lead, sulphur, cinnabar, quicksilver, alum, besides jasper, marble, and fine building stones. The original inhabitants of the Philippines were undoubtedly the Negritos (*Atas*, *Itas*), now reduced to a few isolated groups numbering altogether less than 20,000. Half-caste Negrito communities are extremely numerous, the indigenous element having amalgamated with the intruding Indonesian and Malay peoples. The Indonesians (akin to the Polynesians) are mostly pagans, whereas nearly all the Malays are either Roman Catholics or Mohammedans. The Tagal and Visayan languages are the predominant types.

Discovered in 1521 by Magellan, who was killed here, the Philippines were officially annexed to Spain in 1569, and till 1898 remained an integral part of the Spanish dominion. A rebellion in 1896 went on till the Spanish-American war was begun in 1898. As a result of the war the islands

were ceded to the United States (1898) on a payment of £4,000,000. Besides Manila (the capital; pop. 294,000) there are several other considerable towns—Banang (39,000), Lipa (38,000), San Miguel (35,000), Laoag (30,000), Cabaera (30,000), and San Carlos (27,000). The exports amount to £6,000,000 annually—chiefly of sugar, hemp, tobacco, and copra. There is a submarine cable to Hong-kong. See works by Sir J. Bowring (1851), Foreman (1899), Robinson (N.Y. 1901), and Blair and Robertson (55 vols. 1903 *et seq.*).

Philippo'polis, capital of Eastern Roumelia or Southern Bulgaria, on the navigable Maritza, 110 miles by rail W. by N. of Adrianople. It manufactures silk, cotton, tobacco, leather, &c., and prepares and exports otto of roses (to the value of £55,000). It is the seat of a Greek archbishop. Population, 43,800.

Philippsburg, a town of Baden, on the Rhine's right bank, 16 miles N. of Carlsruhe. Fortified until 1800, it was often besieged. Pop. 2922.

Philipstown, a market-town of King's County, 49 miles W. by S. of Dublin, took its name from Queen Mary's consort, Philip of Spain. Pop. 780.

Phillipsburg, a city of New Jersey, on the Delaware River (crossed by two railroad bridges), opposite Easton, at the western terminus of the Morris Canal, and 73 miles W. of New York by rail. It contains a rolling-mill, foundries, boiler- and locomotive-works, &c. Pop. 10,100.

Phocæa, the most northerly of the Ionian cities in Asia Minor, stood on a peninsula between the gulfs of Elais and Smyrna.

Phocis, a province of ancient Greece, west of Bœotia, and N. of the Gulf of Corinth. With Phthiotis it forms a province of modern Greece.

Phœnicia (Gr. *Phœnike*) was a comparatively narrow strip of country lying to the north of Palestine, along the coast of the Mediterranean Sea, bounded by that sea westwards, and eastwards extending to the mountain-crests of Bargylus and Lebanon. The coast-line was about 230 miles in length, and the area of Phœnicia proper about 3000 sq. m. The tract included within these limits is one of a remarkably diversified character; lofty mountain, steep wooded hill, chalky slope, rich alluvial plain, and sandy shore succeeding each other. This was the home of a famous and enterprising Semitic people, the Phœnicians, who in 1600–1300 B.C. seem to have been dependent on Egypt. After this date the country rose to a high pitch of prosperity and influence, and its people became famous for their trading and nautical enterprise, for their great colonies, their glass manufactures, purple dye, and metal utensils. Perhaps their greatest gift to civilisation was the alphabet, from which practically all civilised systems of writing and printing are derived; possibly they developed it out of one of the Egyptian hieroglyphic systems. Sidon and Aradus were amongst the most ancient cities; Tyre the greatest and most populous. Carthage was the greatest foreign colony, surpassing the mother-country in power; but there were Phœnician settlements in states in Asia Minor, the Greek islands, Cyprus, Crete, Sicily, the Balearic islands, and southern Spain (Carthagena, Tartessus, &c.). Phœnicians traded for tin and copper with Cornwall and the Scilly islands, and with the Baltic for amber; and seem to have been a means of exchanging the produce of Greece and the extreme west with those of Babylon, Persia, India, and East Africa. Hiram of Tyre cherished friendly relations with David and Solomon. Like Palestine, Phœnicia had to bow the neck to the Assyrian yoke (880–630 B.C.). Egypt and Babylon then quarrelled over Phœnicia, which next fell a prey to Persia (527–333), and, after the famous seven months' siege of Tyre to 332, to Alexander the Great and his successors. See works by Canon G. Rawlinson (1889).

Phœnix, since 1891 the capital of Arizona, in the Salt River valley, 35 miles N. by a branch-line from the Southern Pacific railway, and 890 miles SE. of San Francisco. Pop. 5600.

Phœnix Park. See DUBLIN.

Phœnixville, a town of Pennsylvania, on the Schuylkill River, 28 miles NW. of Philadelphia. Here are the extensive works of the Phœnix Iron Company and the Phœnix Bridge Company. Other manufactures are cotton goods, stockings, shirts, needles, pottery, &c. Pop. 9200.

Phrygia (*Frij'ia*), a country in Asia Minor, which at the time of the Persian invasion comprised the districts of Lesser and Greater Phrygia—the former stretching along the shores of the Propontis and the Hellespont to Troas (afterwards part of Mysia), the latter occupying the centre of Asia Minor.

Phthiotis, the south-east corner of Thessaly, the home of Achilles.

Piacenza (*P'yachents'a*), a city of northern Italy, on the right bank of the Po, a little below its confluence with the Trebbia, 43 miles by rail SE. of Milan, and 35 NW. of Parma. It is defended with bastioned walls and an outer ring of forts. The cathedral, in the Lombard-Romanesque style (1122–1233), has an immense crypt, a campanile 223 feet high, and paintings by L. Carracci, Guercino, &c. The church of Sant' Antonino, the original cathedral, was founded in 324, but has been several times rebuilt. The church of Santa Maria della Campagna is adorned with fine frescoes by Pordenone; and it was for San Sisto that Raphael painted the celebrated Sistine Madonna, sold in 1754 by the monks to Frederick Augustus of Saxony. Among the other buildings are the Palazzo Farnese (1558), once a sumptuous edifice, but since 1800 in use as barracks; the communal palace (1281); the palace of justice; and 2 miles E. the theological seminary founded by Cardinal Alberoni. The municipal library contains 120,000 volumes. The principal square is adorned with colossal bronze equestrian statues of Alessandro and Ranuccio Farnese. Manufactures of silks, cottons, pottery, hats, &c. are carried on. Founded as Placentia by the Romans in 219 B.C., Piacenza was captured by the Gauls in 200 and by Totila in 546, was the scene of two church councils in 1095 and 1132, was sacked by Sforza in 1447, and finally was united with Parma (q.v.). Pop. 36,987.

Piana Dei Greci (*Piah'na Day-ee Grek'chec*), a town of Sicily, 10 miles SW. of Palermo. It was the chief Albanian colony in Sicily in the 15th century. Pop. 8847.

Piatigorsk, a town in Russian Caucasia, at the southern foot of Mount Beshtau (4587 feet), facing Mount Elburz, and 124 miles by rail NW. of Vladikavkaz, with warm sulphur-springs (83·7° to 117·5° F.). Pop. 18,665.

Piatra, a town of Moldavia, 60 miles W. by S. of Jassy, on the Bistritza, at the foot of the Carpathians, has a trade in timber. Pop. 20,000.

Piauhy, a maritime province of northern Brazil, of which Paranahyba (q.v.) is the principal town.

Piazza (*Peeatz'a*), an episcopal town of Sicily, 16 miles SE. of Caltanisetta. Pop. 27,038.

Pic'ardy (*Picardie*), an ancient province in the north of France, bounded W. by the English Channel, and now forming the dep. of Somme, with portions of Aisne and Pas-de-Calais.

Pic du Midi (*Peak dü Meedee'*), a summit of the Pyrenees, 9466 feet high, in the south-east corner of the French dep. of Basses-Pyrénées.

Pichincha (*Pitcheen'tcha;* 'boiling mountain'), the most populous province of Ecuador, embraces the Quito plateau and its slopes. Area, 8300 sq. m.; pop. 205,000. The active volcano of Pichincha, 8 miles NW. of Quito, the chief town, has five peaks, two of which (15,918 feet) Mr Whymper ascended in 1880. The enormous crater, nearly a mile across at the top, and 1500 feet at the bottom (which is 2500 feet below), is said to be the deepest in the world.

Pickering, in the North Riding, 32 miles NNE. of York, has a ruined castle and a fine parish church. Pop. 3500.

Picton, capital of Prince Edward county in Ontario, 38 miles SW. of Kingston, has canning industries. Pop. 7000.

Pictou (*Pictoo'*), a port on the N. coast of Nova Scotia, on a large and sheltered harbour, 85 miles NNE. of Halifax. Coal, mined near by, is exported. Sir J. W. Dawson was a native. Pop. 3250.

Picts' Work Ditch. See CATRAIL.

Piedmont, or PIEMONT (*Peed'mont;* Fr. pron. *Pyay-mon^{g}'; pied*, 'foot,' *mont*, 'mountain'), a former Italian principality, which now forms the north-west part of the kingdom of Italy, is by the Alps separated from Switzerland on the N. and from France on the W. It embraces the provinces of Alessandria, Cuneo, Novara, and Turin. Area, 11,389 sq. m.; pop. 3,365,000. See a work by S. Butler (new ed. 1890).

Pieria (*Pye-er'i-a*), a coast district of ancient Macedon, at the base of the Olympus, the fabled birthplace of the Muses and of Orpheus.

Pierre (*Pee-err'*), the capital of South Dakota, is a small town in the centre of the state, on the Missouri River, at the mouth of Bad River, 781 miles by rail WNW. of Chicago. Pop. 3235.

Piershill. See JOCK'S LODGE.

Pietermaritzburg (*Peetermar'itzboorg*), or MARITZBURG, capital of Natal (q.v.), occupies a fine situation near the river Umgeni, 54 miles N. of Durban by rail. The chief buildings are government house and the office of the colonial secretary. It takes its name from its founders, the Boer leaders Pieter Retief and Gert Maritz. Pop. 35,000 (20,000 Europeans).

Pike's Peak, a peak (14,134 feet) of the Rocky Mountains, in Colorado, 65 miles S. of Denver, discovered by Captain Pike, U.S.A., in 1806. It is situated in 38° 50′ N. lat. and 105° 2′ W. long. On its summit is one of the highest meteorological stations in the world. There is a railway to the top, 9 miles long (4½ miles of curves), with a maximum gradient of 1 in 4.

Pilatus, MOUNT (Swiss pron. *Pee-lah'toos;* Lat. *Mons Pileatus*, 'the hooded peak,' from its top being frequently enveloped in cloud; the Pilate legends have grown out of the altered name), an isolated mountain at the W. end of the Lake of Lucerne, rising opposite the Rigi. The lower half is clothed with wood and meadow; the upper portion is a mass of bare and jagged peaks, in the Tomlishorn attaining 6998 feet. Below the summit lies Lake Pilatus. On two of the peaks there are hotels; and since 1889 there has been a tooth-and-rack railway from Alpnach to the top, whence there is a splendid view of the Bernese Alps.

Pilcomayo (*Pil-co-mye'o*), a river of South America, which takes its rise in two branches in the Bolivian Andes, in the dep. of Potosí, flows in a very winding course south-east through the Gran Chaco, separating Paraguay and Argentina, and finally joins the Rio Paraguay a little below Asuncion. Its length is 1700 miles. The volume of water brought down is comparatively insignificant, much being spent in lagunes on its way. It is rendered like brine by the great salt lakes of the Chaco. There have been many attempts, all fruitless, made to open the river route between Argentina and Bolivia.

Pilibhit, a town in the United Provinces, 30 miles NE. of Bareilly by rail. Pop. 33,799.

Pillar Mountain, in Ennerdale, Cumberland, 2927 feet high.

Pillau (*Pil-lou'*), a Prussian fortified town, on a spit of land at the entrance of the Frisches Haff, 30 miles W. of Königsberg by rail. Pop. 4000.

Pillnitz, the ordinary summer residence of the Saxon royal family, in a beautiful situation on the Elbe, 5 miles SE. of Dresden.

Pilsen, the second town of Bohemia, in a fertile and beautiful valley, 67 miles by rail SW. of Prague. There are numerous active industries, producing building materials, machinery, metal-work, porcelain, spirits, liqueurs, leather, &c. In the neighbourhood are mines of iron, alum, vitriol, coal, and sulphuric acid; and the town gives its name to the best Bohemian beer. Pilsen was stormed by Ziska in the Hussite War and by Count Mansfeld in the Thirty Years' War (1618); it was Wallenstein's headquarters in 1633–34. Pop. (1869) 23,681; (1900) 68,079.

Pim'lico, a district of Westminster, south of the Green Park.

Pind Dadan Khan, a town in the Punjab, 1 mile N. of the Jhelum and 110 miles NW. of Lahore. The people (17,724) make brass and copper utensils, pottery, and woollens.

Pindus. See GREECE, p. 311.

Pine Bluff, capital of Jefferson county, Arkansas, on a high bluff on the S. bank of the Arkansas River, 120 miles from its mouth, and 43 by rail SSE. of Little Rock. It ships cotton, and manufactures iron, cotton-seed oil, flour, bricks, &c. Pop. (1880) 3203; (1900) 11,500.

Pinero'lo, or PIGNEROL, a cathedral city of north Italy, at the east foot of the Alps, 23 miles SW. of Turin. From 1042 a town of Savoy, it was until 1713 strongly fortified, having a citadel, in which the Man with the Iron Mask, Lauzun, and Fouquet were imprisoned. This fortress was in French hands, 1536–74, 1630–96, 1704–6, and 1801–14. Cloth, paper, leather, cotton, and silk are manufactured. Pop. 18,000.

Pinkie, the scene of a battle fought on 10th September 1547 near Musselburgh in Midlothian, in which 14,000 English under the Protector Somerset routed twice that number of Scots.

Pinner, a Middlesex parish, 2½ miles NW. of Harrow, with the Commercial Travellers' school (1855). Pop. 3370.

Pinos (*Pee'nōs*), ISLA DE, a Spanish island in the West Indies, south of Cuba, of which it is the largest dependency. Discovered by Columbus in 1494, it is part low and swampy, and part hilly (1500 feet). Area, 1200 sq. m.; pop. 2200.

Pinsk, a town of West Russia, 98 miles by rail E. of Brest-Litovsk. Pop. 28,000.

Piombino (*P'yombee'no*), a former principality of Italy, lies opposite the island of Elba. Its extent was 139 sq. m.; and its pop., previous to its incorporation with Italy in 1860, about 25,000. The town of Piombino, on a promontory 50 miles S. of Leghorn, is connected by a branch-line (1892) with Campiglia, and is the seat of large iron-rolling mills. Pop. 8000.

Piotrkow (Ger. *Petrikau*), a town of Russian Poland, 87 miles by rail SW. of Warsaw. Pop. 32,200.—The *government* has an area of 4730 sq. m. and a population of 1,410,000, and is a centre of the cotton and woollen industries.

Piqua, a city of Ohio, on the Miami River (here crossed by two bridges), 28 miles by rail N. of Dayton. It has manufactures of flour, furniture, mattresses, &c. Pop. 12,200.

Piræus (*Pye-ree'us*; Gr. *Peiraieus*), called also Port Draco, the harbour of Athens since the days of Pericles; this ruler and Cimon before him built the three 'long walls' that connected it with the capital (5 miles to the NE.), and so ensured a safe passage from one to the other. Its fortifications were destroyed by Sulla in 86 B.C., and from that time the town sank into decay. The modern Piræus, which has grown up since 1834, is a mean-looking place, with a naval and military school, arsenal depôts, and some manufactures. A railway connects it with Athens, and with the Turkish frontier. The imports include coal, railway plant, petroleum, sheep, and cattle; the exports, tobacco, valonia, hides, bones, horns, cheese, wool, &c. Pop. (1871) 11,000; (1879) 21,055; (1900) 42,169.

Pirano (*Pee-rah'no*), a seaport of Austria, on a promontory on the S. side of the Gulf of Trieste and 12 miles SW. of Trieste city. Pop. 13,340.

Pirmasens (*Peer-mah'zens*), a town of the Bavarian Palatinate, 34 miles by rail W. of Landau. It manufactures shoes and musical instruments. Close by the Prussians defeated the French in 1793. Pop. 30,200.

Pirna, a Saxon town, stands on the Elbe's left bank, 11 miles by rail SE. of Dresden. Here are a fine 16th-century church; a castle (1573), used as a lunatic asylum since 1811; manufactures of glass, chemicals, tobacco, stoves, &c.; and great sandstone-quarries. Pop. 18,898.

Pirot', a town of Servia, on the Nischava, 30 miles ESE. of Nisch. Pop. 10,450.

Pisa (*Pee-za*), one of the oldest cities of Italy, the rival of Venice and Genoa, is situated on the Arno, 6 miles from its mouth, by rail 49 miles W. of Florence, and 13 NE. of Leghorn. It was formerly a great port, but as the river has silted up and long ceased to be navigable, its commerce has been transferred to Leghorn. The cathedral (1063–1118), with a noble dome, fine paintings by Cimabue, Andrea del Sarto, &c., has the form of a Latin cross, 311 feet long by 252 wide; the nave is 109 feet high. Externally it has a magnificent façade of four superimposed rows of pilasters and arches, and fine bronze doors by Giovanni da Bologna and others. Near the cathedral stands the round marble campanile, the 'Leaning Tower of Pisa' (1174–*c.* 1350), a magnificent specimen of the southern Romanesque architecture, which is 183 feet high, and deviates 14 feet from the perpendicular—a peculiarity not due to original design. The marble Baptistery, or Church of St John (1152–1278), opposite the cathedral, is circular, and supports a dome, crowned with a cupola. The interior, noted for its wonderful echo, contains the grand and elaborate pulpit of Niccola Pisano (1260) and a large marble font. The beginning of the Campo Santo, the famous burial-place, was several loads of earth brought from Jerusalem; in 1278–83 it was surrounded by cloisters by Giovanni Pisano, whose walls were adorned with fresco-paintings by Orcagna and others. The university (1338) has a natural history museum, a botanical garden, a library (1742) of 120,000 volumes, 60 lecturers, and 600 students. Amongst natives may be named the popes Eugenius III. and Nicholas V., the Visconti, Giovanni (but not Niccola) Pisano, and Galileo. The industrial activity is now confined to cottons, silks, ribbons, and the working of coral and alabaster. Dromedaries are bred at a royal farm near. Pop. 61,350.

Pisagua (*Pee-zah'gwa*), a small port of the now Chilian province of Tarapacá, 40 miles N. of Iquique by rail; pop. 2131. It was bombarded during the Chilian civil war in 1891.

Piscat'aqua, a river which is part of the boundary between Maine and New Hampshire, and forms the harbour of Portsmouth.

Pisek', a walled town of Bohemia, on an affluent of the Moldau, 84 miles by rail S. by W. of Prague. It manufactures iron, brass, paper, boots, hats, &c. Pop. 14,596.

Pisgah, the mountain-range to the east of the Lower Jordan, also called Abarim, one of whose summits is Mount Nebo (2644 feet).

Pishín, a district of Southern Afghanistan, just north of Quetta, which has been governed by a British political agent since 1878. Area, 3600 sq. m.; elevation, 5000 feet; pop. 60,000. A branch of the Indus line traverses it.

Pisidia, an ancient southern division of Asia Minor, was separated from the sea by the narrow strip of Pamphylia.

Pistoia (*Pis-to'ya*; anc. *Pistoria*), a walled town of Italy, stands 21 miles by rail NW. of Florence, on a spur of the Apennines. The cathedral (12th and 13th centuries) contains a magnificent altar of silver (1286–1407); the church of St Bartholomew, a fine white marble pulpit by Guido of Como (1250); St Andrea's, Giovanni Pisano's pulpit (1301); and St John's, a font by Giovanni Pisano. The principal manufactures are iron and steel wares, and firearms—the word 'pistol' in all probability takes its name through *pistolese*, 'a dagger,' from Pistoia (Pistola). Pop. 30,190. Here Catiline was defeated in 62 B.C.

Pitcairn Island, a solitary island in the Pacific Ocean, between Australia and South America, in 25° 3′ S. lat. and 130° 8′ W. long., measures 2½ miles by 1 mile. When discovered by Carteret in 1767 it was uninhabited. In 1790 it was taken possession of by nine of the mutineers of H.M.S. *Bounty*, with six Tahitian men and a dozen women. Four years later the Tahitian men one night murdered all the Englishmen, except one, who afterwards assumed the name of John Adams. Thereupon the women, in revenge, murdered all the Tahitian men. According to another account, the white men and the Tahitians murdered each other at intervals. Certain it is that at the end of ten years John Adams was left alone, with eight or nine women and several children; and from them the present inhabitants (126 in 1901) are descended. Adams, changed by these tragic adventures, set about the Christian education of his companions. The little colony was discovered in

1808 by an American sealing ship; the first British vessel to visit it arrived in 1814. The islanders in 1831 had increased to 87, so at their own request they were removed to Tahiti by the British government. But, disgusted by their Tahitian relatives, most of them came back to Pitcairn Island after about nine months. The island was annexed to Britain in 1839. Nearly 200 of the islanders were transferred to Norfolk Island in 1856, but a number of them again returned. Pitcairn Island enjoys a lovely climate; its mountainous surface reaches 1008 feet in Outlook Ridge; the soil is fertile, and produces yams, cocoa-nuts, bread-fruit, sweet potatoes, bananas, &c. The people are degenerating, from intermarriage and their being able to live without exertion. See works by Sir J. Barrow (1831), Lady Belcher (1870), and T. B. Murray (1854; new ed. 1885).

Pitcaithly, or PITKEATHLEY, mineral springs in Perthshire, 4½ miles S. of Perth.

Pitch Lake. See TRINIDAD.

Pitcur, Perthshire, 3 miles SE. of Couper-Angus, has a large weem and a ruined castle.

Pitlochry, a Perthshire village, on the Tummel's left bank, 13 miles NNW. of Dunkeld. It is a great health and summer resort, and has a tweed factory. Pop. 1536.

Pitsligo, NEW, a town of Aberdeenshire, 11 miles SW. of Fraserburgh. Pop. 1676.

Pittenweem, a seaport of Fife, a royal (since 1542) and parliamentary burgh (St Andrews group), 3½ miles NE. of Elie by rail, with fisheries and a ruined 12th-century priory. Pop. 1862.

Pittsburgh (*Pitts'burg*), the second city of Pennsylvania, is built on a narrow strip of land where the Allegheny and Monongahela rivers meet to form the Ohio: it extends 7 or 8 miles up the rivers, and 2 or 3 down the Ohio. By rail it is 444 miles from New York, 354 from Philadelphia, and 468 from Chicago. Allegheny City (q.v.), north of the Allegheny River, is a distinct municipality. The business portion of Pittsburgh is on a plain, less than a mile in width, while the hills are covered with handsome residences. In this region, where the prevailing soft shales and sandstones have been worn away by the rivers to a depth of 500 or 600 feet, the horizontal layers of coal are exposed; the great Pittsburgh coal layer, 8 feet thick, like a broad black band extends around the city 300 feet above the river. The court-house, costing $2,500,000, is of Quincy granite, and is connected with the jail by a 'bridge of sighs.' The government building cost $1,500,000, and there are besides a city hall, the Exposition Building, a large R. C. cathedral, and Trinity Church (Episcopal). Pittsburgh is the seat of a Catholic college; its Carnegie free library was built, and the Carnegie Institute built and endowed, in 1890. The three rivers are crossed by fifteen bridges; and the different parts of the city are connected by several lines of electric cars.

Pittsburgh is now one of the most important industrial cities in the United States. The district, which practically extends over 25 miles up the Allegheny and Monongahela rivers and 10 miles down the Ohio (including the allied boroughs of Allegheny and McKeesport and about thirty smaller boroughs), is the great centre of the steel, iron, and glass industries of the United States. Its coalfields are very rich, and it is an extensive shipping-point for bituminous coal. Including the great Carnegie steel-works at Homestead, and the Westinghouse works, the district contains nearly 3500 manufactories, with an estimated capital of over $1,800,000,000, and employing over 240,000 people. Its manufactures include everything that can be made of iron, from a 58-ton gun to nails and tacks; steel in its various applications; all descriptions of glass and glassware; silver and nickel-plated ware; Japan and Britannia ware; pressed tin, brass, copper, bronzes; earthenware, crucibles, fire-pots, bricks; furniture, wagons and carriages; brushes, bellows, mechanical supplies of all kinds; natural-gas fittings, and tools for oil and gas wells. After 1883 natural gas was largely used for domestic and manufacturing purposes; but of late the supply is less abundant, and the manufactories have returned to the use of coal. Over $15,000,000 have been spent in dams and locks on the Allegheny, Monongahela, and Ohio, to give slack-water navigation, and an ultimate expenditure of $50,000,000 is contemplated. The traffic on these rivers is enormous, chiefly coal and iron manufactures. Much lumber-rafting is done on the Allegheny. The assessed value of Pittsburgh in 1903 was $375,163,000, and the revenue for general purposes was just over $7,094,200. In 1754 a few English traders built a stockade here, but were driven away by the French. The latter replaced the stockade by a fort, which, in honour of the governor of Canada, they called Duquesne. In 1758 it was taken by the English, who next year commenced a large and strong fortification, which, in honour of the elder Pitt, then prime-minister, they called Fort Pitt. The settlement became a borough in 1804, and in 1816 was incorporated as the city of Pittsburgh. Pop. (1810) 4768; (1840) 21,115; (1870) 86,076 (with Birmingham, included soon after, 121,799); (1880) 156,389; (1900) 321,616.

Pittsfield, capital of Berkshire county, Massachusetts, 151 miles by rail W. of Boston. Beautifully situated on a plateau where six lakes round the city give rise to the Housatonic River, it has a marble court-house, a handsome athenæum, and a fine park. Cotton and woollen goods, silk, boots and shoes, and tacks are manufactured. Pop. 22,500.

Pittston, a mining-town of Pennsylvania, on the Susquehanna River, 9 miles by rail NE. of Wilkesbarre. Besides a railway bridge, there are two other bridges connecting it with West Pittston. It has foundries, knitting-mills, and a silk-factory. Pop. 13,500.

Piuro (*P'yoo'ro*), near the Val d'Aosta, once a rich city full of palaces, was crushed with all its wealth and thousands of people by the fall in 1618 of an overhanging mountain. It now is a chaos of wooded knolls and moss-grown rocks.

Pladda, an islet with a lighthouse off the SE. extremity of Arran. Pop. 6.

Plainfield, a city of New Jersey, on Green Brook, 24 miles by rail WSW. of New York. Clothing, hats, and machinery are manufactured. Pop. 15,800.

Plaistow, an East London district, in West Ham parliamentary borough.

Plasencia, a decayed town of Spain, in Estremadura, 130 miles W. by S. of Madrid, is surrounded with double walls (1197), and has a fine Gothic cathedral (1498). Pop. 8000. The monastery of San Yuste, to which Charles V. retired, lies 24 miles E.

Plassey (Bengali *Palási*), a battlefield, 96 miles N. of Calcutta, on the Bhágirathi River, which has eaten away the scene of the struggle. Here Clive defeated Suraj ud Dowlah, subahdar of Bengal, 23d June 1757, a victory which laid the foundation of British supremacy in India.

Platæa (Gr. *Plataiai*), a city in the western part of Bœotia, on the borders of Attica, and at the foot of Mount Cithæron, 6 miles from Thebes. In 479 B.C. it witnessed the glorious victory won by the Lacedæmonian Greeks, under Pausanias and Aristides, over the Persians; in 429–27 it was besieged by a Theban-Lacedæmonian force, and razed to the ground.

Platte, or NEBRASKA, an affluent of the Missouri, formed by the junction of the North and South Forks, which rise among the Rocky Mountains, in Colorado, and flow 800 and 550 miles. It winds 450 miles eastward, in a wide shallow stream, over the treeless plains of Nebraska.

Platten-See. See BALATON.

Plattsburg, capital of Clinton county, New York, on Lake Champlain, at the mouth of the river Saranac, 73 miles by rail S. of Montreal. It has planing-mills, machine-shops, and manufactures of iron, wagons, and sewing-machines. In Plattsburg Bay, on September 11, 1814, a British flotilla was defeated. Pop. 9010.

Plattsmouth, capital of Cass county, Nebraska, on the Missouri, below the mouth of the Platte, and 21 miles by rail S. of Omaha. It manufactures flour, engines, organs, &c. Pop. 5000.

Plauen (*Plow'en*), a town of Saxony, on the Elster, 78 miles S. of Leipzig by rail. It manufactures cotton goods, muslin, cambric, jaconet, embroidered fabrics, cigars, paper, and machinery. Pop. (1875) 28,756; (1900) 73,891.

Playford, a Suffolk parish, 4 miles ENE. of Ipswich. Clarkson lived and died here.

Plessis-les-Tours. See TOURS.

Plevna, a town of Bulgaria, 19 miles S. of the Danube and 85 NE. of Sophia; pop. 18,546. Here in December 1877 Osman Pasha, the Turkish general, after a three months' defence, was forced to surrender to the Russians.

Plinlimmon, a large mountain-mass (2469 feet) of Wales with three summits, on the boundary between Montgomery and Cardigan, 10 miles W. of Llanidloes. The name is said to be a corruption of a Celtic word signifying Five Rivers, the Severn, Wye, and three other rivers rising here.

Plock (Ger. *Plozk*), an ancient town of Russian Poland, on the Vistula, 60 miles NW. of Warsaw, with an 11th-century cathedral. Pop. 28,660.

Plojeshti, or PLOESCI, a town of Roumania, 37 miles by rail N. of Bucharest, with petroleum-refineries. Pop. 42,700.

Plombières (*Plomb-yehr'*), a spa in the French dep. of Vosges, 14 miles S. of Épinal, was brought into fashion by Napoleon III., though its waters were known to the Romans. There are nearly thirty springs of from 66° to 150° F.; they are helpful against skin diseases, gout, rheumatism, dyspepsia, female complaints, &c. A handsome casino was opened in 1876. Pop. 1819.

Plumstead. See ERITH.

Plus'carden, a ruined Cistercian priory (1230), 6 miles SW. of Elgin. See Macphail's work (1881).

Plymouth (*Plim'muth*), one of the most famous of English seaports, an ancient parliamentary, municipal, and county borough, lies in the extreme SW. corner of Devonshire, 246 miles by rail (216 by road) WSW. of London, 128 SW. of Bristol, and 53 SW. of Exeter. It occupies the northern shore of Plymouth Sound, immediately at the mouth of the Plym. The remaining space between it and the Hamoaze, the estuary of the Tamar, is occupied by the sister but much smaller town of Stonehouse (q.v.), while still farther west, along the Hamoaze itself, stretches the third of the 'Three Towns,' Devonport (q.v.), now all united by continuous lines of houses. The chief government establishments are at Devonport—the dockyard, gun-wharf, steam-factory, and principal barracks; while Stonehouse has the victualling yard, marine barracks, and naval hospital. Plymouth is the chief seat of commerce, trade, and manufacture. The site is a very fine one. Between the two natural inlet harbours of Sutton Pool and Mill Bay stretches the bold rocky ridge of the Plymouth Hoe, its eastern end occupied by a citadel built by Charles II. Northward the ground rises in a series of long hills, along which the town stretches until it passes into a suburban hill of singular attractiveness. From the Hoe there are magnificent views both seaward and landward. Here, according to tradition, the captains of the fleet assembled to meet the Armada whiled away the time with a game of bowls, which was not interrupted by the news of the enemy's approach; and here stand a tercentenary memorial to the Armada heroes (1890), and a statue (1884) of Sir Francis Drake (one of Boehm's finest works). The upper portion of the lighthouse erected by Smeaton on the Eddystone (q.v.) was also rebuilt here in 1882–84. Old Plymouth is chiefly clustered round the shores of Sutton Pool—a dingy unattractive set of narrow streets; but of recent years miles of excellent thoroughfares and many handsome buildings have been erected, chief among them a noble Gothic guildhall, opened in 1874 by the Prince of Wales, Lord High Steward of the borough. The 15th-century church of St Andrew is a fine Perpendicular edifice; Charles Church (1646–58) is a singularly good example of post-Reformation Gothic; the Roman Catholic cathedral is an effective Early English edifice (1858). The Cottonian collection of sketches by the leading continental masters is at the Proprietary Library; there is a good local museum at the Athenæum; the South Devon Hospital was opened in 1884 at a cost of £40,000; and the Marine Biological Laboratory in 1888. In Mill Bay are the Great Western Docks, which are capable of taking the largest merchant-vessels. Sutton Pool, the ancient tidal harbour of Plymouth, in addition to a large general trade, is the seat of important fisheries. Manufactures, mainly chemical, are carried on—at Cattedown chiefly, but also at Mill Bay. There is a large foreign, and a very extensive coasting trade, and the port is used by many lines of great passenger-steamers.

Though only a fishing-village at the Conquest, under the name of Sutton, Plymouth has for centuries played a leading part in the national life. It was the favourite port of the Black Prince; the chief Elizabethan rendezvous of Drake, Hawkins, Grenville, and Raleigh; the final port of departure of the *Mayflower* with the Pilgrim Fathers. In the civil wars it sided with the parliament, and it was the first town to declare for William of Orange. In the great French war it rivalled Portsmouth in naval activities. Among its natives are Sir John Hawkins, Sir Richard Hawkins, Joseph Glanvill, R. S. Hawker, Mortimer Collins, with Northcote, Haydon, S. Prout, Sir C. Eastlake, P.R.A.,

and S. Hart, the artists. Plymouth was first incorporated by Henry VI. in 1439, and has since always returned two members to parliament. Pop. (1801) 43,194; (1881) 76,080; (1901) 107,636.

Plymouth Sound is a deep inlet, 2½ to 3 miles wide, and 3 deep, into which the river Tamar falls from the west, and the river Plym from the east. It is sheltered by a great breakwater, constructed in 1812–41 at a cost of £1,300,000—an insulated mole of stones, a mile in length, stretching across the middle of the Sound, 2 miles from the Hoe. About half a mile from the Hoe is a little islet, Drake's Island, which is strongly fortified. A formidable stone fort has also been built on an artificial island immediately within the breakwater; while on either shore there are extensive forts and batteries. The estuary of the Plym is called the Cattewater, and is a capacious inner mercantile anchorage, protected by the Batten breakwater. The estuary of the Tamar is called the Hamoaze, and from the spot at which it enters the Sound between Devil's Point and Mount Edgcumbe to Saltash is nearly 4 miles in length—a still more thoroughly protected anchorage for vessels of the largest size, and occupied by men-of-war. Plymouth Sound is exceedingly beautiful, and has even been likened to the Bay of Naples. On its western shore is Mount Edgcumbe, the delightful seat of the Earl of Mount Edgcumbe. Picturesque Rame Head is crowned by the ruins of a mediæval chapel; and the Yealm's estuary, with the peaked Mewstone at its mouth, is full of romantic beauty.

See Worth's *History of Plymouth* (1871; new ed. 1891), and *The Three Towns Bibliotheca* (1873); Jewitt's *History of Plymouth* (1873); and four works by J. B. Rowe (1873–76).

Plymouth, (1) capital of Plymouth county, Massachusetts, on Plymouth Bay, 37 miles by rail SE. of Boston, is famous as the landing-place in 1620 of the Pilgrim Fathers. Plymouth Rock is a granite boulder at the water's edge on which they landed. It is covered by a handsome granite canopy, and there is also a national monument (1858–89) to the pilgrims; the pedestal, also of granite, stands on a hill overlooking the landing-place, and is 46 feet high, surmounted by a figure of Faith, 36 feet high, with Morality, Education, Freedom, and Law grouped round the base. In Pilgrim Hall (1824–25) are many relics. Pop. 9600.—(2) A mining-town of Pennsylvania, on the Susquehanna, 20 miles by rail SW. of Scranton. Pop. 13,650.—(3) The capital of Montserrat (q.v.).

Plympton, a Devon market-town, near the Plym, 4½ miles E. by N. of Plymouth. It returned two members till 1832. At its grammar-school (1658) were educated Sir Joshua Reynolds (a native) and Haydon. Pop. of parish, 1119.

Plynlimmon. See Plinlimmon.

Pnom Penh. See Cambodia.

Po (anc. *Eridanus* and *Padus*), the largest river of Italy, rises on Monte Viso, one of the Cottian Alps, at an altitude of 6405 feet, close to the French frontier, and flows 360 miles E. to the Adriatic. Over 55 miles from its mouth, above Ferrara, it begins to form its delta, 60 miles wide from north to south, and growing rapidly in area. Ravenna, once on the seashore, now stands 4 miles inland. The Po receives from the left the Ticino, Adda, Mincio, &c., and from the right the Trebbia. Below Piacenza its stream, now considerably above the level of the plain, has from ante-Roman days been embanked.

Pocklington, a market-town in the East Riding of Yorkshire, 16 miles ESE. of York. It has an Early English church (restored 1850) and a grammar-school (1514; reconstituted 1876), where Wilberforce was educated. Archbishop Ullathorne was son of a grocer here. Pop. 2557.

Podgoritza, a town of Montenegro, 16 miles E. of Cetinje, ceded by Turkey in 1879. Pop. 7200.

Podolia, or Kamenetz, a government of West or 'White' Russia, north of Bessarabia, and touching Austria. Area, 16,224 sq. m.; pop. 3,050,000, mostly Russniaks.

Point-a-Pitre. See Guadeloupe.

Point de Galle. See Galle.

Poitiers (Fr. pron. *Pwahteeay'*), the capital of the French dep. of Vienne, occupies the summit and slopes of a little eminence, round whose base flow the Clain and the Boivre, 61 miles SSW. of Tours. Before the revolution it had an immense number of religious edifices, which even yet are sufficiently numerous. The most interesting are the little Temple de St Jean, originally a baptistery of the 6th or 7th century; the abbey church of St Radegonde, with the saint's cenotaph, much visited by pilgrims; and the noble cathedral of St Pierre (1161–15th century), in which, or in the older edifice that occupied its site, twenty-three councils were held—the first in the 4th, and the last in the 15th century. Other edifices are the Palais-de-Justice (the palace formerly of the Counts of Poitou) and the Hôtel-de-Ville (1876). A university, founded by Charles VII. in 1431, is now represented by a school of law, with faculties also of science and literature. There are besides a public library of 30,000 volumes and 400 MSS., a museum, &c. Pop. (1872) 28,247; (1901) 39,886. Poitiers, the *Limonum* of the Romans, derives its present name (earlier *Poictiers*) from the Pictavi or Pictones. In and around it are numerous Celtic and Roman remains, a dolmen, baths, fragments of a huge amphitheatre, &c.; and here in 1882 the remains of a whole Gallo-Roman town were discovered, with temple, baths, and streets, spread over 14 acres. In the vicinity Alaric II., the Visigoth, was defeated and slain by Clovis in 507; and between Poitiers and Tours Charles Martel won his great victory in 732 over the Saracens. Later still (19th September 1356), at a spot 5 miles north of Poitiers, Edward the Black Prince defeated King John of France, killing 11,000 and taking more than 2000 prisoners, among these the monarch himself and one of his sons. St Hilary was the first bishop of Poitiers, which long was capital of the province of Poitou.

Poitou (*Pwahtoo'*), a former province of south-western France, coincident with the present deps. of Deux Sèvres, Vendée, and Vienne.

Pokhurn (*Pokaran*), a town of India, in the Rajput state of Jodhpur, 70 miles NW. of Jodhpur. Pop. 15,000.

Pola, the chief naval station of Austria-Hungary, near the south end of the peninsula of Istria, 105 miles by rail S. of Trieste, with a sheltered, deep, and spacious harbour. The town is protected by forts and batteries, and is overlooked by the citadel. The arsenal employs 2400 men. The cathedral dates from the 15th century. Pola is also a shipping port, exporting wood, fish, sand, and building stones, and importing provisions, coal, and bricks. Pop. (1851) 1100; (1900) 45,205. Pola was destroyed by Augustus, but rebuilt at the request of his daughter Julia, and hence was named *Pietas Julia*. About 200 A.D. it had 30,000 inhabitants,

and was a station of the Roman fleet. It was destroyed in 1267 by the Venetians, who had conquered it in 1148; and in 1379 the Genoese, after routing the Venetians in a sea-fight off the town, once more ravaged it. But it only passed from Venice in 1797 to Austria, who made it her chief naval harbour in 1848. It contains many Roman remains, among them a well-preserved amphitheatre, 450 feet long and 360 broad.

Poland (called by the natives *Polska*, a word of the same root as *Pole*, 'a plain'), a former kingdom of Europe, was, immediately previous to its dismemberment, bounded N. by the Baltic Sea from Danzig to Riga, and by the Russian provinces of Riga and Pskov; E. by the Russian provinces of Smolensk, Tchernigoff, Pultowa, and Kherson; S. by Bessarabia, Moldavia, and the Carpathian Mountains; and W. by the Prussian provinces of Silesia, Brandenburg, and Pomerania. Its greatest length from N. to S. was 713 English miles, and from E. to W. 693 miles, embracing an area of about 282,000 sq. m. (40,000 larger than Austria-Hungary is now). This extensive tract forms part of the great European central plain, and is crossed by only one range of hills, which run NE. from the Carpathians, forming the watershed between the Baltic and Black Seas. The soil is mostly a light fertile loam, though there are large barren tracts of sand, heath, and swamp, especially in the east. Much of the fertile soil is rich pasture-land, and much is occupied with forests of pine, birch, oak, &c. Rye, wheat, barley, and other cereals, hemp, timber, honey and wax, cattle, sheep, and horses, vast mines of salt and coal, some silver, iron, copper, and lead constitute the natural riches of the country; and for commerce the Vistula, Dnieper, Dwina, and their tributaries afford great facilities. The present population of the provinces included in the Poland of former days consists of Poles, Lithuanians, Germans, Jews, Malo-Russians, Roumanians, Gypsies, &c. The Poles, who number 10,000,000, form the bulk of the population; the Lithuanians, 2,100,000 in number, inhabit the north-east of the country; the Germans, of whom there are 2,000,000, live mostly in the towns; the Jews are very numerous, being reckoned at 2,200,000. Of Roman Catholics there are about 9,400,000; of members of the Greek Church (including Uniates), 7,900,000; of Protestants, 2,360,000; the rest are Jews, Armenians in Galicia, &c.

The Polish people takes its name from the Poliani, a tribe that early became dominant amongst the Slavonic inhabitants of the Polish area. The history of the kingdom begins with its Christianisation about the end of the 10th century; in the 11th the kingdom was extended beyond the Oder, the Carpathians, and the Dniester. In the 12th century a contested succession led to dissensions and the loss of Pomerania. In the 13th the Teutonic Knights were summoned by the kings to assist them, but soon became the most formidable enemy of the Polish monarchy, conquering large districts and necessitating frequent wars. The Mongol invasion of 1241 devastated the country, and was followed by the immigration of German colonists and Jews. The marriage of Hedwig or Jadviga, daughter of King Louis, in 1385 to Jagiello, grand-duke of Lithuania, led to the union of Lithuania and Poland under the Jagellon dynasty—a union made permanent and indissoluble in 1569. The kingdom at its greatest extent was subdivided into about forty palatinates, which were mostly governed by hereditary chiefs. The people were divided into two great classes—nobles and serfs. The noble class, which was the privileged and governing class, included the higher nobles, the inferior nobles (a numerous class, corresponding to the knights and gentry of other countries), and the clergy, and numbered in all 200,000; the serfs formed the agricultural labourers, and were attached to the soil. Their condition is described by all travellers as a very pitiable one. Such trade as the country had was mostly in the hands of the Germans and Jews. The nobles were the proprietors of the soil, and appropriated the larger portion of its products. They were brave and hospitable, but quarrelsome, and generally preferred their own interests to that of their country; the serfs were sunk in poverty and ignorance. Long ere the union with Lithuania, the diet, first summoned in 1331, had absorbed almost all the kingly power, and was becoming the centre of furious and selfish dissensions amongst the nobles, which did more than anything else to ruin the nation. Other causes were the feuds of Catholics and Protestants, and the persecution of the Greek Catholics; the miserable condition of the serfs, downtrodden by the nobles; and the want of natural frontiers. The crown was practically elective—another source of difficulty and civil war. Moldavia and Wallachia, long under a Polish protectorate, were taken by the Turks; Livonia was conquered by Sweden (1605), and ceded in 1660; and Brandenburg became independent (1657). The Cossacks, goaded by Jesuit persecution, went over to Russia (1654). Sobieski's glorious victory over the Turks (1683) brought little good to the country, torn as it was by the dissensions of the nobles. Disputed elections and rival claimants to the crown led to the intervention of the adjoining powers, and the *first partition* (1772) of Poland, by which 84,000 sq. m. of Polish territory were divided between Russia, Prussia, and Austria. Renewed dissensions in 1792 led to a like result; a *second partition* (1793) gave Russia and Prussia another slice of 118,000 miles, in spite of the efforts of Kosciusko and other patriots. A Polish national rising was utterly unsuccessful, and merely precipitated the *third partition* (1795), when 82,000 miles of Polish soil were divided amongst Russia, Prussia, and Austria, and the Polish monarchy was at an end. Some readjustment took place by the Treaty of Vienna in 1815; and rebellions against Russian rule in 1830, 1848, and 1863 have only brought further humiliation on Polish hopes and aspirations.

The so-called 'Kingdom of Poland,' united to Russia in 1815, had its own constitution till 1830, and a separate government till 1864, when after the suppression of a widespread revolt, the last visible remnant of independence was taken away. The administration was at first given to eight military governors, and then to a commission sitting in St Petersburg. Finally, in 1868, the Polish province was absolutely incorporated with Russia, and the ten governments into which it was divided are grouped with the governments of Russia proper. In 1867 the area of this section of old Poland was about 49,000 sq. m., with a pop. of about 5,700,000, of whom 4,330,000 were Roman Catholics. In 1905 the ten Polish provinces—Kaliscz, Kielce, Lomza, Lublin, Piotrkow, Plock, Radom, Siedlce, Ssuwalki, and Warsaw—had a collective pop. of over 9,500,000. Commerce is still mostly in the hands of the Jews.

The Polish language, a typical representative of the western Slavonic, is a highly cultivated tongue, with a literature already extensive in

the 16th century. Mickiewicz (1798–1855) is the greatest poet; Sienkiewicz one of the most esteemed and prolific of recent novelists. See historical works on Poland by Lelewel (French trans. 1844), Moltke's *Poland* (trans. 1855), and Morfill's *Poland* (1893).

Polar Seas, the seas about the North and South Poles, are the Arctic and Antarctic oceans, and have been separately discussed in this work under these heads, where mention is made of the principal exploring expeditions to either, and references given to books.

Polesworth, a Warwickshire village, on the Anker, 4 miles ESE. of Tamworth. Pop. of parish, 4670.

Poligny (*Pol-een-yee*), a town of the French dep. of Jura, prettily situated at the foot of the Jura, 18 miles NE. of Lons-le-Saunier. Pop. 4186.

Pollanarrua, a ruined city of Ceylon, 60 miles ENE. of Kandy, with a massive dagoba, a rock-cut temple, and a wide area of ruined buildings that attest the size of the city, which became the capital about 770 A.D.

Pollokshaws, a manufacturing town of Renfrewshire, on the White Cart, 3 miles SSW. of Glasgow. It derives its name from the 'shaws' or woods of the estate of Pollok, held for more than six centuries by the Maxwells. It was made a burgh of barony in 1814; and its industries, started in 1742, comprise power-loom weaving, dyeing, tapestry and chenille manufacturing, bleaching, iron-founding, paper-making, &c. Pop. (1841) 4627; (1901) 11,369.

Pollokshields, a SW. suburb of Glasgow.

Polmont, a Stirlingshire village, 4½ miles W. by N. of Linlithgow. Pop. 561.

Polotsk, a town of Russia on the Dwina, 62 miles by rail NW. of Vitebsk. Pop. 19,134.

Polperro, a small Cornish fishing-town, 6 miles E. of Fowey.

Poltava. See PULTOWA.

Polynesia (Gr. *polys*, 'many,' *nēsos*, 'island'), a term applied collectively by some writers to all the Pacific islands of strictly oceanic character—i.e. either of volcanic or coralline origin; by others restricted to the eastern groups inhabited by the brown Polynesian race. Here it will be taken in the broader sense so as to include all the Pacific lands east of the Philippines, New Guinea, and Australia, except Japan, the Kuriles, Aleutians, Queen Charlotte, Vancouver, Revillagigedo, and Galapagos, which are geographical dependencies of the surrounding Asiatic and American continents. These Polynesian, or 'South Sea' islands (most of them annexed by one of the greater European powers), are distributed over a hundred degrees of longitude from New Britain (149° E.) to Easter Island (109° 17′ W.), and across seventy degrees of latitude from Hawaii (23° N.) to Stewart Island at the southern extremity of New Zealand (47° 20′ S.). But the aggregate extent of dry land in this boundless expanse of some 11 million square miles scarcely exceeds 170,000 sq. m., of which nearly two-thirds are comprised in the New Zealand Archipelago, while the total pop. is probably less than 1,500,000. Polynesia comprises the three broad divisions of Micronesia, Melanesia, and East Polynesia, which are determined partly by geographical position, and partly by ethnological conditions, and each of which is again subdivided into several secondary groups. Thus, Micronesia (Gr. *mikros*, 'small,' *nēsos*, 'island') lies in the extreme north-west almost entirely north of the equator, and consists exclusively of small volcanoes and atolls, forming the five archipelagoes, all inhabited by heterogeneous populations in which most of the oceanic and perhaps some of the continental elements are represented. So also Melanesia (Gr. *melas*, 'black') lies in the extreme west entirely south of the equator, and consists mainly of comparatively large upraised crystalline, coralline, and volcanic islands disposed in parallel chains from north-west to south-east, forming eleven archipelagoes, all inhabited by the Melanesian or dark Oceanic race. Lastly, East Polynesia lies on both sides of the equator, mainly east of a line drawn from New Zealand between Fiji and Samoa to Hawaii, and consists of twelve volcanic and coralline archipelagoes (suitable), besides the large sedimentary and igneous region of New Zealand and numerous sporadic islets, such as Norfolk, Chatham, Rapaiti, Easter, Manihiki, Tongareva, Uvea, and many others. This division is the exclusive domain, apart from recent white immigrants, of the large brown race, commonly called 'Polynesians' in a special sense. The table shows the size, area, and political connection of these multitudinous groups.

Group.	Area in sq. m.	Pop.	State.
MICRONESIA—			
Mariana	450	2,000	Ger. and U.S.
Pelew	200	12,000	Germany.
Caroline	400	30,000	Germany.
Marshall	160	15,000	Germany.
Gilbert (Kingsmill)	170	35,000	England.
MELANESIA—			
Admiralty	770	2,000	Germany.
Bismarck	16,000	188,000	Germany.
D'Entrecasteaux	1,100	1,000 (?)	England.
Louisiade	870	2,000 (?)	England.
Solomon	16,300	175,000	Eng. and Ger.
Santa Cruz	200	5,000	England.
Banks	190	4,500	England.
New Hebrides	5,000	62,000	Independent.
New Caledonia	6,500	43,000	France.
Loyalty	1,100	20,000	France.
Fiji	8,000	120,000	England.
EAST POLYNESIA—			
Hawaii	6,700	154,000	Un. States.
Phœnix	15	60	England.
Ellice	14	3,300	England.
Tokelau	12	520	England.
Samoa	1,000	35,000	Germany.
Tonga	450	30,000	England.
Kermadec	40	100	England.
Austral	105	1,400	France.
Cook (Hervey)	140	11,500	England.
Tahiti (Society)	600	17,000	France.
Tuamotu (Low)	360	5,600	France.
Marquesas	480	6,000	France.
New Zealand	104,000	772,720	England.

Lying almost entirely within the tropics, and consisting nearly everywhere of igneous or coralline groups exposed to the same atmospheric and marine currents, Polynesia presents great uniformity in its climatic and biological conditions (New Zealand, however, differs widely). The rainfall is generally high, the flora relatively rich, the fauna remarkably poor, especially in mammals. There is a general consensus that Polynesia has been occupied from prehistoric times by two distinct races, the dark Melanesians, who belong to the same stock as the Papuans of New Guinea and Malaysia, and the brown Polynesians, called also Mahori and Sawaiori, whose racial affinities have not been satisfactorily determined. Nearly all the Pacific languages appear to be members of the great Malayo-Polynesian family; however it is to be explained, both the dark and brown peoples speak idioms derived from a common stock. For over a century the Oceanic peoples have been in contact with Europeans, and nearly all the Polynesians,

as well as many of the Melanesians, profess some form of Christianity—the first mission established being that to Tahiti in 1797 by the London Missionary Society. But as western influences increase, the races themselves decrease. See works by Ellis (1829), Sir George Grey (1855), De Quatrefages (1866), Pritchard (1866), Angus (1867), Moresby (1877), Fornander (1878–86), Gill (1880), Keane (1880), and Codrington (1891), and the articles on the separate groups.

Pomerania (Ger. *Pommern*), a Prussian province, from 1100 to 1637 an independent duchy, bounded N. by the Baltic, and S. by Brandenburg. Area, 11,620 sq. m.; population, 1,750,000. It is one of the lowest and flattest regions in Germany, and has numerous lakes. Stettin (the capital) and Stralsund are the most important towns. Greifswald is the seat of a university.

Pomeroy, capital of Meigs county, Ohio, between the Ohio River and a range of precipitous hills, 133 miles by rail SE. of Columbus. Coal-mining and the manufacture of salt are the chief industries. Pop. 4640.

Pomfret. See Pontefract.

Pomona, or Mainland. See Orkney.

Pompeii (*Pompee'i;* Ital. pron. *Pompay'yee*), once a seaport at the mouth of the Sarnus, on the Neapolitan Riviera, founded about 600 B.C. by the Oscans, and, after them, occupied by the Tyrrheno-Pelasgians, and by the Samnites, till these, about 80 B.C., were dispossessed by the Romans. From that time down to its destruction, 79 A.D., it became (with Herculaneum) a sort of Rome-super-Mare, frequented by the aristocracy; and its public monuments were out of all proportion to its size. On February 5, 63 A.D., by an earthquake, these buildings were all but levelled with the ground, and some years elapsed ere the fugitive citizens recovered confidence to re-occupy and rebuild. Reconstruction was carried out with haste and tawdriness. The city had relapsed into more than its former gaiety and licentiousness, when on the 23d August (or, more probably, on the 23d November) 79, with a return of the shocks of earthquake, Vesuvius was seen to throw up a column of black smoke, expanding into a great swarthy cloud, dense with ashes, pumice, and red-hot stones, which settled down on the doomed cities with a force increased by the rain-torrents that intermittently fell. Amid the impenetrable gloom the panic of the citizens was aggravated by repeated shocks of earthquake, and for three days the flight continued till Pompeii was abandoned by all who could effect their escape. The Emperor Titus organised relief on an imperial scale, and even undertook the rebuilding of the city. This attempt was soon abandoned, and Pompeii remained a heap of hardened mud and ashes, gradually overgrown with grass—the wall of the great theatre and the outline of the amphitheatre alone marking its site—till 1592, when the architect Fontana, in cutting an aqueduct, came on some ancient buildings. Unsystematic, unscientific excavations proceeded fitfully from 1748 till 1860, when the Italian kingdom took in hand the unearthing of the city. This was carried out with admirable ingenuity, care, and success; and the wonderfully preserved remains of temples, theatres, shops, and dwelling-houses attract pilgrims from all lands to study these unique object-lessons of the public and private life of antiquity.

See works by Neville Rolfe (1884), Mazois (Paris, 1812–38), Nissen (Leip. 1877), Overbeck-Mau (Leip. 1884), and Bagot Molesworth (1903); also Bulwer Lytton's *Last Days of Pompeii.*

Ponapé. See Caroline Islands.

Ponce, a town and port on the south coast of Porto Rico, 50 miles SW. of San Juan. Pop. 28,000.

Pondicherry (*Pon'di-sherr'ee*), the chief of the French settlements in India, on the Coromandel Coast, 90 miles S. by W. of Madras. It is divided into two parts by a canal, White (European) town being next the sea. It has handsome streets, a government house, a college, a lighthouse, and a cotton-mill employing 1500 hands. Pop. 48,283. It exports chiefly oil-seeds. The French colony of Pondicherry has an area of 115 sq. m. and a population of 175,000. Its governor is governor-general of French India. The French first settled here in 1674, but the town was held by the Dutch in 1693–97, and by the English in 1761–63, 1778–83, and 1793–1816.

Pondoland, a district of Kaffraria, on the Natal frontier, South Africa, was mostly annexed to Cape Colony in 1884–87, the remainder being incorporated in 1894. Pop. 200,000.

Ponta Delgada. See Azores.

Pont-à-Mousson (*Pon'-ta-Moosson'*), a town in the French dep. of Meurthe-et-Moselle, on the Moselle, 18 miles NNW. of Nancy and 18 SSE. of Metz. Pop. 11,750.

Pontarlier, a French town (dep. Doubs), 35 miles SE. of Besançon, on the main Jura route from Switzerland to France. Pop. 7760.'

Pontchartrain (*Pon-shar-train'*), Lake, in Louisiana, 5 miles N. of New Orleans, is 40 miles long and 25 wide.

Pontecorvo (*Pontekor'vo*), a cathedral city of Italy, 37 miles NW. of Capua. Pop. 12,240.

Pontefract, or Pomfret, a pleasant market-town in the West Riding of Yorkshire, on an eminence near the influx of the Calder to the Aire, 13 miles SE. of Leeds, 8 E. by N. of Wakefield, and 14 NNW. of Doncaster. It stands on the line of a Roman road, but seems to have arisen round its Norman castle, which, founded about 1076 by Ilbert de Lacy, was the scene of the execution or murder of the Earl of Lancaster (1322), Richard II. (1400), and Earl Rivers (1483), was taken in the Pilgrimage of Grace (1536), and during the Great Rebellion sustained four sieges, being finally dismantled in 1649, after its capture by Lambert. There are two old churches, a town-hall (rebuilt 1796), a market-hall (1860), a grammar-school of Edward VI. (1549), and large market-gardens and nurseries, the growing of liquorice for the lozenges called 'Pomfret cakes' being a specialty as old as about 1562. At Ackworth, 3 miles south, is a large Quaker school (1778). Pontefract, called *Taddenesscylf* in pre-Conquest times, seems to have received its present name between 1086 and 1135; why Pontefract ('broken bridge') is uncertain, see *Notes and Queries* for 1886–87. The borough, chartered by Richard III., lost one of its two members in 1885. Pop. of parl. borough (1851) 11,515; (1901) 20,745, of whom 13,427 were within the municipal boundary. See works by Paulden (1702), Tetlow (1769), and Boothroyd (1807).

Pontevedra (*Pontehvay'dra*), a cathedral town of Spain and capital of a Galician province, 30 miles S. of Santiago. Pop. 22,550.

Pontiac, capital of Oakland county, Michigan, on Clinton River, surrounded by lakelets, 26 miles by rail NNW. of Detroit. It has a state reform school, a lunatic asylum, flour and planing mills, foundries, and brick-yards. Pop. 9770.

Pontianak', capital of the western division of Dutch Borneo, near the mouth of the river Kapuas. Pop. 5000.

Pontigny (*Ponteen-yee'*), a village of the French dep. of Yonne, 18 miles SE. of Auxerre, with a famous Cistercian monastery. Three English archbishops retired hither—Becket, Langton, and St Edmund, the last being buried here. The monastery was devastated by the Huguenots in 1567, and destroyed at the Revolution; but the church (1150–70) is the most perfect Cistercian church in existence.

Pontine Marshes (Lat. *Pometinæ Paludes*), the S. part of the Roman Campagna, extending 26 miles SE. to the sea, and 17 broad. Many attempts have been made to drain them.

Pontresina (*Pontrehzee'na*), a tourist centre in the Swiss canton of Grisons, in the Upper Engadine, on the road to the Bernina Pass. Pop. 483.

Pontypool, a market-town of Monmouthshire, on the Afon Llwydd, 9 miles N. by W. of Newport. Its 17th-century japanned wares have long been a thing of the past, and iron and tinplate works, brewing, and coal-mining now furnish employment. Pop. 6200.

Pontypridd, a town of Glamorgan, 12 miles NW. of Cardiff by rail, at the junction of the Rhondda and the Taff. It has a famous one-arched bridge (1750), iron and coal mines, iron and brass foundries, and chemical and other manufactures—to which is due its rapid growth from a mere village at the beginning of the 19th century. Pop. (1881) 12,317; (1901) 32,316.

Poole, a Dorset seaport, 5 miles W. of Bournemouth and 30 E. of Dorchester. It stands on the north side of Poole Harbour (7 by 4½ miles), an irregular inlet, formed by the projection of the 'isle' of Purbeck, almost dry at low-water, and having four tides a day. On Brownsea or Branksea Island, just within the narrow entrance to the harbour, is a castle dating from the time of Henry VIII. Poole itself has an old town-hall (1572), a guildhall (1761), a town-house (1822), shipping, yacht-building, and trade in potter's and pipe clay. The men of Poole were great fighters in days of old by land and sea, as buccaneers, smugglers, and Cromwellian soldiery. There was 'Arripay,' or Harry Page, who about 1400 kept the seas against France and Spain; and there was William Thompson, who, with a man and a boy, captured a French privateer in 1695. Till 1867 the borough returned two members, and then till 1885 one. Pop. (1851) 9255; (1901) 19,463. See works by Hutchins (1788), Sydenham (1839), and Brannon (3d ed. 1859).

Poona, or PUNA, a town of India, 119 miles by rail SE. of Bombay, is the military capital of the Deccan and seat of the government of the presidency during half the year. The city is embosomed in gardens, but its streets are mostly narrow or crooked, and the houses poor. Under the peshwas the city was the capital of the Mahratta princes; it was occupied and annexed by the British in 1818. Here have been built the Deccan College and the College of Science, the latter for training civil engineers, a normal school and normal college, a high school, &c. The Europeans live chiefly at the cantonments, north-west of the city. The natives manufacture cottons and silks, gold and silver jewellery, ivory and grass ornaments, and clay figures. Pop. (1851) 73,209; (1881) 129,751; (1901) 153,320.

Popayan (*Popi'an*), capital of the dep. of Cauca in Colombia, stands in a fertile plain, 5700 feet above sea-level, near the river Cauca. It has a ruined cathedral and a university. Pop. 10,000.

Poperinghe (Fr. pron. *Poperanɡ*), a town of Belgium, 4 miles from the French frontier and 8 W. of Ypres by rail. It manufactures lace, linens, and woollen cloths. Pop. 11,565.

Poplar, a parish of E. London.

Popocatepetl ('smoking mountain'), a conical volcano (17,784 feet) 40 miles SE. of the city of Mexico. No eruption has been recorded since 1540; it still smokes, however. In and around its crater (5165 feet in diameter, and nearly 1000 deep) much sulphur is obtained.

Port Adelaide. See ADELAIDE.

Portadown, a market-town of Armagh, Ireland, on the Bann, 6 miles S. of Lough Neagh and 25 by rail SW. of Belfast. It trades in farm-produce, and manufactures linen, cambric, and sheeting. Pop. (1871) 6735; (1901) 10,046.

Portage City, capital of Columbia county, Wisconsin, at the head of navigation on the Wisconsin River, and on the ship-canal to the Fox River, 177 miles NW. of Chicago. It has grain-elevators and ironworks, and manufactures leather, boots, clothing, &c. Pop. 5430.

Portage la Prairie, the market-town of a rich agricultural district in Manitoba, on the Assiniboine River, 56 miles by rail W. of Winnipeg. It has flour-mills and grain-elevators, a brewery, a biscuit-factory, a paper-mill, &c. Pop. 3900.

Portarlington, a market-town, partly in King's County, but chiefly in Queen's County, on the Barrow, 44 miles by rail SW. of Dublin. It was named from the Earl of Arlington, to whom Charles II. granted it. William III. planted in it a colony of French and Flemish Protestants. Until 1885 it returned an M.P. Pop. 1950.

Port Arthur, the terminus of the eastern division of the Canadian Pacific Railway, on Thunder Bay, an arm of Lake Superior, 993 miles by rail WNW. of Montreal. Pop. 5500.

Port Arthur, or LUSHUNKO, a naval station and arsenal on the extremity of the rocky Manchurian peninsula of Liao-tung, which stretches southward between the Gulf of Pe-chi-li and the Yellow Sea. The port, which had been fortified by German engineers, was taken by the Japanese from China in 1894, but in 1898 it, with Ta-lien-wan (Dalny), was 'leased' to Russia, enormously strengthened, and made the main terminus of the Siberian railway system. In the Russo-Japanese war (1904–5) it was again taken by the Japanese (2d Jan. 1905), after a memorable siege of eight months, the most severely contested on record. Its English name is derived from a surveying officer who was here in 1860.

Port-au-Prince (*Por-to-Pranɡss'*), the capital of Hayti (q.v.), is situated on the west coast, at the head of a bay of the same name. Pop. 70,000.

Port Bannatyne, or KAMESBURGH, a village of Bute on Kames Bay, 2½ miles NNW. of Rothesay by tram. Pop. 1170.

Port Breton, the SE. part of New Ireland (now German), the scene in 1879 of a disastrous experiment in colonising by French Legitimists.

Port Clarence, a Durham seaport, at the N. side of the mouth of the Tees, 9 miles S. of Hartlepool.

Port Darwin, one of the finest harbours in Australia, on the NW. coast of the Northern Territory of South Australia. Its entrance is 2 miles wide. Palmerston, on the E. shore, 1973

miles from Adelaide, is the land terminus of the overland telegraph, and of the cable to Java, and the starting-point of a railway (1891) to the gold-fields 150 miles inland. Pop. 2600.

Port D'Urban. See DURBAN.

Port Durnford, a harbour in British East Africa, on an indentation of the coast a little more than 1° S. of the equator.

Port Elizabeth, a seaport of Cape Colony, on the western shore of Algoa Bay, 85 miles by rail SW. of Graham's Town and 350 S. of Kimberley. Founded in 1820, it is the principal seaport of the east part of Cape Colony, and also of the Orange River Free State. Its public buildings are the town-house, the provincial hospital, churches, the Grey Institute, a college, a library (20,000 volumes), a museum, &c. Two piers were constructed in 1881; and an aqueduct, 28 miles long (1878), brings good water. The exports include wool, ostrich-feathers, Angora goats' hair, and diamonds. Pop. (1875) 13,649; (1904) 32,921.

Port Erin, a village in the Isle of Man, 5½ miles W. of Castletown, with a breakwater, steamboat pier, and marine biological station (1892).

Portessie, a Banffshire fishing-village, 1¼ mile ENE. of Buckie. Pop. 931.

Port Essington, an inlet in the Coburg Peninsula in N. Australia, forming a fine harbour, where in 1831–50 there was a penal settlement.

Port Famine, the name given by Cavendish in 1587 to a spot on the north coast of the Straits of Magellan, a Chilian penal colony in 1843–53.

Port-Glasgow, a town of Renfrewshire, on the southern shore of the Firth of Clyde, 3 miles ESE. of Greenock and 20 WNW. of Glasgow. It was founded in 1668 by the magistrates of Glasgow as a harbour for their city, the deepening of the Clyde (q.v.) not having yet been thought of. In 1710 it was constituted the head custom-house on the Clyde, and for a while took the lead of Greenock; in 1775 it was incorporated as a municipality; and by the Reform Bill of 1832 it unites with Kilmarnock, &c. to return one member. Built on low alluvial ground, and backed by hills 700 feet high, it has a Doric town-house (1815), a public hall (1873), ruined Newark Castle (1597), a wet-dock of 12 acres (formed since 1834), a large graving-dock (1874), extensive timber-ponds, shipbuilding-yards, iron and brass foundries, &c. Pop. (1841) 6938; (1881) 10,802; (1901) 16,840.

Portglenone, a Londonderry village, on the Bann, 9 miles W. of Ballymena.

Port Gordon, a Banffshire fishing-village, 2½ miles SW. of Buckie. Pop. 1204.

Port Hamilton, a spacious, well-sheltered harbour, formed by three islands of the Nan-how group, 30 miles S. of Corea, and 45 NE. of Quelpart. It was discovered and named by Belcher in 1845, and held by Britain in 1885–86.

Porthcawl, a Glamorganshire seaport and watering-place, 6¼ miles SW. of Bridgend.

Porthcwrnow (*Porthcur'no*), a Cornish cove, 8 miles SW. of Penzance.

Porthleven, a Cornish seaport, 2½ miles WSW. of Hilston.

Port Hope, a port of entry of Ontario, on the north shore of Lake Ontario, 63 miles by rail E. of Toronto. Pop. 4200.

Port Huron, capital of St Clair county, Michigan, is on the St Clair River, where it issues from Lake Huron, and at the mouth of the Black River, 59 miles by rail NNE. of Detroit. The rivers are crossed by four iron bridges. The city has a fine custom-house (1877), shipyards and dry-docks, sawmills, grain-elevators, and machine and railroad shops. A railway tunnel here passes under the St Clair (q.v.) River; there is also a steamferry to Sarnia. Pop. 21,000.

Portici (*Por'tichee*), a town of Italy, on the slope of Vesuvius, 5 miles by rail SE. of Naples. The royal palace (1738) is now an agricultural college. Pop. 14,272.

Port Isaac, a Cornish seaport, 6½ miles NE. of Padstow.

Portisham, a Dorset parish, 6 miles SW. of Dorchester. Here is a tower to Nelson's Hardy, who was a native.

Portishead, a Somerset watering-place, on the Severn estuary, 10 miles W. of Bristol. Pop. of urban district, 2550.

Port Jackson. See SYDNEY.

Port Jervis, a town of New York, on the Delaware River, 88 miles by rail NW. of New York City. Pop. 9387.

Portland, (1) the largest city and chief seaport of Maine, and capital of Cumberland county, on Casco Bay, 108 miles by rail NE. of Boston. It is situated on a narrow peninsula, 2½ sq. m. in area, with broad shaded streets, a court and custom-house, post-office, city hall, observatory, and Baxter and Mechanics' Halls. There are rolling-mills; and locomotives, machinery, boilers, stoves, carriages, and shoes are manufactured, and sugar and petroleum refined. The harbour, defended by three forts, is large, deep, and well sheltered; there are wharves, elevators, and drydocks, and steamers ply direct to Liverpool in winter. The place was settled by an English colony in 1632. In 1866 a fire destroyed $10,000,000 worth of property. Portland is the seat of Episcopal and Roman Catholic bishops, and was the birthplace of Longfellow. Pop. (1870) 31,413; (1900) 50,145.—(2) PORTLAND, the metropolis of Oregon, and capital of Multnomah county, is on the Willamette River, 12 miles from where it joins the Columbia, and 772 by rail N. of San Francisco. Large ocean-going ships come up to this point. A handsome city, well built, with fine, shaded streets, it has a court-house, a U.S. government building, and an asylum. There are iron-foundries, machine-shops, sawmills, canneries, breweries, and manufactures of furniture, flour, shoes, &c. Portland was founded in 1844, and became a city in 1851. Pop. (1870) 8293; (1880) 17,577; (1900) 90,426.

Portland, ISLE OF, a rocky peninsula of Dorsetshire, connected with the mainland by the Chesil Bank (q.v), and 4 miles S. of Weymouth by a branch-line (1865). It is 4½ miles long, 1½ wide, 9 in circumference, and 2890 acres in area. From its highest point, the Verne (495 feet), it shelves with a gradual and almost unbroken slope to Portland Bill (20 feet), the southern extremity, where stand two lighthouses (1716–89), showing fixed lights 210 and 136 feet above sea-level, and between which and the Shambles, a dangerous reef, 3 miles SE., a surf, called the Portland Race, is raised by the rushing of the impetuous tides. The cliffs have in places been worn into fantastic caverns; and ancient raised beaches are well marked near the Bill. Portland is one solid mass of oolitic limestone, which has been largely quarried for building purposes since the 17th century, when Inigo Jones employed it for Whitehall and Sir Christopher Wren for St Paul's. Goldsmiths' Hall, the Reform Club, and Pall Mall

generally are also built of it; and the yearly export ranges between 50,000 and 70,000 tons. A magnificent harbour of refuge has been formed by the construction of a breakwater (1849–72), stretching nearly due north for more than 2 miles from the NE. point of the 'Isle;' most formidable fortifications have moreover been constructed, the Verne in especial being crowned by Fort Victoria. New defence works were constructed in 1894–1904, as well as a new breakwater, Portland Roads being thus almost entirely surrounded. Other features of the 'Isle' are its great convict-prison, dating from 1848, and holding upwards of 1500 convicts; Portland Castle (1520), built by Henry VIII., and held for Charles I. till 1646; Bow and Arrow Castle, ascribed to Rufus; and Pennsylvania Castle (1800), built by Governor Penn, the great Quaker's grandson. The inhabitants of the 'Isle' long remained a peculiar people. The 'Isle' itself is remarkable for its copious and excellent spring-water and for the mutton of its small breed of black-faced sheep. Pop. (1851) 5195; (1881) 10,061; (1901) 15,200. See Damon's *Geology of Weymouth and Portland* (1860), and an article in the *Cornhill* (1882).

Portlaw, a market-town on the Clodiagh, 11 miles W. of Waterford. Pop. 1100.

Port Louis, the capital and principal port of Mauritius, is situated on an excellent harbour on the north-west coast, and is enclosed by a ring of lofty hills. It has graving-docks, is defended by forts (1887–91), is a coaling station of the British navy, and has barracks and military storehouses. The city contains the government house, a Protestant and a Roman Catholic cathedral, a royal college, &c. It suffered terribly from the great hurricane of May 1892. Pop. 53,200.

Portmad'oc, a Carnarvonshire seaport, on Tremadoc Bay, 11 miles E. of Pwllheli. It ships slate and copper.

Port Mahon (*Ma-hoan'*; anc. *Portus Magonis*), capital of Minorca (q.v.), is beautifully situated on a deep, narrow inlet in the SE. of the island, its excellent harbour being protected by fortifications. Stone, shoes, cottons, cattle, and honey are exported. Pop. 17,397. The town was held by the English in 1708–56 and 1762–82.

Portmoak', a Kinross-shire parish, on Lochleven. The poet Michael Bruce was a native.

Port Moody. See Vancouver.

Port Natal. See Durban.

Porto Alegre (*Pŏrto Alay'greh*), capital of the Brazilian state of Rio Grande do Sul, stands at the NW. end of the Lagŏa dos Patos. Founded in 1742, it has a cathedral, an arsenal, and manufactures of pianos, furniture, brandy, and beer. Pop. 85,000 (3000 Germans).

Portobello, a Scottish watering-place, on the southern shore of the Firth of Forth, 3 miles E. of Edinburgh. Its first house (1742) was built by one of Admiral Vernon's seamen in the expedition against Portobelo (whence the name); but it dates, like its eastern extension Joppa, almost wholly from a time later than 1804. An esplanade, 1 mile long, skirts the sands; there are a promenade pier of 1250 feet (1871), municipal buildings (1878), and manufactures of pottery, bricks, bottles, &c. Incorporated municipally with Edinburgh in 1896 (pop. 8800), it unites with Leith and Musselburgh to return an M.P.

Portobelo, a decayed seaport of Colombia, on the northern shore of the Isthmus of Panamá, almost due north of the town of Panamá. It has an excellent harbour, discovered by Columbus in 1502, but is very unhealthy, and has fallen into decay since 1739, when it was stormed by Admiral Vernon. Drake died off here. Pop. 1300.

Porto Ferrajo. See Elba.

Port of Spain. See Trinidad.

Porto-Maurizio (*Mow-reetz'i-o*), a town of north Italy, stands embowered in olive-groves on the Gulf of Genoa, 69 miles by rail SW. of Genoa, and 41 E. by N. of Nice. Pop. 7150.

Porto Novo, (1) a small port on the Coromandel coast of India, 145 miles S. of Madras by rail. Here, on 1st July 1781, Sir Eyre Coote, with 8000 men, defeated Hyder Ali and 60,000. Pop. 14,000.—(2) A trading station in French Guinea.

Porto Rico (*Ree'ko*), or Puerto Rico, a fertile West India island, 75 miles E. of Hayti or St Domingo; with an area of 3530 sq. m., it measures 110 miles E. to W. by 40. It is traversed from E. to W. by ranges of mountains (El Yunque, 3670 feet). From the base of the mountains rich alluvial well-watered tracts extend to the sea; the higher parts are covered with forests. The principal crops are sugar, coffee, and rice (the food of the people); tobacco, maize, yams, bananas, plantains, and tropical fruits are also grown. Cattle and horses are fed on the low-land pastures. The exports are sugar, coffee, molasses, tobacco, and cattle. Pop. (1800) 155,400; (1864) 615,844; (1900) 953,500. The towns are St John's (q.v.), the capital, and Ponce (28,000). Columbus discovered Porto Rico in 1493, and Ponce de Leon founded a settlement in 1510. The island was ceded by Spain to the United States after the war of 1898, and in 1900 civil government was conferred.

Portpatrick, a decayed fishing-village in Wigtownshire, 7¾ miles SW. of Stranraer by rail, and 21½ NE. of Donaghadee in Ireland. It was long the Gretna Green for Ireland, and a mail-packet station from 1662 till 1849. A pier was built in 1774, and a great artificial harbour was commenced in 1821, but ultimately abandoned, the *Orion* steamship having been lost within the port in 1850, when seventy souls perished. The lighthouse was removed in 1869, and the harbour-works fell quickly into ruin, after having cost £500,000. Pop. (1861) 1206; (1901) 451.

Port Phillip, the gate of Melbourne, discovered in 1802 by Murray, and named after Captain Phillip, first governor of New South Wales.

Portreath, a Cornish seaport, 4 miles NW. of Redruth.

Portree, a seaport village of Skye, on Portree Bay, 32 miles WSW. of Strome Ferry, and 120 NNW. of Oban. It got its name *Port-an-righ* ('king's harbour') from a visit of James V. in 1540. Pop. 870.

Port Royal. See Jamaica.

Portrush', a watering-place with excellent golfing links in County Antrim, 6½ miles by rail N. of Coleraine, and 7 W. by S. of the Giants' Causeway, with which it is connected by an electric tramway (1883). Pop. 1955.

Port Said (*Sah-eed'*), a town of Egypt, on the west side of the Suez Canal, on a desolate strip of land between Lake Menzaleh and the Mediterranean. The place, which owes its origin to the Suez Canal (q.v.), is named after Said Pasha, and is mainly a coaling station. Pop. 46,560.

Portsea Island, a small island of Hampshire, 4 miles long, separated from the mainland by a narrow channel crossed by bridges, and containing the towns of Portsea and Portsmouth.

Port Simpson, a British Columbian port on the Portland Channel which separates Canada and Alaska, selected as terminus for the Northern Canadian Transoceanic Railway. Pop. 1000.

Portsmouth (*Ports'muth*), the chief naval arsenal of Great Britain, and an important seaport, market-town, and municipal, parliamentary, and county borough, in the south of Hampshire, stands on the south-west shore of Portsea Island (q.v.), at the entrance to Portsmouth Harbour, and opposite the town of Gosport (q.v.), with which it communicates by means of a steam-bridge. It is 74 miles SW. of London, 44 W. of Brighton, and 23 SE. of Southampton. Besides the parish of Portsmouth, the limits of the municipal and parliamentary borough, which are co-extensive, include also the parish and town of Portsea, and the out-wards Landport and Southsea, and comprise the whole of Portsea Island, with the exception of a small portion in the north-east corner. Pop. of the borough (1821) 69,479; (1851) 72,096; (1881) 127,989; (1901) 188,133. Portsmouth is for the most part a mean-looking, dirty town, but has the most complete fortifications in Britain. These comprise, on the landward side, the outer line of the Portsdown forts and the Hilsea lines; to seaward, the Spithead (q.v.) forts. A portion of the imposing bastioned ramparts, which encircled both Portsmouth and Gosport, have since 1872 been removed as useless. Southsea, which is situated outside the walls skirting Southsea Common, is now a fashionable watering-place. Many improvements have been carried out in Portsmouth, including improved drainage, and the opening of the Victoria Park in 1878; a new town-hall, built at a cost of £140,000, was opened by the Prince of Wales in 1890. The church of St Thomas, whose chancel and transept date from the close of the 12th century, the nave and tower from 1698, contains a ghastly cenotaph in memory of the murdered Duke of Buckingham. The Garrison Chapel, Early English in style, and finely restored by Street in 1867, is a fragment of the hospital of St Nicholas, founded in 1212. In it Charles II. married Catharine of Braganza; and in front of it is buried the brave Sir Charles James Napier. The dockyard, in the district of Portsea, was till 1872 only 116 acres in extent; but vast works, carried out at a cost of £2,500,000, have increased the area to 293 acres. Noteworthy features are the mast and rope houses, hemp-stores, rigging-stores, sail-loft, the twelve dry-docks, the building-slips, the wood-mills, with the block-making machines, the smithy, with its Nasmyth's hammer, &c. Portsmouth Harbour, about 400 yards wide at its entrance, expands into a spacious basin, extending 4 miles inland, and having a breadth of 3 miles along its northern shore. Large war-vessels can enter and lie at anchor at all times of the tide, there being 4 fathoms of water in the channel at low-water. The outward entrance is defended by Forts Monckton and Gilkicker, and Southsea Castle. The harbour is situated in the middle of the channel, close to the magnificent anchorage of Spithead, where 1000 ships of the line may ride without inconvenience, and is under shelter of the Isle of Wight, and opposite the French arsenal of Cherbourg. The importance of this port dates only from the reign of Henry VIII. Its defences were commenced by Edward IV., and strengthened by Elizabeth and William III. Here, in a house that still remains, the Duke of Buckingham was assassinated by Felton. In 1782 the *Royal George* went down at Spithead, and nearly 1000 lives were lost. Charles Dickens was born at 387 Mile End Terrace, Commercial Road, Landport, Portsea; and other worthies have been Walter Besant, the younger Brunel, Jonas Hanway, Sir Frederick Madden, George Meredith, and John Pounds. See works by L. Allen (1817), H. Slight (1828), H. P. Wright (1873), W. H. Saunders (1880), and Murrell and East (1884).

Portsmouth, (1) the metropolis and only seaport of New Hampshire, on the Piscataqua's south bank, 3 miles from the Atlantic, and 57 by rail NNE. of Boston. Built on a beautiful peninsula, overlooking a capacious and deep harbour, it is a handsome old town, many of its streets lined with shade-trees, and is a favourite summer-resort. It has a custom-house; the manufactures include cotton, hosiery, shoes, iron-casting, and shipbuilding. At Kittery, on an island opposite, is a U.S. navy-yard. Here in 1905 peace was concluded between Russia and Japan. Pop. 10,640.—(2) Capital of Scioto county, Ohio, stands among hills in an iron region, on the Ohio River, at the mouth of the Scioto, and at the south terminus of the Ohio Canal, 106 miles by rail ESE. of Cincinnati. Pop. 17,870.—(3) A city and port of Virginia, on the Elizabeth River, opposite Norfolk (q.v.). Gosport, with its navy-yard, &c., is a suburb. Portsmouth contains a dry-dock and a naval hospital. Pop. 17,450.

Portsoy', a Banffshire seaport, 8½ miles W. of Banff, a burgh of barony since 1550. Pop. 1878.

Port St Mary, a coast-village in the Isle of Man, 4¾ miles W. by S. of Castletown.

Port Sunlight, a beautiful model village of Cheshire, 3 miles SE. from Birkenhead, founded in 1888 by the proprietors of a neighbouring work for their workpeople. It has spacious streets, with houses in Old English style, with a complete system of religious, educational, and social institutions. Pop. (1905) 3500.

Port Talbot. See ABERAVON.

Port Townsend, capital of Jefferson county, Washington, is on Puget Sound, near Juan de Fuca Strait, 47 miles N. of Seattle. It has a good harbour. Pop. 4000.

Por'tugal (named from *Portus Cale*, the Roman name of Oporto, q.v.), a kingdom of Europe, lying between Spain and the Atlantic, on the west side of the Iberian Peninsula, stretches 350 miles between 36° 59′ and 42° 8′ N. lat., and varies in width from 70 to 140 miles between 6° 10′ and 9° 31′ W. long. The area is 36,038 sq. m.—a little larger than Ireland. In 1851 the population numbered 3,487,000; in 1874, 4,160,315; and in 1900 it was 5,423,132. Some 20,000 persons emigrate every year, chiefly to Brazil. Lisbon and Oporto (356,000 and 167,955 respectively) are the only towns with above 25,000 inhabitants. The six home provinces are Minho, Traz os Montes, Beira, Estremadura, Alemtejo, and Algarve; to which are to be added the Azores and Madeira, always reckoned not as colonies but as parts of the mother-country.

The coast is mostly low and flat, except immediately north and south of the mouth of the Tagus, and at Cape St Vincent. The two northern provinces are diversified by spurs (5000 feet) of the mountains of Spanish Galicia. The Sierra da Estrella (6540 feet) is a westward continuation of the Spanish Sierra Guadarrama system. The Sierra Morena is continued westwards in southern Portugal. So the principal rivers of the country —the Guadiana in the south, the Tagus in the centre, and the Douro and Minho in the north —are simply the lower courses of Spanish rivers;

but the Mondego has its sources in the country. Minerals are little worked from want of fuel and cheap means of transit. Salt is prepared; copper, iron, lead, manganese, antimony, gypsum, lime, and marble are exported. The vicinity to the ocean tempers the climate, and exempts it from the dry heat of Spain. The inequalities of the surface produce, however, diversities of climate; for, while snow falls abundantly on the mountains in the northern provinces, it is never seen in the southern lowlands. Rain falls abundantly throughout the year. Malaria and fever prevail in the low flat lands and near the salt-marshes. The soil is generally rich, except in the mountainous parts; but agriculture is everywhere in a backward state, little more than half the area of the country being put to profitable use. Maize, wheat, rye, barley, and rice are grown, but not in sufficient quantity for the wants of the people; also potatoes, vegetables (especially onions), flax, fruits (oranges, lemons, chestnuts, almonds, &c.). But the vine and the olive maintain the most prosperous industries; the wine annually produced (especially port, named from Oporto) amounts to 88,000,000 gallons. Silkworms and bees are kept, and fish (tunnies and sardines) are abundant. Some 50,000 persons weave wool, and the others cut cork, manufacture cotton, linen, silk, leather, glass and porcelain, paper, and gold and silver filigree, &c. The mercantile marine comprises only 280 ships of little over 86,000 tons; most of the commerce is carried in British bottoms. The exports, principally wine (more than half of the whole, and sent mainly to Britain, also to Brazil and France), copper, salt, cork, fish, oxen, fruits, vegetables, and wool, average 6 millions sterling in value annually. The value of all the exports sent to Great Britain every year ranges from 2½ to 4 millions sterling. From Great Britain Portugal imports chiefly cottons (½ to ¾ million sterling), woollens, coal, metals, machinery, and butter, to the annual value of ½ to ¾ million sterling. Her total imports, which also embrace bullion, flour and wheat, glass, live-stock, silk, timber, linen, &c., have reached the value of 12 millions. The revenue, from £12,000 to £13,000, is usually exceeded by the expenditure. The debt has reached near £170,000,000, and the finances are in an utterly deranged condition. There are over 1490 miles of railway. The army is about 35,000 men—on a war footing, 150,000. The navy has five armoured cruisers and over twenty third-class cruisers, besides torpedo-boats, &c.

The colonies of Portugal are as follows:

	Area in sq. m.	Pop.
AFRICA—		
Cape Verde Islands	1,480	147,424
Guinea	12,000	820,000
St Thomas and Prince's Island	360	42,103
Angola, Ambriz, Benguela, Mossamedes, and Congo	484,800	4,119,000
East Africa	310,000	3,120,000
ASIA—		
Goa (in India)	1,080	561,400
Diu, Daman, &c.	168	77,454
Timor, &c.	7,458	300,000
Macao (in China)	4	78,627
Total	817,350	9,266,008

The state religion is that of the Church of Rome. There are three ecclesiastical provinces presided over by the Cardinal Patriarch of Lisbon and two other archbishops, and fourteen bishops. The monasteries were dissolved in 1834. Compulsory education was enacted in 1844, but is very feebly enforced, and Portugal is far behind in public instruction. The one university at Coimbra (1300), one of the oldest in Europe, has five faculties, 75 professors, and about 1060 students. Portugal is a constitutional monarchy, the crown being hereditary alike in the female and the male line. The *Cortes* consists of the House of Peers and the House of Deputies.

The Portuguese are a mixed race—originally Iberian or Basque, with later Celtic admixture. Jewish and Arabic blood are strongly present in the centre, and African in the south. The Portuguese differ widely from their Spanish brethren, whom they regard with inveterate hatred and jealousy, mainly on account of their attempts to subvert the independence of Portugal. Like the rest of Iberia, Portugal (the southern part of which was known to the Romans as Lusitania, often taken as a poetical name for the whole country) was thoroughly Romanised after the conquest of the Carthaginians by the Romans in 138 B.C. Then the peninsula was overrun by the Visigoths, and next by the Saracens (see SPAIN). Northern Portugal fell under the influence of Castile; but under Alfonso I. (1143) Portugal became an independent kingdom, though the Saracens were not conquered in the south till 1250. Wars with Castile were frequent. Under John (1385–1433) began a close alliance between Portugal and England, and the Portuguese king John married John of Gaunt's daughter. With their son, Prince Henry the Navigator (died 1460), began the most brilliant era of over-sea enterprise and conquest, including the acquisition of Madeira, the Azores, and the doubling of the Cape of Good Hope (1486), the reaching of India by sea and settlements there (1497), and the discovery and occupation of Brazil (1500). In the 16th century Portugal was one of the most powerful monarchies of Europe, and most prosperous of commercial peoples; but its decline was swift, and Philip II. annexed Portugal to Spain for sixty years. English assistance secured the independence of the kingdom in 1640 (recognised by Spain in 1668); but the glory had departed. Portugal shared in the troubles of the French occupation and the Peninsular war; after Napoleon's defeat, the old family, which had taken refuge in Brazil, was restored; but the country was rent by intrigue, dissension, and civil war. The rush of the European powers to occupy central and southern Africa stirred Portugal to tenaciously cling to her once great colonial empire in Africa; but the march of events has given to Britain, Germany, France, and the Congo Free State, much that Portugal once claimed as hers.

See Crawfurd, *Portugal, Old and New* (1880); Salisbury, *Portugal and its People* (1893); Murray's *Handbook;* and the histories by M'Murdo (1888) and Morse Stephens (1890).

Portugalete (*Por-too-ga-lay'tay*), a Spanish seaport in the province of Vizcaya, 8 miles NW. of Bilbao, with a remarkable swing-ferry. Pop. 3500.

Portum'na, a Galway market-town, on the Shannon, 12 miles W. of Parsonstown. Pop. 960.

Poscharevatz. See PASSAROWITZ.

Posen (Polish *Poznan*), a Prussian province, bounded N. by West Prussia, E. by Poland, S. by Silesia, and W. by Brandenburg. Area, 11,178 sq. m. The navigable Warthe traverses it from E. to W.; the Vistula touches it on the NE. The province belongs to the great plain of north Germany. Pop. (1900) 1,887,275, of whom 1,280,000 were Catholics, and 35,000 Jews. The great majority are of Polish stock, and speak Polish and its dialects. The chief

towns are Posen (the capital), Gnesen, Bromberg, Lissa, and Rawitsch. Posen formed part of Poland till 1772, when, at the first partition, the districts north of the Netze were given to Prussia; the rest was added in 1793. In 1807 Posen was included in the duchy of Warsaw; but in 1815 it was re-assigned to Prussia.

Posen, the capital, and a fortress of the first rank (1827–53), is situated on the Warthe, 158 miles by rail E. of Berlin. It became the seat of a Christian bishop in 968, and it was the capital of the early Polish dukes. In the 16th century it was an important trading mart, but by 1600 had begun to decline. The fortifications have been strengthened by detached forts built in 1876–84. The cathedral, a Gothic pile dating from 1775, has attached to it the 'Golden Chapel' of Count Raczynski. Other buildings are the town-house (1508), the Raczynski Palace, the Dzialynski Palace, the archiepiscopal palace, and a provincial museum of antiquities. The manufactures are artificial manures, agricultural implements, furniture, carriages, &c.; and there are breweries, distilleries, and flour-mills. Pop. (1875) 60,998; (1900) 117,033.

Posidonia. See Pæstum.

Posilip'o (from a villa here called *Pausilypon*, 'Sans-souci,' of the Emperor Augustus), a mountain on the north-west of Naples, close by the city. It is remarkable for the tunnel known as the Grotto of Posilipo, through which the road from Naples to Pozzuoli (anc. *Puteoli*) passes. The grotto is 20 to 80 feet high, 20 to 30 feet wide, and 755 yards long. It is traditionally ascribed to the reign of Augustus, but was long believed by the vulgar to have been made by the poet Virgil, whom they regarded as a great magician. Above the eastern outlet of the grotto is the so-called 'Tomb of Virgil;' at the base of the hill anciently stood the poet's villa. Two other tunnels penetrate the hill, one north of the grotto, made for the tramway, and another constructed at the command of Agrippa in 37 B.C.

Possil Park, a northern suburb of Glasgow.

Potchefstroom (*Pot'chefstroam*), a town of the Transvaal, 105 miles SW. of Pretoria. Pop. 4000.

Potenza (*Potent'za*; anc. *Potentia*), a cathedral city of South Italy, in a valley of the Apennines, 103 miles E. by S. of Naples. Pop. 17,978.

Poti (*Po'tee*), a seaport of Russian Caucasus, at the Rion's mouth, on the east shore of the Black Sea, 200 miles by rail W. of Tiflis. It ships maize, manganese, &c. Poti was seized by Russia in 1828. Pop. 7112.

Potidæ'a, a Corinthian colony founded on the westernmost isthmus of the Chalcidice peninsula in ancient Macedonia.

Poto'mac, a river of the United States, formed by two branches which rise in the Alleghany Mountains in West Virginia, and unite 15 miles SE. of Cumberland, Maryland. Thence the river flows 400 miles SE., and falls into Chesapeake Bay, after forming an estuary nearly 100 miles long, and from 2½ to 7 wide. The largest ships can ascend to Washington, and the tide reaches Georgetown. A few miles above Washington the river forms a cataract 35 feet high; and between there and Westport it falls more than 1000 feet. The scenery here is wild and beautiful, especially where it breaks through the Blue Ridge at Harper's Ferry. The principal affluents are the Shenandoah, Cacapon, and Monacacy.

Potosi (*Pot-o-zee'*; usually *Poto'zee*), capital of a Bolivian dep., and a famous, though decayed, mining-town, stands in a dreary, cold, and barren district, nearly 50 miles SW. of Chuquisaca. It is built on the side of the Cerro de Potosi (15,381 feet), at an elevation of 13,000 feet above the sea, and is thus one of the loftiest inhabited places on the globe. The public buildings include a handsome cathedral and a mint which employs 200 hands. The industry is limited to silver-mining. The Cerro is still rich in this ore, although the production has greatly fallen off. Potosi was founded in 1545, and in 1611 had 160,000 inhabitants. Its population does not now exceed 16,000.

Potsdam, chief town of the Prussian province of Brandenburg, and second residence town of the monarch, is situated on an island formed by the lake-like river Havel, a canal, and other waterways, 18 miles by rail SW. of Berlin. It is a handsome city, with broad streets, public gardens, and fine squares. The royal palace (1667–1701), in the park of which are statues of Frederick-William I., Alexander I. of Russia, and Generals Blücher, Gneisenau, Kleist, and Tauenzien; the town-house, a copy of that at Amsterdam; and the military orphanage are the principal public buildings. The Garrison Church, with a steeple 290 feet high, contains the tombs of Frederick-William I. and Frederick II.; and the Friedenskirche the tombs of Frederick-William IV. and the Emperor Frederick III. The Brandenburg Gate is a copy of Trajan's Arch at Rome. Near the town are more than half-a-dozen royal palaces, as Sans-Souci (1747), the favourite residence of Frederick the Great, surrounded by a splendid park and gardens, containing Rauch's monument to Queen Louisa; the palace of Friedrichskron, formerly the New Palace (1763–70); Charlottenhof (1826); the Marble Palace; and Babelsberg. Potsdam has an observatory, and a cadet and other military schools. Its manufactories produce sugar, chemicals, harness, silk, waxcloth, beer, &c. Flower-gardening, especially of violets, is a busy industry. Alexander von Humboldt was a native. Pop. (1880) 48,447; (1905) 61,500.

Potteries, The, a district in North Staffordshire, 9 miles long by 3 broad, the centre of the earthenware manufacture in England, includes Hanley, Burslem, Stoke-upon-Trent, Newcastle-under-Lyme, Tunstall, &c.

Potton, a market-town of Bedfordshire, 11 miles E. of Bedford. Pop. of parish, 1907.

Pottstown, a borough of Pennsylvania, on the Schuylkill River, at the mouth of Manatawny Creek, 40 miles NW. of Philadelphia. It contains iron-foundries, blast-furnaces, rolling-mills, car-works, &c. Pop. 15,000.

Pottsville, capital of Schuylkill county, Pennsylvania, is built on the side of steep hills, on the Schuylkill River, at the entrance of Norwegian Creek, 93 miles NW. of Philadelphia. In the midst of a rich coal and iron region it has iron-furnaces, foundries, rolling-mills, machine-shops, sawmills, &c. Pop. 16,500.

Poughkeepsie (*Po-kip'si*), capital of Dutchess county, New York, on the east bank of the Hudson River, 73 miles N. of New York City, is finely situated on a tableland, 200 feet above the river. The Hudson is here crossed by a steam-ferry, and spanned by a railroad bridge (1888) of masonry, steel, and iron, 3094 feet long, or, including the approaching viaducts, nearly 7100 feet. Poughkeepsie is the largest town between New York and Albany; its manufactures include machinery, iron-ware, silk, boots and shoes, clothing, beer, &c. Two miles N. is the

state hospital for the insane, which cost $750,000. Vassar College (1865), for the higher education of women, is just beyond the eastern city limit. Poughkeepsie was settled by the Dutch about 1680; in 1778 it was the state capital. Pop. (1870) 20,080; (1900) 24,029.

Poulton le Fylde, a Lancashire town, near the Wyre, 5 miles S. of Fleetwood. Pop. 2230.

Poverty Bay. See GISBORNE.

Powerscourt, a Wicklow parish, 4½ miles SW. of Bray, on the Dargle, in whose glen is a waterfall of 300 feet.

Powis Castle. See WELSHPOOL.

Pozsony. See PRESBURG.

Pozzuoli (*Potz-oo-ol'ee*), a city of Italy, on the Bay of Naples, 7 miles W. of Naples by tramway, is interesting from its classic memorials—the cathedral (once the Temple of Augustus), the Serapeum, and the amphitheatre in which Nero fought as a gladiator, which could seat 30,000 spectators. There are also remains of temples to Diana and Neptune, and of the ancient harbour. Behind the town is the Solfatara, a half-extinct volcano, from which issue currents of hot sulphureous gases, and springs of saline water. In the neighbourhood are Avernus (q.v.); the royal hunting-lodge Astoni; the Lucrine lake, celebrated for its oysters; the ruins of Baiæ and Cumæ; and the Lake of Agnano, with the famous Grotta del Cane. A little west is a branch of the famous Armstrong works at Elswick, near Newcastle, established here (1888–90) with the support of the Italian government. Pop. 21,967. The ancient *Puteoli* was made a Roman colony in 194 B.C., and subsequently became virtually the port of Rome, and the first emporium of commerce in Italy. It was destroyed by Alaric, Genseric, and Totila, and, though rebuilt by Byzantine Greeks, it was sacked by Saracens (10th century) and Turks (1550), and ruined by earthquakes (1198 and 1538). St Paul landed there.

Prænesté. See PALESTRINA.

Prague (Ger. *Prag;* Czech *Praha*), the capital of Bohemia, is situated at the base and on the slope of the hills which skirt both sides of the isleted Moldau, 217 miles by rail NNW. of Vienna and 118 SSE. of Dresden. It offers a highly picturesque appearance from the beauty of its site, and the numerous lofty towers (more than seventy in number) which rise above the palaces, public buildings, and bridges of the city. The fortifications have been demolished since 1866. The royal Burg, on the Hradschin (240 feet), the ancient residence of the Dukes of Bohemia, dates mainly now from the 16th and 17th centuries, and has 440 rooms. The neighbouring cathedral of St Vitus (1344) is still unfinished, though building was resumed in 1867. Here are the splendid royal mausoleum (1589) and the shrine (1736) of St John of Nepomuk, containing 1½ ton of silver. Of forty-seven other Catholic churches the chief are the domed Jesuit church of St Nicolas, and the Teyn church (1407; the old Hussite church), with Tycho Brahé's grave, and its marble statues of the Slavonic martyrs, Cyril and Methodius. Of five bridges and two railway viaducts the most striking is the Karlsbrücke (1357–1503, temporarily damaged by flood in 1890), 543 yards long, with gate-towers at either end, and statues of John of Nepomuk and other saints. Other noteworthy objects are the townhall (1381–1884), the Pulverturm (1475), the new Czech Theatre (1883), the old Jewish graveyard, the Theresa Institution for Ladies, the vast Czerni Palace (now used as barracks), the Picturegallery, and the Premonstratensian monastery of Strahow. Prague has numerous public gardens and walks, with several noble parks close by. The suburb of Karolinenthal, which is traversed by the great viaduct of the railway, and is of modern growth, has barracks, and manufacturing establishments; farther north is the great botanical garden. The university, founded in 1348, had 10,000 students at the beginning of the 15th century; but subsequently it had a long period of decay. It received a new constitution in 1881, having now two co-ordinate sides or sections, one German and one Czech, with respectively 150 and 210 teachers, and 1350 and 3200 students. It possesses a library of 195,000 volumes and 3800 manuscripts, a fine observatory, a botanical garden, &c. The manufactures include machinery, chemicals, leather, cotton, linen, gloves, beer, spirits, &c. Pop. with suburbs (1880) 293,822; (1900) 385,240; of the town proper (1900) 201,589, of whom 87 per cent. were Czechs, 2 per cent. Protestants, and 7 per cent. Jews.

Prah, a river running between Ashanti and the Gold Coast, and then through the latter to the sea, 30 miles W. of Cape Coast Castle.

Praia Grande. See RIO DE JANEIRO.

Prato (*Prah'to*), a walled town of Italy, 11 miles NW. of Florence. It has a cathedral with frescoes by Filippo Lippi. Pop. 15,510.

Prawle Point, the S. extremity of Devon.

Prenzlau (*Prentz'low*), an agricultural town of Prussia, at the N. end of Lake Ucker, 67 miles by rail NNE. of Berlin. Pop. 20,230.

Presburg (Ger. *Pressburg;* Hung. *Pozsony*), a town of Hungary, on the Danube's left bank, 40 miles by rail E. by S. of Vienna. It is backed by the spurs of the Little Carpathians, and is a pleasant town. Its principal buildings are the Gothic cathedral (13th c.), in which the kings of Hungary used to be crowned; the church of the Franciscans (1290–97); the town-house (1288); and the parliament house, in which the Hungarian representatives met until 1848. The royal castle (1645) was reduced to ruin by fire in 1811. The manufactures are beer, dynamite, wire, starch, spirits, confectionery, biscuits, &c. Pop. (1881) 48,326; (1900) 61,537. Presburg grew to importance during the 11th and 12th centuries. From 1541 (when the Turks seized Buda) down to 1784 it was the capital of Hungary. It was taken by Bethlen Gabor in 1619, by the Austrians in 1621, and was bombarded by Davoût in 1809. Here in 1805 Napoleon concluded a treaty with the emperor after Austerlitz.

Prescot, a manufacturing town of Lancashire, 8 miles E. by N. of Liverpool. It has manufactures (introduced from Yorkshire in 1730; and revived since 1892) of watch-movements, watch-tools, small files, &c., and there are potteries near it. Prescot was the birthplace of John Kemble. Pop. 8100.

Prescott, a town of Arizona, lies 6000 feet above sea-level, 74 miles by a branch-line S. of Prescott Junction, which is on the Atlantic and Pacific Railroad, 595 miles SW. of Denver. Gold and silver are found in the neighbourhood. It was superseded by Phœnix as the state capital in 1891. Pop. 3759.

Pressburg. See PRESBURG.

Prestatyn, a Flintshire market-town, 4 miles E. of Rhyl. Pop. 1300.

Presteigne (*Pres-teen'*), a Radnorshire (q.v.)

market-town, on the Lugg, 6½ miles ENE. of New Radnor. Pop. 1260.

Preston, an important manufacturing town of Lancashire, a municipal, parliamentary, and county borough, at the head of the estuary of the Ribble, 14 miles from the Irish Sea, 28 NNE. of Liverpool, 31 NW. of Manchester, and 209 NNW. of London. Occupying an eminence 120 feet above the river, and built mostly of brick, it is on the whole well laid out, and is surrounded with pleasing scenery. The town-hall, built in 1862–67 from designs by Sir G. G. Scott at a cost of £80,000, is a French Gothic pile, with a clock-tower and spire 195 feet high. In 1882 were laid the foundation-stones of the Lancashire county hall and of the Harris free library and museum, to the latter of which in 1883 Mr R. Newsham bequeathed pictures and art-treasures worth £70,000. The places of worship are all modern, for even the parish church has been rebuilt. St Walburge's (Roman Catholic, 1850–66), by Hansom of cab celebrity, has a spire 306 feet high, the loftiest built in England since the Reformation, which amply redeems 'proud Preston' from its old 'no-steeple' reproach. Other edifices are the grammar-school (1550; rebuilt 1841), the corn exchange and market-house (1824), public baths (1851), a covered market (1870), militia barracks (1856), the infirmary (1869), &c. Three large public parks were laid out in 1867—the Miller and Avenham parks, and the former unsightly 'Moor' of 100 acres to the north of the town. In the first a statue was erected in 1873 of the fourteenth Earl of Derby; in Winckley Square is a monument to Sir Robert Peel. Preston was constituted an independent port in 1843; and great improvements have been effected at a cost of over a million under the Act of 1883, these including the deepening of the channel so as to admit vessels of 1000 tons, the construction of a dock of 40 acres (opened by the Duke of Edinburgh, 25th June 1892), the erection of warehouses, &c. Arkwright, who was born here in 1732, in 1768 set up here his famous spinning-frame; and Preston now is one of the principal seats of the cotton industry, which gradually superseded the linen manufacture. There are also iron and brass foundries, iron shipbuilding yards, engineering and machine shops, steam-boiler works, rope-walks, &c. A guild-merchant festival, first clearly heard of in 1397, has been held every twenty years since 1562—the last on 1st September 1902. Preston, the first of whose royal charters was granted by Henry VI., returns two members to parliament. The borough boundary was extended in 1885. Pop. (1811) 17,115; (1841) 50,073; (1881) 100,262; (1901) 118,227—112,989 within the municipal borough.

Preston arose whilst ancient *Coccium* or Ribchester, higher up the Ribble, decayed. In Athelstan's reign Amounderness, the hundred in which it is situated, was granted to the cathedral church of York; hence its chief town came to be known as Preston or 'priests' town.' Near Preston, in 1648, Cromwell routed the royalists; and Preston figures in both the Jacobite rebellions of 1715 and 1745. For Forster's little army surrendered here; and Prince Charles Edward occupied the town on both his march to and his retreat from Derby. In 1832 Joseph Livesey of Preston and six others here signed a pledge of total abstinence—the first ever taken in England. See works by Whittle (2 vols. 1821–37), Dobson (four, 1856–62), Hardwick (1857), Abram (1882), and T. C. Smith (1891).

Prestonpans, a coast-town of Haddingtonshire, 8 miles E. of Edinburgh. Its salt-pans flourished from the 12th century till 1825; now brewing and fishing are the principal industries. Pop. 2624. To the SE., on 21st September 1745, was fought the battle of Prestonpans, Preston, or Gladsmuir, when in a five minutes' rush Prince Charles Edward's 2500 Highlanders routed 2300 disciplined soldiers under Cope and Gardiner.

Prestwich, a cotton manufacturing town of Lancashire, 4 miles NNW. of Manchester. It has a Gothic church (13th century; restored in 1861), also many fine villas and a large lunatic asylum. Pop. 13,500.

Prestwick, a watering-place with famous golf-links, 2¾ miles N. by E. of Ayr. Pop. 2800.

Pretoria, capital of the Transvaal Colony, stands 4000 feet above the sea, in a plain sheltered by encircling mountains, 35 miles NE. of Johannesburg by rail, and is terminus of the line to Delagoa Bay. Founded in 1855, it was named after the Boer leader Andries Pretorius; and it was occupied by Roberts in 1900. Pop. 22,000.

Prev'eza, or **Previsa**, a fortified seaport in the extreme SW. of Turkey, stands on the north side of the entrance to the Gulf of Arta. The Venetians held it from 1683 to 1797. Pop. 7000.

Pribram, a mining-town of Bohemia, 48 miles by rail SSW. of Prague, employs 6000 men in the royal lead and silver mines, and various manufactures. Pop. 14,020.

Pribylof Islands. See Alaska.

Priego (*Pree-ay'go*), a town of Spain, 46 miles SE. of Cordova. Pop. 17,800.

Priene (*Prī-ee'nee*), anciently one of the 'twelve' cities of Ionia, stood a little NW. of the mouth of the Mæander in Caria.

Prilu'ki, a town of Russia, 87 miles E. by N. of Kieff. Pop. 19,100.

Primrose Hill, in the north-west of London, beside Regent's Park.

Prince Edward Island, since 1873 a province of Canada, is situated in the Gulf of St Lawrence, and is separated from New Brunswick and Nova Scotia by Northumberland Strait. Its greatest length is 130 miles; its breadth varies from 4 to 34 miles, and it has an area of 2133 sq. m., or 1,365,400 acres, nearly all of which are occupied. Pop. (1871) 94,021; (1901) 103,259, or 48 to the sq. m. It was discovered by the Cabots, but annexed by France; still, little was done towards its settlement until 1715, when its fertility attracted some Acadians from Cape Breton. It was finally ceded to Britain in 1763. At first a part of Nova Scotia, in 1768 it was made a separate province. The pop. in 1763 was 4000; but emigration set in, and the Acadians were expelled, so that in 1768 it had sunk to 1300. Until 1799 called St John's Island, it was then renamed Prince Edward Island, in compliment to the Duke of Kent, who paid it a visit. The local government passed a measure in 1875 giving them powers to buy out the landlords, most of them absentees, and to sell the land thus acquired (843,981 acres) to the tenants or others on easy terms. The surface is undulating, but never exceeds 500 feet; the soil is very fertile. All kinds of cereals, roots, and vegetables are raised. Oats and potatoes from the island enjoy a special reputation, as do also its sheep and horses. A natural manure, called mussel mud, and made of decayed oyster, clam, and mussel shells, is found on the coasts. Coal is known to

exist, but not worked. The climate is milder than that of the mainland, and freer from fogs. Prince Edward Island is the best fishing-station in the Gulf of St Lawrence, but the habits of the inhabitants are so decidedly agricultural that the fisheries have been neglected. Mackerel, lobsters, herring, cod, hake, and oysters are taken, besides salmon, bass, shad, halibut, and trout. The coastline is a succession of bays and headlands; the largest bays are Egmont, Hillsborough, and Cardigan, which by penetrating into the land from opposite directions divide the island into three distinct peninsulas. The rivers are short, but the province is well watered. Charlottetown is the capital, and has a pop. of 12,000. Other towns are Summerside, Georgetown, and Souris. A railway traverses the island, which is connected by telegraph with the mainland. The settlers are largely of English, Irish, and Scotch descent, besides French, Germans, and Scandinavians. Free education has prevailed since 1853.

Prince of Wales Island. See PENANG.

Princes Islands (anc. *Demonnesoi*), a beautiful group of nine islets near the eastern end of the Sea of Marmora, 10 miles SE. of Constantinople, the largest being called Prinkipo. See a monograph by S. S. Cox (New York, 1888).

Princes Risborough, a town of Bucks, under the Chilterns, 7½ miles S. by W. of Aylesbury. It had a moated palace of the Black Prince. Pop. of parish, 2318.

Princeton, (1) capital of Gibson county, Indiana, 161 miles by rail E. of St Louis. It has woollen manufactures. Pop. 6050.—(2) A pleasant borough of New Jersey, 50 miles SW. of New York. Pop. 3900. On January 3, 1777, the British were defeated here by Washington; here, too, the Continental Congress sat in 1783; and from Princeton Washington dated his farewell address to the army. Princeton, however, is chiefly celebrated as the seat of the College of New Jersey, better known as Princeton College, and since 1896 as Princeton University. Founded at Newark in 1746, it was in 1756 transferred to Princeton, on the erection of a hall named Nassau Hall in honour of William III. The university now has over 100 instructors and about 1400 students, with fine museums and laboratories, two observatories, and libraries with 250,000 volumes. Its endowment is $3,000,000. Among its presidents have been Jonathan Edwards and Dr James M'Cosh.

Prince Town. See DARTMOOR.

Prior Park. See BATH.

Prisrend, a town of Albania, 72 miles E. by N. of Scutari. Pop. 39,000.

Pris'tina, a town of European Turkey, 59 miles by rail N. of Uskub. Pop. 18,000.

Procida (*Protch'ida*), an islet of Italy, between the island of Ischia and the mainland (Cape Miseno), 50 miles W. by S. of Naples. Area, 1½ sq. m.; pop. 13,930. On its shores is the city of the same name, with a harbour, a royal palace, a state-prison, and a marine school.

Progres'o, a seaport of Yucatan, 25 miles N. of Merida. It stands on an open bay.

Prome, a town of Burma, on the Irawadi, 65 miles NW. of Rangoon by rail. Pop. 30,022.

Prossnitz, a town of Moravia, 13 miles by rail SW. of Olmütz. Pop. 24,500.

Provence (*Provon^{n}ss*), formerly a maritime province of France, was bounded on the S. by the Mediterranean, and comprised the modern deps. of Bouches du Rhône, Var, Basses-Alpes, and parts of Alpes Maritimes and Vaucluse. It included a portion of the Roman province of Gaul generally called simply *Provincia* ('the Province'), whence it derived its name; and it was united to France in 1486. The Provençal tongue was spoken over a much larger area. See Baring-Gould's *In Troubadour Land* (1891).

Providence, seaport and, since 1900, sole capital of the state of Rhode Island, is situated at the head of navigation, on an arm of Narragansett Bay known as Providence River, 35 miles from the ocean and 44 miles by rail SSW. of Boston. It covers a wide area on both sides of the river, which, above its two bridges, expands into a cove, a mile in circuit, on the borders of which is a handsome park, shaded with noble elms. It is a city of large commerce, manufactures, and wealth, abounding with beautiful villas and gardens. Founded before the conventional type of American cities had been discovered, its streets are pleasantly irregular, and the site singularly uneven, rising in one place to 204 feet above high-water, and in one ward, much of which is still in farms, there are numerous hills and valleys. Among the many notable public buildings and institutions of Providence are a city hall, of granite, which cost upwards of $1,000,000, and has facing it the state's soldiers' monument; the state-house; the custom-house and post-office; the Athenæum, and the buildings of the Rhode Island Historical Society; the arcade and the Butler Exchange; a great number of churches, schools, and libraries, hospitals and asylums, including a noble charity known as the Dexter Asylum for the Poor; the Friends' Boarding-school (popularly, 'the Quaker College'); and the Brown Baptist University (1764), with 900 students. Two small rivers afford abundant water-power; and the chief manufactures are silverware, jewellery, tools, stoves, engines, locomotives, cottons and woollens, laces, wicks, &c. Providence was settled in 1636, and till 1900 was only joint capital with Newport. Pop. (1870) 68,904; (1880) 104,857; (1900) 175,597.

Provins (*Provan^{g}*), a town of France, 59 miles by rail SE. of Paris. Pop. 7975.

Provo City, capital of Utah county, Utah, on the Provo River, between Utah Lake and the Wahsatch Mountains, 46 miles by rail SSE. of Salt Lake City. Pop. 6159.

Prussia (Ger. *Preussen*), by far the most important state in the German empire, is a kingdom embracing nearly the whole of northern Germany, and owning also Hohenzollern (q.v.) and thirteen other detached territories lying within the bounds of other German states. The area is 136,000 sq. m. (one-tenth larger than the United Kingdom, or half the size of Texas), with (1900) 34,472,509 inhabitants—nearly two-thirds of the entire German empire, with three-fifths of the population. There are fourteen provinces—East and West Prussia, Berlin (city), Brandenburg, Pomerania, Posen, Silesia, Saxony, Sleswick-Holstein, Hanover, Westphalia, Hesse-Nassau, Rhenish Prussia, and Hohenzollern. About one-fifth of the present area has been acquired since 1853, the largest gains after the victorious war of 1866. The Prussia of Frederick the Great embraced only 47,800 sq. m. when he ascended the throne, and 75,000 when he died. Pop. (1819) 10,981,934; (1864) 19,254,649; (1871) 24,689,252.

More than two-thirds of Prussia belongs to the north European plain, already described at GERMANY, while less than a third, chiefly in the

south-west, is hilly or mountainous. The Schneekoppe (5250 feet) in the Reisengebirge is the loftiest summit. The western and south-western parts of the country, comprising Rhenish Prussia, Westphalia, and Hesse-Nassau, cut off by the Teutoburgerwald, the Weser Hills, the Harz, &c., from the sandy and heathy wastes of the north, are quite distinct in their physical character from the rest of Prussia. They are divided by the Rhine into two portions. The soil is generally poor in these districts also, though they possess special sources of wealth in their iron and coal mines. The level country between the Rhone and the Maas, bordering the Eifel, is extremely fertile; and Hesse-Cassel is particularly so. Nassau is specially famous for its Rhine wines. The northern plain is watered by five large rivers —the Niemen, Vistula, Oder, Elbe, and Weser— all of which rise beyond the borders of the kingdom, and the Pregel, Eider, and Ems, which are exclusively Prussian. In the west the chief river is the Rhine. About 12,000,000 persons are engaged in agriculture. Of the total area, 50 per cent. is occupied by arable land, 9½ per cent. by meadows, and 11 per cent. by pasturage. The forest-lands, chiefly in East Prussia, Posen, Upper Silesia, Westphalia, Southern Hanover, and Hesse-Nassau, occupy 10,000,000 acres. The mineral products include, coal, iron, lead, zinc, copper, cobalt, antimony, manganese, arsenic, sulphur, alum, nickel, black lead, baryta, gypsum, slate, lime, freestone, salt, amber, agate, jasper, onyx, &c. Prussia yields about one-half of the annual zinc production of the world; and of the total output of coal in Germany, Prussia produces 93 per cent. The chief coalfields are in Silesia, Westphalia, and Rhenish Prussia, which are at the same time the chief industrial provinces of the kingdom. The region of the Harz in Hanover is also famous for its mining industries. All metals, salt, precious stones, and amber found along the Prussian coast from Danzig to Memel belong to the crown. Prussia has upwards of 100 mineral springs, of which the most noted are those of Aix-la-Chapelle, Ems, Schwalbach, Wiesbaden, Schlangenbad, and Selters. The principal manufactures are linens and cottons, also silk, wool, mixed cotton and linen fabrics. Other great industries are the preparation and manufacture of iron, steel (the steel and gun works of Krupp, at Essen, being world-famous), and other metallic wares, paper, leather, soap, oil, cigars, tobacco, beer, chicory, starch, beetroot, gunpowder, and glass. Berlin and Elberfeld rank as the two most important centres of manufacture on the Continent. The commerce of Prussia is materially facilitated by her central European position, and the network of river and canal navigation, which makes her territories the connecting medium between several of the great European states, and which, with 21,120 miles of railway, 50,500 miles of public roads, and a coast-line of 1000 miles, gives her a free outlet to the rest of the world. About seven-eighths of the population of Prussia are Germans. Of the Slavonic tribes the most numerous are Poles, numbering 2½ millions. In Brandenburg and Silesia there are about 85,000 Wends; in East Prussia upwards of 150,000 Lithuanians; the western part of the kingdom has 10,000 Walloons, using the French language; intermixed in its generally German population Silesia has 55,000 Czechs or Bohemians; Sleswick-Holstein, 140,000 Danes— making in all about 3 millions who do not use the German language, or who employ it only as secondary to their native tongues. The dominant religion is Protestantism, and since 1817 the Lutheran and Reformed Churches have been united under the head of one common Evangelical Church. The Protestants are over 64 per cent. of the population, Roman Catholics about 34, and Jews over 1. Education is widely diffused, thorough, and compulsory, between the ages of six and fourteen. Prussia has ten universities—viz. Königsberg, Berlin, Greifswald, Breslau, Halle, Göttingen, Münster, Bonn, Kiel, and Marburg, which number above 1600 professors and teachers and 18,200 students; see GERMANY. In addition to the libraries of the several universities there is the Royal Library at Berlin, with 860,000 volumes and about 15,000 MSS. Since 1848 Prussia has a Herrenhaus, or House of Lords, comprising princes, the heads of the nobility, some life peers, and a few representatives of provinces, large towns, universities, &c.; and a Chamber of Deputies of 433 elected members. The monarchy is hereditary in the male line, and is now conjoined with the dignity of German emperor. The sovereign and royal family must profess the evangelical confession of faith. In the year 1905 the budget-estimate of the receipts was 2,803,805,050 marks (£140,190,252), just balanced by the expenditure. The total national debt is over £351,752,322. The Prussian contingent is the most important part of the German army, which is all under the command of the emperor-king. For the army, navy, &c., see GERMANY.

The Baltic lands now forming an important part of Prussia, were originally inhabited by the Slavonic Prussians, akin to the Lithuanians, who resolutely resisted all attempts of the dukes of Poland to christianise them, and were only converted by the warlike measures of the Teutonic Knights, who in 1230-83 became masters of the region, and gradually peopled it with German colonists. The knights, often at war with Poland and Lithuania, declined in power in the 14th and 15th centuries, and in 1466 had to cede West Prussia to Poland, holding the rest as fiefs of the Polish crown. In 1511 the knights elected a Hohenzollern prince as their head, who ultimately became Duke of Prussia. In 1618 the inheritance fell to another branch of the Hohenzollern house, which had since 1319 been margraves and ultimately electors of Brandenburg. Pomerania and parts of Franconia and other districts had already made the electorate a powerful state, which, however, suffered terribly in the Thirty Years' War. The 'Great Elector,' Frederick William, succeeded after 1640 in restoring prosperity, and made the electorate a European state, which in 1703 was recognised as a kingdom. Frederick the Great (1740–86) greatly aggrandised the state by his wars and administration, obtaining all West Prussia at the first partition of Poland. The second and third partitions were carried out under Frederick William II. (1786–97). Frederick William III. (1790–1840) had the difficult task of re-organising Prussia after the misery and ruin of the French occupation; after Waterloo Prussia regained almost all she had lost by the humiliating peace of Tilsit in 1807. The troubles of 1848 did not affect the area, which was added to under William I. and Bismarck by the incorporation of Hanover, Hesse-Cassel, Nassau, Frankfort, part of Hesse-Darmstadt, and Sleswick-Holstein, after the Austro-Prussian war of 1866, another result of which was that Austria ceased to be any part of Germany, and Prussia became the predominant German state. The Franco-German war of 1870–71 gave Prussia still greater predominance and the im-

perial crown. See books quoted at GERMANY, and the history by Tuttle (Boston, 1888).

Pruth (*Proot*), a left-hand affluent of the Danube, rises in Galicia, on the NE. side of the Carpathian Mountains, and flows 520 miles eastward past Kolomea and Czernowitz; from where it leaves Austrian territory to its mouth in the Danube at Reni, 13 miles below Galatz, it forms the boundary between Russian Bessarabia and Roumania. It is navigable from near Jassy.

Przemysl, a town of Austrian Galicia, on an affluent of the Vistula, 61 miles W. of Lemberg by rail. It manufactures machinery, spirits, wooden wares, &c. Since 1874 it has been strongly fortified. Pop. 46,300, about one-third Jews.

Pskov, a decayed town of Russia, 9 miles SE. of Lake Pskov (50 miles long by 13 broad), 160 miles SSW. of St Petersburg. During the 14th and 15th centuries it was a Hanse town, with 60,000 inhabitants; in 1510 it was annexed to Moscow. Pop. 30,400.—The *government* has an area of 17,064 sq. m. and a pop. (1897) of 1,123,320.

Pudsey, a municipal borough (1900) of the West Riding of Yorkshire, 3 miles E. of Bradford, with great manufactures. Pop. 15,000.

Puebla (*Pweb'la*), the third city of Mexico, capital of a state of the same name, stands on a fruitful plain, 7120 feet above sea-level, and 68 miles (by rail 116) SE. of the city of Mexico. In the vicinity are Orizaba, Popocatepetl, and other lofty mountains. It was founded in 1531, and is one of the handsomest towns in the republic, with theological, medical, art, and normal schools, a museum of antiquities (1728), two large libraries, hospitals, &c. On the great square stands the cathedral, a Doric building with two towers. The chief manufactures are cottons, paper, iron, glass, porcelain, leather. Pop. 93,550. Puebla was besieged for two months by the French, and then taken by storm, 17th May 1863.

Pueblo (*Pweb'lo*), capital of Pueblo county, Colorado, on the Arkansas River, at the mouth of Fountain Creek, 117 miles by rail S. by E. of Denver. Through its iron and steel industry it rapidly became the second city of the state and an important railway centre; immense quantities of raw materials and fuel abound in the vicinity. In 1890 a Mineral Palace was erected to hold a permanent exhibit of Colorado's mineral productions—from stone and coal to pure gold. Pop., in 1880 only 3250, is now 30,000.

Puente Nacional (*Pwentey Nasional'*), a town of Colombia, in Santander dep., on the Rio Suarez. Coal and iron are mined. Pop. 12,000.

Puerto Bello. See PORTOBELO.

Puerto Cabello (*Pwerto Cavel'yo*), a seaport of Venezuela, 78 miles W. from Carácas. It stands on a long, low, narrow peninsula on the Caribbean Sea, and has a safe, roomy, and fortified harbour. It is the port of Valencia, 34 miles distant by rail. Pop. 15,145.

Puerto Cortez, a port of Honduras (q.v.).

Puerto de Santa Maria, a seaport of Spain, at the mouth of the Guadalete, on the Bay of Cadiz, 22 miles by rail (all round the bay) NE. of Cadiz and 8 SW. of Xeres. It is a great export harbour for sherry, and manufactures silk, soap, hats, leather, spirits, beer, &c. Pop. 19,006.

Puerto Plata (*Pwerto Plah'ta*), the chief port of the Dominican Republic, on the north coast of Hayti. It has an open roadstead. Pop. 6000.

Puerto Principé (*Pwerto Preen'seepay*), an inland town in the east of Cuba, 40 miles SW. of its port, Nuevitas, by rail. Pop. 26,641.

Puerto Rico. See PORTO RICO.

Puget Sound, a large inland sea in the northwest of Washington, U.S., communicating with the Pacific by the Admiralty Inlet and Juan de Fuca Strait. It is divided into several branches, penetrates far into the interior, and is everywhere navigable for the largest vessels. Great quantities of pine and fir are shipped.

Pulborough, a Sussex market-town, on the Arun, 9 miles N. by E. of Arundel. Pop. 1727.

Pulicat, a town of India, 20 miles N. of Madras, the first settlement of the Dutch in India; pop. 4967. It stands on an island in a large sea-inlet called the Lake of Pulicat.

Pulkowa (*Poolko'va*), a village of Russia, 10 miles S. of the site of a magnificent observatory (59° 46′ 18″ N. lat. and 30° 19′ 40″ E. long.), the 'St Petersburg observatory,' built by the Czar Nicholas in 1838–39. In 1882 one of the largest telescopes in the world was erected here.

Pulo-Penang. See PENANG.

Pulteneytown. See WICK.

Pultowa (*Poolto'va*), or POLTA'VA, a town of Russia, on a tributary of the Dnieper, 88 miles by rail SW. of Kharkoff, and 449 NE. of Odessa. A bishop's seat, it manufactures tobacco and leather, and has four great annual fairs. Here Charles XII. was defeated by Peter the Great on 27th June 1709. Pop. 53,214.

Pultusk (*Pool-toosk'*), a town of Poland, 32 miles N. of Warsaw. Here Charles XII. of Sweden defeated the Saxons in 1703, and here in 1806 the French defeated the Russians. The town was destroyed by fire in 1875. Pop. 15,946.

Punchestown, a racecourse close to Naas, 20 miles SW. of Dublin by rail.

Pungwe, a river of Portuguese East Africa, forming the principal waterway to Manicaland and Mashonaland; its mouth is situated some 25 miles NE. of Sofala and 130 SW. of the Zambesi delta. After some diplomatic difficulties between Britain and Portugal, it was agreed (1891) by Portugal that British commerce should have unimpeded access by this route to the British sphere in the interior, the Pungwe being made freely navigable for British vessels. The Pungwe Massi Kesse Railway to the Mashonaland frontier was partially opened in October 1893.

Punjab, or PANJAB (*pánj-ab*, 'five rivers;' the *Pentapotamia* of the Greeks), a province in the NW. of India, bordering on Cashmere, is watered by the Indus and its five great affluents—the Jhelum, Chenab, Ravi, Beas, and Sutlej. Till the formation in 1901 of the North-west Frontier Province (incorporating almost all the Punjab territory lying beyond the Indus), the total area had been 148,966 sq. miles, with a population (1891) of 25,130,127; but since then the area is 133,741 sq. miles, and the population (1901) 23,235,917 — 2,905,000 being in the numerous native states. The capital is Lahore, but Delhi is more populous. Amritsar, third in size, is the religious capital of the Sikhs. The northern parts are traversed by spurs from the Himalayas. In the south is the Salt Range, 2000 to 5000 feet high, between the Indus and the Jhelum. The climate in the plains is most oppressively hot and dry in summer, reaching in May 87·4° to 116·6° F. in the shade; but is cool, and sometimes frosty, in winter. Little rain falls except in the districts along the base of the Himalayas. Trees are few in number and small, and fuel is so scarce

that cow-dung is much used in its stead. Wheat of excellent quality is produced, and indigo, sugar, cotton, tobacco, opium, tea, rice, barley, millet, maize, and numerous vegetables and fruits are grown. The manufacturing industry—cottons, wood-work, iron, leather, gold and silver lace, silk, and shawls—is carried on for the most part in the great towns. Punjab exports indigo, grain, salt, metals, spices, tea, tobacco, manufactured cottons, hides, and leather to Kabul, Cashmere, Turkestan, and Tibet; and imports dyes, goats' wool, raw silk, fruits, ghee, horses, furs, timber, and shawl cloth. The inhabitants are chiefly Jats, Sikhs, Rajputs, and Pathans. Of the whole population, 56 per cent. were Mohammedans, 38 Hindus, and 6 Sikhs.

Punta Arenas (*Poonta Aray'nas*), (1) the chief port of Costa Rica on the Pacific, stands on a 'sandy point' jutting into the Gulf of Nicoya, 14 miles by rail WSW. of Esparza. Pop. 7000.—(2) A town in Patagonia (q.v.).

Purbeck, Isle of, a peninsular district of Dorsetshire, 12 miles long and 5 to 9 broad, is bounded N. by the river Frome and Poole Harbour, E. and S. by the English Channel, and W. by the little stream of Luckford Lake, which runs from Lulworth Park to the Frome. The coast is bold and precipitous, with St Albans Head, 360 feet high; inland a range of chalk downs curves east and west, attaining a maximum height of 655 feet. The Purbeck Marble is a fresh-water limestone, composed almost wholly of shells. Nearly a hundred quarries are worked; the quarrymen still form a curious kind of trade's guild. Of old the 'isle' was a royal deer-forest. Swanage and Corfe Castle are the chief places. See works by Robinson (1882), and J. Braye (1890).

Purfleet, a village of Essex, on the north bank of the Thames, 15 miles by rail E. by S. of London and 8 miles E. of Woolwich, contains government powder-magazines, built in 1781.

Puri. See Juggernaut.

Purley House, Surrey, 2½ miles S. of Croydon, the property of the regicide Bradshaw, and the residence afterwards of Horne-Tooke, who hence named his *Diversions of Purley*.

Purmerend, a town of Holland, 10 miles N. of Amsterdam. Pop. 4960.

Purniah (*Poor'ne-ah*), a town of Bengal, 230 miles NNW. of Calcutta. Pop. 15,016.

Pusey, a Berks parish, 5 miles E. by N. of Faringdon. Dr Pusey was born here.

Puteaux (*Pü-to'*), a town 2 miles from the western boundary of Paris, on the Seine's left bank, opposite the Bois de Boulogne. Pop. 24,300.

Pute'oli. See Pozzuoli.

Putnam, a town of Connecticut, on the Quinnebang River, 56 miles ENE. of Hartford. Pop. 6712.

Putney, a suburb of London, in Surrey, 6 miles WSW. of Waterloo, on the south side of the tidal Thames, which, here nearly 300 yards broad, is crossed by a new granite bridge (1884–86), leading to Fulham. It is a great rowing place, the starting-point of the Oxford and Cambridge boat-race; and from its ready access to town, the river, Putney Heath, and Wimbledon Common, has grown rapidly of recent years. The parish church, with a 15th-century tower, was mainly rebuilt in 1836; in the churchyard is Toland's grave. Putney is the birthplace of Thomas Cromwell and Gibbon, and the deathplace of Pitt, Fuseli, and Leigh Hunt. From Putney's old bridge Mary Wollstonecraft tried to drown herself; and on Putney Heath Pitt fought his duel with Tierney (1798), Castlereagh his with Canning (1809). Pop. (1851) 5280; (1901) 24,140.

Putrid Sea. See Azov.

Putumayo (*Poo-too-mī'o*), or Içá, rises in Colombia on the eastern side of the Andes, and flows SE. 950 miles to the Amazon.

Puy (*Pwee*), Le, or Le Puy-en-Velay, a French town (dep. Haute-Loire), 70 miles SW. of Lyons by rail, stands at the base and on the steep slopes of Mount Anis (2050 feet), from whose summit starts up precipitously the basaltic mass called Mont Corneille, crowned by a colossal figure (53 feet) of the Virgin, made of Russian cannon brought from Sebastopol. The most notable building is the Romanesque cathedral (6th–12th century), in the highest part of the town. Lace and thread work are manufactured. Pop. 17,000.

Puy-de-Dôme (*Pwee-de-Dome*), a central dep. of France. Area, 3070 sq. m.; population, 550,000. The western side is an elevated volcanic region, studded with numerous extinct cones; the highest Puy-de-Sancy (6188 feet). The principal rivers are the Allier, a tributary of the Loire, and the Dordogne. The dep. is subdivided into the arrondissements of Ambert, Clermont-Ferrand (the capital), Issoire, Riom, and Thiers.

Pwllheli (*Pool-hay'lee*), a Welsh seaport and watering-place, 22 miles by rail S. by W. of Carnarvon, with lobster and oyster fisheries. It is a municipal borough, uniting with Carnarvon, &c. to return one member. Pop. 3631.

Pynes, the seat of the Earl of Iddesleigh, 2 miles N. of Exeter.

Pyramids, monumental structures of stone or brick over the sepulchral chambers of Egyptian kings, built in the well-known pyramidal shape. The most famous are those of Gîzeh, on the other side of the Nile facing old Cairo and near the ancient Memphis. The largest, that of Chufu or Cheops, second king of the 4th dynasty (3756 B.C.?), was originally 481 feet high on a square base of 774 feet—higher than St Paul's on an area as large as Lincoln's Inn Fields—but many of its exterior blocks have been removed for buildings in Cairo. The second, that of Chephren, the successor of Cheops, was 450 feet high on a base of 700 feet square. The third is much smaller, and there are six others smaller still at Gîzeh; eleven at Sakkara, a few miles S.; others at Abou Roash, Abusîr, at Dahshûr, at Meydûm, in the Fayyûm, and in Nubia.

Pyr'enees, the mountain-chain that divides France from Spain, stretches from the Mediterranean to the south-east corner of the Bay of Biscay, a distance of 270 miles, its breadth varying between 15 and 70 miles. They form a regular and continuous chain, divisible into the Western, Central, and Eastern Pyrenees. The Central Pyrenees, extending from the Port de Canfranc to the Col de la Perche, contain the highest peaks and the most imposing mountain-masses, as Pic de Néthou (in Maladetta), 11,170 feet; Mont Perdu, 10,998; Vignemale, 10,794; Marboré, 10,673; and Pic du Midi, 9466. On both north and south the mountains sink down to the plains in a series of terraces, with precipitous faces, the slope on the Spanish side being steeper than on the French side. The valleys or ravines cutting into the mountain-mass on both sides terminate in caldron-shaped basins, called *cirques* or *oules* (= pots), the sides of which are precipitous and seamed with waterfalls; the most celebrated is

the Cirque of Gavarnie, at the head of Gave de Pau, with a waterfall 1380 feet high. The streams on the Spanish side are mostly feeders of the Ebro, whilst the French streams feed the Adour, the Garonne, and some little Mediterranean rivers. The lower Pyrenean valleys through which these streams flow are in many cases covered with grass or forest, or even vineyards and olive-groves. Snow lies on the highest pinnacles, the snow-line being 9200 feet on the south side and at 8300 on the north. A narrow belt of glaciers runs from east to west just below the Central peaks, but almost wholly on the French side. Minerals are not generally abundant, though iron is worked in Basses-Pyrénées and Pyrénées-Orientales; coal exists on the Spanish side and lignite on the French. There are numerous mineral springs (several being hot), those of Eaux-Bonnes, Cauterets, Eaux-Chaudes, Bagnères de Bigorre and de Luchon, and Barèges being the best known. See Count Henry Russell, *Pau, Biarritz, and the Pyrenees* (new ed. 1891).

Pyrénées (*Pee-ray-nay'*), BASSES, a dep. of SW. France, having the Bay of Biscay on the west. Area, 2946 sq. m.; population, 427,000. It is divided into the arrondissements of Pau (the capital), Oloron, Orthez, Bayonne, and Mauléon.

Pyrénées, HAUTES, a dep. of France, lying east of Basses-Pyrénées, is part of the old province of Gascony. Area, 1749 sq. m.; population, 215,000. Its arrondissements are Tarbes (the capital), Argelès, and Bagnères de Bigorre.

Pyrénées-Orientales (*Pee-ray-nayz'-O-ri-on^{g}-tahl'*), a southern dep. of France, bounded E. by the Mediterranean. Area, 1591 sq. m.; population, 213,000. Its arrondissements are Perpignan (the capital), Prades, and Céret.

Pyritz (*Peereetz'*), a manufacturing town of Pomerania, 25 miles SE. of Stettin. Pop. 8062.

Pyrmont (*Peer-mont'*). See WALDECK.

Pytchley, a village of Northants, 3 miles SW. of Kettering, whence the Pytchley Hunt takes name. See a work by Nethercote (1888).

QUANGTUNG. See CANTON.

Quantocks, a Somerset range of hills, extending 8 miles NNW. to the coast near Watchet, and culminating in Wills Neck (1262 feet). They have memories of Coleridge and Wordsworth.

Quarndon, a village, with sulphur baths, 3 miles NNW. of Derby.

Quatre-Bras (*Kâhtr-Brâh*), a village of Belgium, 10 miles SSE. of Waterloo, situated at the intersection of the great roads from Brussels to Charleroi, and from Nivelles to Namur, whence its name ('four arms'). Here, on 16th June 1815, two days before Waterloo, the English under Wellington defeated the French under Ney. A monument to the Duke of Brunswick, a bronze lion 10½ feet high, was erected in 1890.

Quebec (*Kwe-bek'*; Fr. *Québec*, pron. *Kay-bek'*), a province of Canada, between Ontario and New Brunswick. Area (with additions up to 1900), 347,350 sq. miles. The surface comprises great rivers and lakes, large stretches of agricultural land, and immense forests. S. of the St Lawrence are the Notre Dame or Green Mountains, while on the N. is the Laurentian Range. The St Lawrence (q.v.) has many tributaries of great length, the Ottawa, St Maurice, Saguenay, &c. Of numerous lakes, the best known are Temiscamingue, Metapedia, Temiscouata, Memphremagog, and St John. The province has a coast-line of 825 miles on the Atlantic. The winter is slightly colder than in the other parts of eastern Canada. The soil is rich and loamy, well adapted for cereals, hay, and root-crops. Indian corn, hemp, flax, and tobacco are also raised. Fruit is grown, especially apples and plums, which are exported; grapes ripen in the open air. Tomatoes are also a field-crop. Cattle-breeding is carried on, and large numbers of animals are exported to Britain. The fisheries in the River and Gulf of St Lawrence are very prolific, and all the smaller rivers teem with fish. Alluvial gold is found in various places, and copper in the eastern townships, while iron is very generally distributed. Other minerals are lead, silver, platinum, zinc, asbestos, and apatite, or phosphate of lime. Agriculture and dairy-farming form the chief occupations of the people; but lumbering, mining, shipbuilding, manufactures, fisheries, and commerce employ many. The affairs of the province, which is divided into 63 counties, are administered by a lieutenant-governor, an executive council of 24 life-members, and a legislative assembly of 73 persons elected every four years. The province is represented in the Dominion Senate by 24 members, and in the House of Commons by 65. Pop. (1871) 1,191,516; (1881) 1,359,027; (1901) 1,648,898, of whom about 80 per cent. were French-Canadians, descendants of the French settlers living in the country when it was transferred to Great Britain in 1763. The French population then did not exceed 70,000, so that the progress in 130 years is in strange contrast to the state of things in old France. Families of twelve and fourteen are quite common amongst French-Canadians. The English population does not increase in the same way. Farms are subdivided amongst all the children as in France. In religion the Roman Catholics naturally prevail, but the rights of the Protestant minority are protected by statute. The two Protestant universities are M'Gill at Montreal and Bishop's College at Lennoxville; Laval, the Catholic university, is at Quebec. The principal city in the province is Montreal (pop. 270,000), the commercial metropolis of the Dominion. Quebec, the most historic city in Canada, is the seat of the provincial government.

QUEBEC, the capital, is situated on a steep promontory, on the north-west bank of the St Lawrence, 300 miles from the Gulf of St Lawrence and 180 below Montreal (172 by rail). The highest part of the headland is Cape Diamond, 333 feet above the river. Quebec is the most important military position in Canada; its citadel occupies an area of 40 acres, and commands a magnificent view. The harbour is spacious, and the docks and tidal basin are perfect specimens of engineering skill; on the Levis side of the river is the extensive graving-dock. The city is divided into an Upper and Lower Town, whilst westward are the thriving suburbs of St John, St Louis, and St Roch's—the latter having immense warehouses and stores. To the south-west of St John are the Plains of Abraham, the historic battlefield, with a column 40 feet high to the memory of General Wolfe. Another monument, 65 feet high, dedicated to Wolfe and Montcalm, is situated in the Governor's Garden, and immediately overlooks the St Lawrence. On the Ste Foye Road is an iron pillar crowned by a bronze statue,

commemorating the deeds of the British and French under Murray and Levis in 1760. There is a shaft also to the memory of Jacques Cartier and the Jesuit Brébeuf. Four martello towers occupy elevated positions. In the Upper Town is Dufferin Terrace, 1400 feet long and 200 feet above the water level, commanding a noble view. The Grand Battery is also picturesquely situated. Three handsome modern gates have replaced the old ones. The principal edifices are the parliamentary and departmental buildings, court-house, post-office, custom-house, city hall, masonic hall, basilica, the archiepiscopal palace, the Anglican Cathedral, Church Hall, and Young Men's Christian Association building. Laval University, named after the first Roman Catholic bishop of Quebec, who in 1663 founded the seminary, has a library of 150,000 volumes, a museum and art gallery, laboratory, &c. Morrin College (Presbyterian) is affiliated with M'Gill University. The water-supply is from Lake St Charles. The city is lighted with gas and electricity, the power for the latter being afforded by the Falls of Montmorency, 9 miles distant. Quebec is connected with all parts of America by rail, and is at the head of ocean steamship navigation. Shipbuilding has fallen off. The manufactures are worsted goods, iron-castings, machinery, cartridges, cutlery, nails, leather, musical instruments, boots and shoes, paper, tobacco, steel, &c. The chief exports are timber and lumber. Quebec is the seat of a R. C. archbishop and an Anglican bishop. Cartier visited the site, Stadaconé, in 1535; and in 1608 Champlain founded and named the town, which was the centre of French trade, civilisation, and missions till 1759, when it was captured by Wolfe. In 1763 it was ceded to Great Britain. Pop. (1852) 42,052; (1881) 62,446; (1901) 68,844. See works by Lemoine (1876), Mercier (1890), and Sir Gilbert Parker (1903); and for the siege, Doughty and Parnell (6 vols. 1903).

Quedah, or KEDAH, a state on the west side of the Malay Peninsula, with an area of 3600 sq. m. and a pop. of 30,000, nominally subject to Siam. The capital, Quedah, has 8000 inhabitants.

Quedlinburg (*u* as *oo*), a town of Prussia, at the N. base of the Harz Mountains, 56 miles SE. of Brunswick, founded by Henry the Fowler in 924. On an eminence stands the old castle of its abbesses, in whose chapel rest Henry I., his wife Matilda, and the Countess of Königsmark. Here Klopstock and Karl Ritter were born. The town manufactures sugar, wire goods, and farinaceous foods. Pop. 24,761.

Queenborough, a municipal borough on the Isle of Sheppey, 2 miles S. of Sheerness, was founded by Edward III. (1369), and named after Queen Philippa. Steamers ply to Flushing. Pop. 1550.

Queen Charlotte's Islands, a group N. of Vancouver Island, off British Columbia. Area, 5100 sq. m. The two chief islands, Graham and Moresby, are 160 miles long and nearly 70 broad. Anthracite, coal, copper and iron ore, and gold-bearing quartz are found. Pop. 2000 Indians.—*Queen Charlotte's Sound* is a strait separating Vancouver Island, on the N., from the mainland.

Queensberry, a Dumfriesshire mountain (2285 feet), 7 miles WSW. of Moffat.

Queensbury, a town in the West Riding of Yorkshire, 3½ miles NNE. of Halifax. Pop. 6440.

Queen's County, an inland county of Leinster, is bounded by King's County, Kilkenny, and Tipperary, and measures 33 miles by 37. Area, 424,854 acres. Pop. (1841) 153,988; (1861) 90,650; (1901) 57,225, of whom 50,000 were Catholics. Nearly 14½ per cent. of the total area is barren. Queen's County is, for the most part, within the basin of the Barrow, and is flat and, except where bogs prevail, fertile. It is also drained by the Nore and crossed by the Grand Canal. On the north-western border lie the Slieve Bloom Mountains (1734 feet). Coal occurs in the south-east. Agriculture is the principal occupation; there is much dairy-farming. This district was made a shire in honour of Queen Mary, from whom also the chief town, Maryborough (pop. 2960), was called. The county returns two members.

Queensferry, a town of Linlithgowshire, 9 miles WNW. of Edinburgh, on the south shore of the Firth of Forth, which here is crossed by the great Forth Bridge (q.v.). Named after St Margaret, it has been a burgh of royalty since 1363, a royal burgh since about 1639, and a police-burgh since 1882; with Stirling, &c. it returns one member. It has remains of a Carmelite friary, converted in 1890 into an Episcopal church, and a new town-hall (1894); and one of its hotels is the Hawes Inn of Scott's *Antiquary*. Pop. 1831.—NORTH QUEENSFERRY is in Fife, at the other end of the bridge. Pop. 510.

Queensland, youngest and second largest of the colonies included, after 1901, in the Australian Commonwealth, comprises an area of 668,497 sq. m. It was little known until 1823, when Oxley discovered the river which he named the Brisbane, in honour of the governor of New South Wales; and it was first proclaimed a separate colony in 1859. The island-studded coast-line is 2250 miles in extent. The southern boundary generally follows the twenty-ninth parallel of S. lat. The northernmost point of the mainland is Cape York. Queensland is 1300 miles in length from N. to S., and 800 miles at the greatest breadth in the S. Its western boundary for the most part is 138° E. long. Running more or less parallel with the eastern coast, about 50 miles inland, is a backbone of mountains, the Main Dividing Range, a continuation of the Blue Mountains; the highest peaks are Bellenden-Ker (5500 feet) and Mount Dalrymple (4250). The east side is ridgy and thickly timbered with eucalypti; the country west of the mountains is to a large extent open downs and plains, often of the richest black soil, covered with the finest fattening herbage in the world. The largest rivers on the east coast are the Brisbane, Mary, Burnett, Fitzroy, Burdekin, and Johnston. On the western watershed are the Mulligan, Herbert, and Diamantina. The headwaters of the Thomson and Barcoo flow southward through the boundless prairie-country. The Flinders, Leichhardt, Gilbert, Mitchell, and Gregory flow northward to the Gulf of Carpentaria. Rockhampton is on the Fitzroy, Maryborough on the Mary, and Mackay on the Pioneer. The principal harbour in Queensland is Moreton Bay. The alluvial coast-lands are devoted to ordinary and semi-tropical agriculture and timber produce. The basaltic plains and tablelands beyond the Main Range, extending to the 'Never Never country,' are occupied by pioneer pastoralists with their herds of sheep and cattle. In such a colony, two-thirds of which lies within the tropics, there is a wide variety of climate and natural capabilities. The summer heat is undoubtedly great; but there is immunity from hot winds, and the heat being dry is bearable,

though the maximum register is 108°. For seven months of the year the climate is most enjoyable. The colony enjoys a high repute for health, gives a low death and a high birth rate, and is free from pulmonary and contagious diseases. Pop. (1871) 125,146; (1881) 213,525; (1901) 503,266, including 9313 Chinese and 9327 Polynesian labourers, and excluding some 7000 aborigines. A table of the population, revenue, comparative crops, exports, &c. of Queensland and the other Australian colonies will be found in the article AUSTRALIA.

Much of the marked prosperity of Queensland is due to the development of ocean and inter-colonial steam communication. The navigable streams have been dredged at enormous cost. The railway system of Queensland (2997 miles) connects with that of New South Wales, and there are over 10,100 miles of telegraph lines. From 1868 to the end of 1903 its mines have produced 17,454,418 ounces of gold, value £58,312,127. In central Queensland is the remarkable Mount Morgan (q.v.) mine. Copper, tin, silver and lead, quicksilver, manganese, and iron are found; and there are valuable coal-mines. Agates and fine opals are found, and specimens of the diamond, ruby, sapphire, and topaz. The annual exports of wool, hides, skins, and tallow represent a value of 4½ millions. The manufactories comprise metal-foundries, sugar-mills, tanneries, flour-mills, distilleries, saw-mills. Tweed-factories are worked near Ipswich. Of late years the bêche-de-mer and pearl-fisheries of Torres Straits have been highly productive; and meat-preserving has also become an established industry. The seat of government is Brisbane, and the next largest towns are Rockhampton, Townsville, Maryborough, Gympie, Ipswich, Toowoomba, and Charters Towers. The governor is appointed by the crown, and there are an executive council and two houses of parliament. The state sends 9 members to the Commonwealth House of Representatives. Education is free, secular, and compulsory. A small permanent force, a defence contingent, and volunteers make up an enrolment nearly 5000 strong; but every male between eighteen and sixty years old is liable for military service in an emergency. The entrance to the Brisbane River is defended by a battery and torpedo works, and there are gunboats, torpedo and packet boats, and a naval reserve. About 410 million acres of land still belong to the crown, leased mostly to squatters as sheep and cattle runs. Market-gardening in Queensland, even in the large towns, is principally done by Chinamen. On the Darling Downs, which is the garden of Queensland, wheat may be grown; and oats, barley, rye, maize, lucerne, and European vegetables and fruits are raised; elsewhere sweet potatoes, yams and pumpkins. Sugar-growing is a great industry, and arrow-root and tobacco are grown. Cotton, rice, coffee, and even tea have been proved to be suitable. An immense variety of fruits, of both temperate and tropical climes, grow well; ginger, pepper, and nutmeg are indigenous. Amongst the hard-woods are the ironbarks, stringy-barks, gums, and bloodwoods, and there are many easily-worked and beautiful softwoods. Snakes (some of them very poisonous) and alligators are the most dangerous wild animals. The fauna includes the usual Australian marsupials—the platypus, dingo, flying-fox, &c. Kangaroos used to be a pest. Many of the birds are of gorgeous plumage. The emu roams the plains, and the cassowary is a rare appearance in the north. The rabbit has been fenced out from the southern borders with tolerable success. The sea-fishing is unsurpassed, and the Moreton Bay oysters are exported. From the dugong, besides the oil, is obtained a hide invaluable for thick machinery belting. Queensland suffers occasionally from floods and from droughts; the necessity for artificial irrigation is of paramount importance. By 1903 over 900 artesian bores had been sunk, giving a daily flow of nearly 10,500,000 gallons.

See books by Bonwick (1880), Grant (1881), Russell (1888), Lumholtz (1889), Weedon (1898), the annual *Year-book*, and Rutledge's semi-official *Guide to Queensland* (1899).

Queenstown, an Irish seaport, on the south side of Great Island, in Cork harbour, 12 miles by rail SE. of Cork and 177 SW. of Dublin. Its original name was Cove of Cork; the present name commemorates the visit of Queen Victoria in 1849. The town is built in parallel streets on the slopes of a hill shaped like an amphitheatre. Its climate enjoys a high reputation. The splendid Catholic cathedral for Cloyne diocese is the principal building. Queenstown is an important port of call, the mails from the United States being landed here and sent overland by rail to Dublin; while the British mails are in part taken on board here. Pop. (1871) 10,334; (1891) 9082; (1901) 7909.

Queen's Town stands on an arm of the Klaas Smits River in the east of Cape Colony, 154 miles by rail N. by W. of East London. Pop. 9850.

Quelpart, a rock-bound, wooded island 60 miles off the S. coast of Corea, 40 miles long by 17 broad, attains in the volcanic Mount Auckland 6500 feet. It is fertile and populous.

Querétaro (*Kay-ray'ta-ro*), the capital of a Mexican state, on a hilly plateau, 6273 feet above sea-level, 153 miles by rail NW. of Mexico city. It contains a government palace, a cathedral, an aqueduct with arches 90 feet high, and two cotton-mills, employing 2300 hands. Here the Emperor Maximilian was shot in 1867. Pop. 36,000.

Quetta, or SHALKOT, a fortified town near the north frontier of Beluchistan, strategically important as commanding the Bolan Pass (q.v.) and the Pishin Valley. Since 1887 it has been connected with the Indian railways, and since 1877 has been under British officers. Coal and petroleum were found in 1890. Pop. 25,000.

Quetzaltenango, the capital of a dep. of Guatemala, on the Siguila, 95 miles W. by N. of Guatemala city. Pop. 30,000, mostly Indians.

Quiberon (*Kee'beron'*), a small fishing-town of France (dep. Morbihan), at the extremity of a long narrow peninsula, 21 miles SW. of Vannes. Pop. 3300. Here a body of French royalists landed from an English fleet in 1795, and endeavoured to rouse the people of Brittany and La Vendée. On 20th November 1759 Hawke defeated a French fleet in Quiberon Bay.

Quilimane (*Kee-le-mâh'nay*), a seaport of East Africa, in Portuguese territory, stands 15 miles from the mouth of the N. arm of the Zambesi. Pop. 8000, including 116 Europeans and 327 Asiatics.

Quillo'ta, a town of Chili, in the fertile valley of the Aconcagua, 13 miles from its mouth, and 25 miles by rail NE. of Valparaiso. Pop. 9000.

Quiloa, or KILWA, a seaport of German East Africa, 190 miles S. of Zanzibar. Pop. 6000.

Quilon (*Qwee-lon'*), a town of Southern India, in the state Travancore, on the west coast, 85 miles NW. of Cape Comorin. A settlement of the ancient Syrian Church, it became Portuguese in 1503, and Dutch in 1653. Pop. 15,588.

Quimper (*Kan°-pair*), a town of France (dep. Finistère), on the Odet, 11 miles from its mouth, and 63 by rail SE. of Brest. It has a stately cathedral (1239–1515), potteries, tanyards, sail-works, &c. Population, 19,500.

Quimperlé, a pretty Breton town of 5417 inhabitants, amidst hills, 35 miles ESE. of Quimper by rail, with an old Romanesque church.

Quinag, a Sutherland mountain (2653 feet), on the N. side of Loch Assynt.

Quincy, (1) the third city of Illinois, and capital of Adams county, is on the Mississippi River (here crossed by an important railway bridge), 160 miles above St Louis and 262 by rail SW. of Chicago. It has a fine court-house, a medical college, an Episcopal cathedral, large flour-mills, machine-shops, foundries, saw- and planing-mills, breweries, and factories of stoves, furniture, carriages, tobacco, &c. Pop. (1880) 27,268; (1900) 36,252.—(2) A town of Massachusetts, near the sea, and 8 miles S. of Boston by rail. The township produces the famous Quincy granite, and was the birthplace of John Hancock, John Adams, and his son, John Quincy Adams. Pop. 25,000.

Quiraing (*Kwee-rang'*), a fantastic rock mass (1779 feet) in the N. of Skye.

Quito (*Kee'to*), the capital of Ecuador, and of the province of Pichincha, lies in 0° 14′ S. lat., on the east side of the great plateau of Quito, at the foot of the volcano of Pichincha (q.v.), 9351 feet above the sea. Its site is cut up by numerous ravines; but the streets are laid out regularly at right angles, plunging into and scaling the sides of the valleys. In the square stand the cathedral, with its green-tiled dome, the archbishop's palace, the municipal building, and the capitol. Other public buildings are the university, a seminary, an institute of science, an observatory, a museum, a library of 20,000 volumes, a penitentiary, a hospital, many monasteries, &c. The manufactures include cottons and woollens and beer; the drying of bird-skins (humming-birds') and the production of sacred images rank as important industries. Founded in 1534, Quito has suffered frequently from earthquakes (especially in 1797 and 1854) and from revolutions (as in 1877 and 1883). Pop. 80,000, mainly Indians and mestizoes.

Quorn, or QUORNDON, a village of Leicestershire, 2½ miles SE. of Loughborough, gives name to a celebrated pack of foxhounds. Pop. 2180.

Quorra, one of the several names borne by the Niger (q.v.) in its upper course.

RAAB (*Râhb;* Hung. *Győr*), a town of Hungary, at the confluence of the Raab and the Little Danube, 67 miles WNW. of Buda-Pesth. It has a beautiful cathedral, and manufactures tobacco and cutlery. Pop. 27,795.

Raalte (*Râhl-teh*), a Dutch town, 11 miles NNE. of Deventer. Pop. 5795.

Raasay (*Râh'zay*), an Inverness-shire island, between Skye and the Scottish mainland. It is 13 miles long from N. to S., 3½ miles in greatest breadth, and 24 sq. m. in area. Pop. (1841) 647; (1901) 419. Dun Caan (1456 feet) is the highest point, and ruined Brochel Castle on the east shore the chief object of interest.

Rabat, or NEW SALLEE, a port of Morocco, at the mouth of the Ragreb, opposite Sallee (q.v.). It stands on cliffs amidst gardens, and has a fort and the ruins of the Sultan's palace. It was once the chief port for European commerce, but its harbour is silted up. Pop. 21,000.

Raby Castle, Durham, 6 miles NE. of Barnard Castle, the seat (1379) of the Nevilles, and now of the Duke of Cleveland.

Racalmu'to (*u* as *oo*), a town of south Sicily, 13 miles by rail NE. of Girgenti. Pop. 16,133.

Racconigi (*Racconee'jee*), a town of North Italy, 23 miles by rail S. of Turin. Pop. 9875.

Race, CAPE. See NEWFOUNDLAND.

Racine (*Ra-seen'*), capital of Racine county, Wisconsin, on Lake Michigan, and on both sides of Root River, which is crossed by five swing bridges, and forms a good harbour. By rail it is 62 miles N. of Chicago and 23 S. of Milwaukee. Racine has a handsome post-office and city hall, a hospital, the Taylor Orphan Asylum, an Episcopal University (1852), a trade in lumber, flax, flour, and woollen mills, and manufactories of ploughs, boilers, pumps, wagons, linseed-oil, hardware, wire-work, cordage, furniture, refrigerators, boots, rubber, &c. Pop. 29,014.

Racow (*Ra-kof'*), a village in the south of the Polish government of Radom, was in the 16th century a Socinian centre. Pop. 2109.

Radcliffe, a town of SE. Lancashire, on the Irwell, 2½ miles SSW. of Bury and 7 NNW. of Manchester. It has an ancient parish church (restored 1873), a ruined tower, a market-hall (1852), a co-operative hall (1878), cotton and calico works, bleachfields, and neighbouring coal-mines. Pop. (1851) 5002; (1901) 25,368.

Radhanpur, chief town of a protected state (1150 sq. m.; pop. 98,129) in Bombay Presidency, 150 miles NW. of Baroda. Pop. 14,722.

Radley, a Berkshire parish, near the right bank of the Thames, 5 miles S. of Oxford. The Bowyers' seat here was in 1847 converted into a High Church public school—St Peter's College—for 130 boarders. It has a fine chapel. Pop. 733.

Radnor, NEW, a Radnorshire village, on the Somergill, 7 miles WSW. of Presteigne. Pop. 497.—OLD RADNOR (pop. 340) is 3 miles ESE.

Radnorshire, a border county of South Wales, bounded by the counties of Montgomery, Salop, Hereford, Brecon, and Cardigan. Measuring 36 miles by 30, and 432 sq. m. in area, it is the tenth in size and twelfth in population of all the twelve Welsh counties. The beautiful Wye traces all the south-western and southern boundary, the Teme the north-eastern; and the surface generally is hilly or mountainous, in the Forest of Radnor attaining 2163 feet. Of half-a-dozen mineral springs, those of Llandrindod are in most repute. The soil is poor, less than half of the total area being in tillage, whilst woods and plantations cover nearly 8000 acres. The rearing of stock is the principal industry. Radnorshire returns one member to parliament; and till 1885 another was returned by the Radnor district of boroughs, which comprises Cefnllys, Knighton, Knucklas, New Radnor, Presteigne, and Rhayader. Pop. (1801) 19,135; (1841) 25,458; (1901) 23,281. See Williams' *History of Radnorshire* (Tenby, 1858).

Rad'om, a town of Poland, on a sub-tributary of the Vistula, 60 miles S. of Warsaw. Pop. 28,750.—Area of *government* of Radom, 4768 sq. m.; pop. 825,000.

Radstock, a town of Somerset, 7 miles NW. of Frome. Pop. 3400.

Ragatz, a spa in the Swiss canton of St Gall, 68 miles by rail SE. of Zurich and 13 N. by W. of Chur (Coire); it stands at the mouth of the ravine leading to Pfaffers (q.v.), whence it gets its healing waters by a pipe (1838–40) 2½ miles long. Schelling is buried here. Pop. 1896.

Raglan Castle, a noble ruin, 7 miles WSW. of Monmouth, was the seat of the Herberts, Earls and Marquises of Worcester, and belongs now to the Duke of Beaufort.

Ragley Hall, Warwickshire, 1½ mile SW. of Alcester, the Marquis of Hertford's seat (1750).

Ragu'sa (*u* as *oo*; Slav. *Dubrovnik*), a decayed city of Dalmatia, stands on the east shore of the Adriatic, 100 miles SE. of Spalato. Greek first and then Roman, Ragusa afterwards became an independent republic, and so maintained itself until 1808 under the protection successively of Byzantium, Venice, Hungary, and the Porte. Napoleon in 1809 incorporated Ragusa in Illyria; and since 1814, like the rest of Dalmatia, it has belonged to Austria. Ragusa had long before this declined from her former greatness, having suffered repeatedly from fires, plagues, and earthquakes. Chief amongst its buildings are the palace (1435–64) of the rectors (chief-magistrates), the custom-house and mint (*c.* 1312–1520), the Dominican church (1306) and monastery (1348), the Franciscan church and monastery (1317), and the church of St Biagio (Blaise), the patron saint of the town, built in 1348–52, but rebuilt in 1715. The old cathedral was destroyed by the disastrous earthquake of 1667; its successor (1671–1713) has some valuable silver ornaments. The harbour is now sanded up. Merchandise is landed and shipped at the harbour of Gravosa, to the N. Pop. 13,170. See T. G. Jackson's *Dalmatia* (vol. ii. 1887).

Ragusa (anc. *Hybla Herœa*), a town of Sicily, 31 miles WSW. of Syracuse, stands on the Ragusa, 14 miles from the sea. Pop. 31,943.

Rahway (*Raw-way*), a city of New Jersey, on the Rahway River, 4 miles from its mouth, and 20 by rail W. of New York. It manufactures carriages, printing-presses, &c. Pop. 7995.

Rai Bareilly (*Rī Bara'ylee*), a town of Oudh, stands 48 miles SE. of Lucknow, and has a fort (15th century), a magnificent palace, and some fine mosques. Pop. 18,781.

Raichûr, a town of Hyderabad; pop. 22,174.

Rainford, a town of Lancashire, 4 miles NW. of St Helens. It manufactures tobacco, pipes, and crucibles. Pop. 3372.

Rainham Hall, Norfolk, the seat (1632) of the Marquis of Townshend, 3½ miles SW. of Fakenham.

Rainier, Mount. See Cascade Range.

Rainy Lake, on the boundary line between Ontario and the United States, 10 miles W. of Lake Superior. It is 50 miles long, and discharges by Rainy River into Lake of the Woods.

Raipur (*Rī-pore*), a town in the Central Provinces of India, stands on a plateau (950 feet), 180 miles E. of Nagpur. Pop. 32,120.

Rajamahendri (nearly as *Rajahmundry*), a Madras town, on the Godavari, 30 miles from its mouth. From 1753 to 1758 it was held by the French. Pop. 36,400.

Rajkot, chief town of a native state in Kathiawar, Bombay; pop. 36,150.

Rajmahal, a decayed town of India, on a steep eminence on the right bank of the Ganges, 170 miles NNW. of Calcutta, with the remains of many palaces. In 800 it had 25,000 inhabitants, but now less than 4000.

Rajputana (*Radjpootâh'na*), a territory of India, embracing twenty native states and the British district (2711 sq. m.; pop. 542,358) of Ajmere-Merwara. It lies between Sind (on the W.) and the Punjab (on the N.). Its total area is 132,979 sq. m., and its total pop. is about 10,000,000. The most important native states are Jaipur, Jodhpur, and Udaipur; next follow Alwar, Bhartpur, Kotah, and Bikaner. This region is crossed by the Aravalli Mountains, and consists in great part of sandy, barren plains. It gets its name from the ruling Aryan race, the Rajputs, a proud aristocracy, who have furnished ruling dynasties to many of the native states.

Rajshahi. See Rampur Beauleah.

Raleigh, the capital of North Carolina, is near the Neuse River, 186 miles (by rail 271) SSW. of Richmond. It is regularly built on an elevated site, with a central square, from which four principal streets radiate, each 99 feet wide, and in which stands the domed granite capitol, which cost over $500,000. The city manufactures iron, clothing, carriages, &c. Pop. 13,650.

Ralik. See Marshall Islands.

Ramillies (Fr. pron. *Ra-mee-yee'*), a village of Brabant, Belgium, 14 miles by rail N. of Namur. Here, on May 23, 1706, Marlborough defeated the French under Villeroy.

Ramnag'ar, (1) an Indian town of the North-west Provinces, on the Ganges, 2 miles above Benares; pop. 11,859.—(2) A decayed town of the Punjab, on the Chenab River; pop. 6830.

Rampur', the capital of a native state (945 sq. m.; pop. 551,249) in the North-west Provinces, on the river Kosila, 110 miles E. by N. of Delhi. It manufactures damask, pottery, sword-blades, and jewellery. Pop. 80,000.

Rampur Bauleah, chief town of the Rajshahi district (area, 2361 sq. m.; pop. 1,338,638) of Eastern Bengal, stands on the north bank of the Ganges. Pop. 21,407.

Ramsbottom, a town of Lancashire, on the Irwell, 4 miles N. of Bury. The first Sir Robert Peel established calico-printing here, and it now has manufactures of cottons, calicoes, ropes, machines, &c. Here lived the Grants, the 'Cheeryble brothers' of *Nicholas Nickleby*. Pop. 16,000.

Ramsey, (1) a seaport and watering-place in the north of the Isle of Man, 14 miles NNE. of Douglas, and by rail (1879) 18 NE. of Peel. It stands on a spacious bay, with a good sandy beach and a background of wooded hills (1842 feet), and from its beauty and salubrity has risen into a favourite resort. It has two promenades, a park, salt-water lake, a pier 730 yards long, and steamboat communication with Liverpool, Fleetwood, Glasgow, Greenock, Whitehaven, and Douglas. Population, 5000.—(2) A market-town of Huntingdonshire, 12 miles NNE. of Huntingdon. It has a branch-line (1863) and remains of a mitred Benedictine abbey (969). Pop. 5000. Ramsey Mere is long since drained, and bears rich wheat crops.

Ramsgate, a watering-place of Kent, in the south-east of the Isle of Thanet, 72 miles E. by S. of London, 4 SSE. of Margate, and 15 ENE. of Canterbury. From a small fishing-village it began to increase in importance during the 18th century through successful trade with Russia,

and through the formation here (1750–95) of a harbour of refuge for the Downs. That harbour, 51 acres in extent, with a sea-entrance 250 feet wide, is enclosed on the east and west by two piers 670 and 520 yards long. The aspect of the place, which George Eliot calls 'a strip of London come out for an airing,' is familiar through Frith's 'Ramsgate Sands' (1854); among its special features are an obelisk marking the spot where George IV. in 1821 embarked for Hanover, an iron promenade pier (1881), the fine Granville Hotel, a beautiful Roman Catholic church by the Pugins, a Benedictine monastery, college, and convent, and a Jewish synagogue and college, erected by Sir Moses Montefiore, who, like the elder Pugin, was a resident. To the north is Broadstairs (q.v.), beloved of Dickens; and to the west Pegwell Bay, with Ebbsfleet, the landing-place of St Augustine, and also, traditionally, of Hengist and Horsa. Here, too, is Osengall Hill, with an early Saxon cemetery. Ramsgate was incorporated in 1884. Pop. (1851) 11,838; (1881) 22,683; (1901) 27,733. See James Simson's *Historic Thanet* (1891).

Ranchi (*Rantchee*), a town of Lohardaga district, Bengal. Pop. 26,000.

Rand, or WITWATERSRANDT. See JOHANNESBURG.

Randazzo (*Randat'zo*), a town of Sicily, at the northern foot of Mount Etna. Pop. 9908.

Randers, a town in Jutland, on the Randers-Fiord, 20 miles from its mouth in the Cattegat. Pop. 21,000.

Ranelagh (*Ran'e-la*), NORTH and SOUTH, two suburbs of Dublin, lying south of the city.

Rangoon', the capital of Burma, stands on the Hlaing or Rangoon River, 20 miles from its entrance into the Gulf of Martaban. The existing city is almost entirely modern, built since the British took possession in 1852. It extends along the left bank of the Hlaing, the docks being opposite to it at the suburb of Da-la, on the other side of the river. Behind is the large military cantonment, grouped round the fortified hill (166 feet) on which stands the Shway-Dagôn pagoda, 'the most venerated object of worship in all the Indo-Chinese countries.' It is built of brick, is lavishly gilded, and tapers up to a cone 321 feet high; it is said to have been erected in the 6th century B.C. The streets are laid out regularly; the river is carefully embanked; there are five markets and an excellent water-supply; the thoroughfares are well lighted and traversed by tramway cars; and there has been an elective municipality since 1883. Forts and batteries protect the town. The principal buildings are the public and governmental offices, the Anglican cathedral (whose foundation-stone was laid by Lord Dufferin in 1886), the native pagodas, the chief jail of Lower Burma, the Phayre Museum in the horticultural gardens, St John's College, the high school, a hospital, &c. Along the river-side are numerous rice-husking-mills and saw-mills. Pop. (1852) 25,000; (1872) 89,897; (1881) 134,176; (1901) 234,885. Rangoon is the chief port of Burma (q.v.), about 86 per cent. of the total trade of that country passing in and out here. Under British sway, its trade has grown wonderfully. A town has existed here since the 6th century B.C., which was called Dagon till its capture by the Burmese sovereign Alompra in 1760, when it was renamed and rebuilt. It was first held by the British in 1825–27.

Rangpur' (*u* as *oo*), a town of Bengal, on the Ghaghat, an arm of the Brahmaputra, 110 miles SE. of Darjiling. Pop. 14,500.

Rannoch, a bleak, desolate moorland of north-west Perthshire, with a mean elevation of 1000 feet above sea-level, and measuring 28 miles by 15. It is crossed by the West Highland Railway (1894). In its western part is Loch Lydoch (5¼ miles × ½ mile; 924 feet above sea-level), which winds amid flat and dismal scenery. Stretching eastward from the moor is Loch Rannoch (9⅜ miles × 1½ mile; 668 feet), which is overhung by Schiehallion, contains a crannog with a later fortress, and sends off the Tummel 29 miles E. and SSE. to the Tay. Loch Tummel (2¾ miles × ½ mile; 480 feet) is an expansion of this river, on which are also the Falls of Tummel, 20 feet high.

Rapallo, a winter health-resort of Northern Italy, 17 miles by rail ESE. of Genoa, with a castle and the pilgrimage church of the Madonna (1557) on the Monte Allegro. Pop. 5625.

Raph'oe, a market-town of Donegal, 15 miles SSW. of Londonderry. Its former see was united to Derry in 1835. Pop. 803.

Rapidan. See RAPPAHANNOCK.

Rappahannock, a river of Virginia, rises in the Blue Ridge of the Alleghany Mountains, receives the Rapidan, and flows 125 miles south-east to Chesapeake Bay. It is tidal and navigable to Fredericksburg.

Raratong'a. See COOK ISLANDS.

Ras'tatt, or RASTADT, a fortified town of Baden, on the Murg, 3 miles from the Rhine, and 15 SW. of Carlsruhe. Steel wares, beer, and tobacco are manufactured. Pop. 14,000.

Ras'trick, a town of Yorkshire, on the Calder, with cotton and woollen manufactures and quarries, now incorporated with Brighouse (q.v.).

Ratak. See MARSHALL ISLANDS.

Rathang'an, a market-town on the Little Barrow, 6 miles NW. of Kildare. Pop. 615.

Rathdowney, a town in Queen's County, 3½ miles S. of Ballybrophy station. Pop. 1046.

Rathdrum', a market-town on the Avonmore, 9 miles SW. of Wicklow. Pop. 644.

Rathenow (*Rāh'te-now*), a town of Prussia, on the Havel's right bank, 43 miles W. by N. of Berlin. Pop. 22,500.

Rathfry'land, a Down market-town, 9 miles SE. of Newry. Pop. 1290.

Rathkeale', a town of Ireland, on the river Deel, 19 miles SW. of Limerick by rail. Pop. 1750.

Rath'lin, a crescent-shaped island off the coast of Antrim, 6½ miles N. of Ballycastle. Measuring 6½ by 1½ miles, and 3398 acres in area, it has fine cliffs, and attains a maximum altitude of 449 feet. The valleys are fertile, but fishing is the leading industry. Rathlin is identified with the *Ricinia* of Ptolemy, and *Raghlin* or *Ragherin* ('fortress of Ireland') of later writers. St Columba established a church here in the 6th century; and Bruce in 1306 took refuge in a castle, now a ruin. Pop. 300.

Rathmel'ton, or RAMELTON, a Donegal market-town, on Lough Swilly, 7 miles NE. of Letterkenny. Pop. 1165.

Rath'mines, a S. suburb of Dublin.

Rathmul'len, a Donegal village, on Lough Swilly, 7 miles NE. of Rathmelton. Pop. 511.

Rathnew', a village, 2 miles W. of Wicklow.

Rath'o, a Midlothian village, 8 miles WSW. of Edinburgh. Pop. 755.

Ratibor', a town of Prussian Silesia, on the Oder, 44 miles SSE. of Oppeln, chief town of the principality of Ratibor, from 1288 to 1532, since 1742 subject to Prussia. It manufactures iron, tobacco, shoes, paper, glass, sugar, &c. Pop. 30,750.

Rat'isbon (Ger. REGENSBURG), a town of Bavaria, on the Danube's right bank, 82 miles by rail NNE. of Munich. Formerly a free city of the empire and seat of the Diet, Ratisbon presents a mediæval character, with narrow, crooked streets, and high gabled houses. The noble Gothic cathedral, begun in 1275, was not completed till 1534. The church of the Irish (*Scoti*) Benedictines dates from the 12th century, and is built in the pure Byzantine style. The old townhall was (1645–1806) the place of meeting for the imperial diet. There are also the Thurn and Taxis Palace, the royal villa, &c. A stone bridge (1135–46), 1024 feet long, connects Ratisbon with the busy trading suburb of Stadt am Hof. The manufactures include porcelain and stoneware, brass and steel wares, leather, tobacco, lead-pencils, chemicals, &c., and there is an active trade, especially in corn and salt. Pop. (1875) 31,487; (1900) 46,215. Originally a Celtic town, Radasbona was made by the Romans a frontier fortress; later it was the capital of the Dukes of Bavaria, and one of the most populous cities of southern Germany. Here were signed the Ratisbon Interim in 1541 and the armistice between France and Austria in 1684. The city was stormed by Bernhard of Weimar in 1633, and by both Austrians and French in 1809. It was ceded to Bavaria in 1810.

Ratlam. See RUTLAM.

Ratnagiri (nearly as *Rutnagher'ry*), a coast-town of India, 136 miles S. by E. of Bombay. Pop. 14,500.

Rattray, a police-burgh of Perthshire, on the Ericht, opposite Blairgowrie. Pop. 2025.

Ratzeburg, a town of Lauenburg, 35 miles ENE. of Hamburg. Here Coleridge learned German. Pop. 4315.

Ravelston, a seat of the Keiths, 2½ miles W. of Edinburgh.

Ravenglass, a Cumberland seaport, 4½ miles N. by W. of Bootle.

Ravenna, a walled city of Italy, 43 miles E. of Bologna, once close to, but now some 5 miles from the Adriatic, with which it is connected by the Corsini Canal. It has been the seat of an archbishop since 438, and possesses a museum, a public library, a picture-gallery, municipal buildings (with a leaning tower), a theatre, &c. It manufactures silk, linen, paper, and glass. The streets are wide, and the squares are adorned with statues of the popes. Pop. 64,000. Deserted by the sea, and strongly entrenched by canals and marshes, Ravenna became the refuge of the Emperor Honorius (402), and the capital of Italy for the next 350 years. It attained its greatest glory under Theodoric the Ostrogoth (493–526), whose mausoleum (La Rotonda)—now empty—is without the walls. Conquered by the generals of Justinian, Ravenna was the seat of exarchs from Constantinople until 752, when it was taken by the Lombards, and afterwards by the Franks, by whom it was gifted to the pope. A republic in the early part of the 13th century, governed by its own dukes in the 14th, subject to Venice after 1440, it was won by Pope Julius II. in 1509, and continued papal until 1860. There are at least six churches of the time of Galla Placidia (390–450), the sister of Honorius and mother of Valentinian III. The *round* campaniles, perhaps of the 10th century, form an architectural feature peculiar to Ravenna. Dante died at Ravenna in 1321, and is buried there. A column, 2 miles from the walls, commemorates the fall of Gaston de Foix at the head of the French army of Louis XII., after a bloody and useless victory over the papal and Spanish troops in 1512. Byron resided at Ravenna, 1819–21.

Ravensburg (*Rāh-fens-boorg*), a town of Würtemberg, 11 miles by rail NNE. of Friedrichshafen on Lake Constance. Pop. 13,467.

Ravenspur. See HUMBER.

Ravi. See PUNJAB.

Rawal Pindi, a town and military station of the Punjab, lies between the rivers Indus and Jhelum, 160 miles by rail NW. of Lahore. It has an arsenal (1883), a fort, a public park, and an active transit-trade with Cashmere and Afghanistan. Here the Sikhs surrendered in 1849. Pop. (1868) 28,586; (1881) 52,980; (1901) 87,688.

Rawdon, a Yorkshire town, 6 miles NE. of Bradford, with cloth manufactures. Pop. 3177.

Rawitsch (*Rāh'vitch*), a town of Prussia, 64 miles by rail S. of Posen. Pop. 11,919.

Rawmarsh, a Yorkshire town, 2¼ miles N. by E. of Rotherham, with china and iron works and collieries. Pop. (1851) 2533; (1901) 14,587.

Rawtenstall, a town of Lancashire, 4 miles W. of Bacup. A municipal borough (1891), it manufactures cottons and woollens. Pop. 31,050.

Ré, ÎLE DE (*Ray; Rex insula*), is a small, low-lying island off the French dep. of Charente-Inférieure, opposite La Rochelle. It is 18 miles long and 3 broad, measures 28 sq. m., and has about 14,000 inhabitants, who make salt. The west coast is rocky; on the east are good harbours. Oyster-farming is an industry, and wine is exported. The chief town, St Martin (pop. 2523), was fortified by Vauban. Ars and La Flotte have 1547 and 2593 inhabitants.

Reading (*Red'ding*), a municipal, parliamentary, and county borough, capital of Berkshire, on the Kennet, near its influx to the Thames, 36 miles by rail W. of London (by road 39, by river 74). Its castle was wholly demolished by Henry II.; but the splendid Benedictine abbey, founded in 1121 by Henry I., who was buried here, is represented by considerable ruins and a fine gateway, restored in 1861, and surrounded by public gardens. Nine parliaments were held within its hall; the last of its mitred abbots was hanged by Henry VIII., with two of the brethren. There are handsome municipal buildings and two excellent town-halls, a lofty clock-tower, a free library, concert room, museum, &c. Other buildings are the Italian assize courts (1861); a large grammar-school (1486; rebuilt 1870–71), of which Dr Valpy was long head-master; St Lawrence's Church (1434; restored 1868), with a large flint tower 189 feet high; and the Royal Berkshire Hospital. Drainage-works were completed in 1874, waterworks in 1878; and the largest (59 acres) of three public parks was gifted in 1891 by Mr G. Palmer. Reading is an important mart for corn and other agricultural produce, and has manufactures of iron, paper, sauce, &c., whilst two of its industrial establishments are world-famous—Huntley and Palmer's huge biscuit factory and Sutton's seed-emporium. Reading, which is in the diocese of Oxford, gives title to a suffragan bishop. Its representation was reduced from

two to one in 1885, when, however, the parliamentary borough was extended. The first charter was granted by Edward III. Pop. (1851) 21,456; (1891) 55,666; county borough (1901) 72,217. Reading suffered much from the Danes between 868 and 1006, and in 1643 surrendered to Essex after a ten days' siege. It was the birthplace of Archbishop Laud, Justice Talfourd, and Goldwin Smith. It has memories also of Chaucer and Bunyan. See works by Coates (1802–9), Man (1816), Doran (1835), and J. B. Jones (1870).

Reading, (1) a city of Pennsylvania, capital of Berks county, on the Schuylkill River, 58 miles by rail NW. of Philadelphia. It draws from the neighbouring hills its water-supply and abundant iron ore, the principal manufactories being iron and steel works. It also makes shoes, hats, beer, cigars, leather, paper, bricks, &c. Settled in 1748, it became a city in 1847. Pop. (1880) 43,278; (1900) 78,961, many of German descent.—(2) A town of Massachusetts, 12 miles NW. of Boston. Pop. 5000.

Recanati, a town of Italy, 15 miles S. of Ancona, has a Gothic cathedral. Here Leopardi was born. Pop. 15,590. Porto Recanati, on the Adriatic, 6 miles NE., has a pop. of 5000.

Recife (*Ray-see'fey*). See PERNAMBUCO.

Recklinghausen, a town of Westphalia, 22 miles NW. of Dortmund. Pop. 35,000.

Reculver, a village of Kent, 1 mile from the sea, and 9 miles W. of Margate, with remains of the Roman station *Regulbium*. Pop. 294.

Red'car, a popular bathing-resort in the North Riding of Yorkshire, 10 miles by rail NE. of Middlesborough. Its smooth, firm sands stretch 10 miles from the mouth of the Tees to Saltburn. Pop. (1851) 1032; (1901) 7695.

Redditch, a busy town on the borders of Worcester and Warwick shires, stands on an acclivity 13 miles SSW. of Birmingham by rail. Needles, pins, fish-hooks, and fishing-tackle are made extensively. Pop. (1851) 4802; (1901) 13,493.

Redesdale, the valley of the river Reed in Northumberland, extending 21 miles SE. and SW. from the Scottish border, until it opens into the valley of the North Tyne at Reedsmouth. Watling Street traverses its middle and upper part. Near the southern end of Redesdale is the famous field of Otterburn (q.v.); and near its source was fought the 'Raid of the Redeswire,' 7th July 1575. The men of Redesdale of old were brave and turbulent, and bore more than their share in Border feuds and forays.

Redout Kalé (*Redoot' Kah-lay'*), a fortified post on the Black Sea coast of Caucasia, 10 miles N. of Poti, captured by the British fleet in 1854.

Red River, the lowest western tributary of the Mississippi, rises near the eastern border of New Mexico, and flows 1600 miles E. and SE. through or along the borders of Texas, Indian Territory, Arkansas, and Louisiana, till it enters the Mississippi below 31° N. lat. Of its feeders the Washita (Ouachita) is the most important.

Red River of the North, a navigable river of the United States and Canada, rises in Elbow Lake, Minnesota, near the sources of the Mississippi, forms the boundary between Minnesota and North Dakota, and flows into Manitoba and through a flat country to Lake Winnipeg. Its course is 665 miles (525 in the United States). The Red River rebellion of the Canadian half-breeds (1869–70) was headed by Louis Riel, and suppressed by Colonel (Lord) Wolseley.

Red River Settlement. See MANITOBA.

Redruth (*Red'rooth*), a town of Cornwall, on a hillside (414 feet) in the centre of a great mining-district, 9 miles by rail W. by S. of Truro. It has a town-hall (1850), public rooms (1861), a miners' hospital (1863), &c. William Murdock here in 1792 first used gas for lighting purposes. Pop. 10,450.

Red Sea, an arm of the Indian Ocean, running NNW. from the Gulf of Aden, with which it communicates by the Strait of Bab-el-Mandeb, 13½ miles across. Its length is about 1200 miles, and its greatest breadth 205 miles; it narrows towards the southern entrance, while in the north it is divided by the peninsula of Sinai into two gulfs, the Gulf of Suez, 170 miles long by 30 miles wide, and the Gulf of Akaba, 100 miles in length. The Arabian coasts of the Red Sea are usually narrow sandy plains backed by ranges of barren mountains; the African coasts towards the north are flat and sandy, but southwards high tablelands rise inland, culminating farther south in the lofty mountains of Abyssinia. A marked feature of the Red Sea is found in the partly upraised coral-reefs running parallel to both eastern and western shores; the Farisan Archipelago is in the eastern and larger reef, and the island of Dahlak, off Annesley Bay, in the western reef. There is also a volcanic group lying in 14° N. lat., the largest of which rises 2074 feet. The principal harbours are Mocha, Hodeida, Lokeyyah, Jiddah, and Yenbo' on the Arabian coast, and Massowah, Khor Nowarat, and Suakim on the African coast. A great trade route till the rounding of the Cape of Good Hope, the Red Sea has become a vastly more important route since the construction of the Suez Canal. The tides are very variable, depending largely on the direction and force of the winds. The mean temperature of the air generally ranges between 70° and 94° F. during the day, though readings of over 100° are often registered in the shade; but during the night the temperature may fall to the freezing-point, owing to radiation in the clear and cloudless atmosphere. The mean temperature of the surface water varies at the northern end between about 65° and 79° F., in the central regions between 75° and 86°, and at the southern end between 78° and 89°. The salinity of the water is almost constant at about 1·030 (ordinary ocean water is about 1·026). No rivers flow into it, little rain falls, and evaporation is excessive. The greatest depth, near the centre, is about 1200 fathoms, and the mean depth about 375 fathoms. The marine fauna and flora are extensive. The origin of the name—Lat. *Mare Rubrum* and Gr. *Erythra Thalassa*—is much disputed.

Ree, LOUGH, a lake between Connaught and Leinster, is an expansion of the Shannon (q.v.).

Reed. See REDESDALE.

Regalbu'to (*u* as *oo*), a town of Sicily, 25 miles WNW. of Catania. Pop. 12,250.

Regensburg (*Ray'gens-boorg'*). See RATISBON.

Reggio (*Red'jo;* anc. *Rhegium Julii*), (1) a seaport of South Italy, stands on the Strait of Messina, 9 miles SE. of the city of Messina in Sicily. It has a fine archiepiscopal cathedral, and manufactures silks, scented waters, gloves, stockings, and caps. Pop. 44,500.—(2) A walled city of Central Italy, Ariosto's birthplace, on the ancient *Via Emilia*, 17 miles by rail SE. of Parma. It has a 15th-century cathedral, a fine theatre, and a model lunatic asylum. Pop. 60,000.

Regina (*Rejī'na*), capital of the Canadian prov-

ince of Saskatchewan as constituted in 1905, and including Assiniboia (of which it was capital), 357 miles by rail W. of Winnipeg. Pop. 2650.

Reichenbach (*Rī'hhen-bahh*), (1) a manufacturing town of Saxony, 11 miles SW. of Zwickau, produces woollen fabrics—merinoes, flannel, shawls, quilts, cashmere—and has wool-spinning, dyeing, and calico-printing works. Pop. 25,500.—(2) A town of Prussian Silesia, 46 miles by rail SE. of Liegnitz. Pop. 15,250.

Reichenberg (*Rī'hhen-berg*), the chief seat of the cloth manufacture in North Bohemia, stands on the Neisse, 86 miles by rail NE. of Prague. Apart from the principal industry, which dated from the 16th century, and in which, in the town and neighbourhood, some 10,000 workmen are employed, cotton and woollen fabrics, machinery, and leather are manufactured. Pop. 35,000.

Reichenhall (*Rī'hhen-hāl*), an Alpine spa in the extreme south-east of Bavaria, 10 miles SW. of Salzburg. It was handsomely rebuilt after the great fire in 1834. It is the chief centre of the Bavarian salt-works, and in the manufacture of salt its inhabitants are mostly employed, though the delightful air of the valley in which it stands, and its fifteen saline springs, attract about 6000 visitors every summer. Pop. 4200.

Reigate (*Rī'gayt*), a thriving market-town of Surrey, at the southern base of the North Downs, 21 miles S. of London. Of the castle of the Earls of Warrenne little remains save a grassy mound, with large vaults or caverns beneath it. The church, with Transition Norman piers, but mainly Perpendicular, contains the grave of Lord Howard of Effingham, and a library (1701) with some curious MSS. and many of Evelyn's books. Other buildings are the public hall (1861) and the grammar-school (1675). Foxe the martyrologist is claimed for a resident; and Archbishop Usher died here. Till 1832 Reigate returned two members, then one till 1867. It became a municipal borough in 1863. Pop. (1851) 4927; (1901) 25,993.

Reikiavik (*Rīk'ya-vik*). See Iceland.

Reims. See Rheims.

Rembang, a town on the north coast of Java, capital of a residency that has an area of 2896 sq. m. and a pop. of 1,500,000.

Remiremont (*Re-meer-mon^{g}*), a town of France (dep. Vosges), on the Moselle, 17 miles by rail SE. of Epinal, with sawmills and muslin, cotton, and leather factories. It was the seat of a famous Benedictine nunnery, founded in 620. Pop. 8870.

Remscheid (*Rem-shide*), a town of Rhenish Prussia, 6 miles S. of Elberfeld-Barmen, manufactures iron wares, cutlery, &c. Pop. (1871) 22,017; (1890) 40,371; (1900) 58,100.

Renaix (*Re-nay'*), a Belgian town, 25 miles by rail S. by W. of Ghent. Pop. 20,100.

Rendsburg (*u* as *oo*), a town of Sleswick-Holstein, on the North Sea and Baltic Canal, 19 miles W. of Kiel. Pop. 14,730.

Ren'frew, an ancient royal and parliamentary burgh, the county town of Renfrewshire, stands on the south bank of the Clyde, 6 miles below Glasgow. A knoll called Castlehill marks the site of the original seat of the royal house of Stewart. Anciently the chief port on the Clyde, Renfrew has still a small wharf; and there is some shipbuilding and weaving. It forms one of the Kilmarnock (q.v.) group of burghs. There is a town-hall (1873). Pop. (1841) 2013; (1901) 9296.

Renfrewshire, a Scottish county, bounded N. by the river and Firth of Clyde, and elsewhere by Lanarkshire and Ayrshire. It is 31 miles long by 13 broad, and contains 254 sq. m. or 162,428 acres, of which 5642 are water and foreshore. Pop. (1801) 78,056; (1881) 263,374; (1901) 268,980. Till 1889 part of the southern suburbs of Glasgow was reckoned within the county. The surface is irregular: besides the low lands fringing the Clyde, there are three principal valleys, those of the Gryfe, Black Cart, and White Cart, with upland pastures and ranges of hills, the highest point being the Hill of Stake (1711 feet) on the Ayrshire border. Agriculture and the breeding of horses and cattle are carried on with success; dairy-farming is largely practised, owing to the proximity of large towns. Rather less than two-thirds of the whole extent is arable, mainly in pasture or grass crops. The minerals are coal, iron-stone, copper, barytes, shale, and lime. Besides mining and agriculture, the chief industries are the manufacture of thread, cotton, and chemicals, print and bleach works, shipbuilding, engineering, and sugar-refining. Renfrewshire is divided into two wards, Upper and Lower, and two parliamentary divisions, eastern and western, each returning one member. The chief towns are Renfrew, Paisley, Greenock, Gourock, Port-Glasgow, Pollokshaws, Johnstone, and Barrhead. Renfrewshire, or at least the western portion, was anciently called Strathgryfe, and it was the chief patrimony of the house of Stewart. In 1404 the title of Baron of Renfrew (still borne by the Prince of Wales) was conferred by Robert III. on his son James; and about the same time Renfrew was disjoined from Lanarkshire and made a separate county. See Crawford's *History* (1716), and *Archæological and Historical Collections* (Paisley, 1885 *et seq.*).

Reni (*Ray'nee*), a Russian town of Bessarabia, at the Pruth's influx to the Danube, 10 miles E. of Galatz. Pop. 6000.

Rennes (*Renn;* the *Condate* of the Redones), the capital formerly of the province of Brittany, and now of the dep. of Ille-et-Vilaine, is situated at the confluence of those two rivers, 234 miles WSW. of Paris and 51 SSE. of St Malo. A seven days' fire in 1720 destroyed nearly 4000 houses. The most noteworthy of the public buildings are the cathedral, finished in 1844, and Italian in style; Notre Dame, with its dome surmounted by a huge image of the Virgin; the archbishop's palace (1672); the stately Palais de Justice (1618–54); the university buildings (1855); the theatre (1835); the Hôtel de Ville, with a public library; and the Lycée. As the focus of railways between Paris and the north-west of France, and commanding good river and canal navigation, Rennes is favourably situated for commerce. The manufactures include sail-cloth, table-linen, &c. Pop. (1872) 48,658; (1901) 64,395.

Renton, a town of Dumbartonshire, on the Leven's right bank, 2 miles N. by W. of Dumbarton. Founded in 1782, it has a Tuscan column (1774) to the novelist Smollett, who was born close by, and it carries on calico-printing, dyeing, and bleaching. Pop. 5100.

Repton, a Derbyshire village, 6½ miles SSW. of Derby and 4½ NE. of Burton-upon-Trent. Here was founded the first Christian church in Mercia, of which Repton for a while was the royal and episcopal capital. It was the seat from before 660 till its destruction by the Danes in 874 of a celebrated nunnery, as afterwards of an Austin priory from 1172 till the Dissolution. Remains of this priory are incorporated in the buildings of the free grammar-school, which, founded in

1556 by Sir John Porte, has risen to be one of the great English public schools, with some 20 masters and 275 boarders. The parish church has a graceful spire and a very interesting Saxon crypt, 17 feet square. Pop. of parish, 1700. See Bigsby's *History of Repton* (1854).

Requeña (*Ray-kayn'ya*), a town of Spain, 37 miles W. of Valencia. Pop. 14,409.

Reshd, a town of Persia, capital of the province of Ghilan, stands near the south-west shore of the Caspian Sea, 150 miles NW. of Teheran. The port is Enzeli, on the other side of the bay, and 16 miles distant. Pop. 35,000.

Resina (*Rez'eena*), a town of Italy, 4 miles SE. of Naples, at the foot of Vesuvius, and facing the sea. It is built on the site of ancient Herculaneum. Pop. 16,626.

Restalrig, a village close to Jock's Lodge (q.v.).

Restigouche (*Restigoosh'*), a river of Canada, flowing 200 miles SE., E., and NE. through or along the borders of Quebec and New Brunswick, into the Bay of Chaleurs.

Retford, East, a Nottinghamshire market-town, on the right bank of the Idle, an affluent of the Trent, 24 miles E. by S. of Sheffield and 138 NNW. of London. It has a handsome town-hall (1867), a grammar-school (1552; rebuilt 1858), paper-mills, iron-foundries, &c. It was incorporated by James I., the municipal boundary being extended in 1878. The parliamentary borough was extended in 1829 to take in all Bassetlaw wapentake—since 1885 one of the four county divisions. Pop. of mun. borough (1851) 2943; (1901) 12,340. See a History by Piercy (1828).

Rethel (*Re-tel'*), a French town (dep. Ardennes), 24 miles NE. of Rheims. Pop. 6019.

Retimo (*Retee'mo*), a seaport of Crete, on its north coast, 40 miles W. of Candia. Pop. 10,000.

Réunion (Fr. pron. nearly *Ray-een-yon$^{g''}$*), a French island in the Indian Ocean, 115 miles SW. of Mauritius and 350 E. of Madagascar. An ellipse in shape, it has an area of 970 sq. m., being 38 miles long and 28 broad. Population, 175,000, mostly Creoles, with 15,000 negroes and nearly 30,000 natives of India. The backbone of the island is a volcanic range, culminating in the Piton de Neiges (10,069 feet), and in Piton de Fournaise (8612 feet), an active volcano. Streams, although not large, are very numerous, and fall in cascades to the sea. The climate is hot, but on the whole not unhealthy. Cyclones sometimes do serious damage. One-third of the island is cultivated, one-third under timber, and one-sixth is grass-land. Tropical fruits, sugar (the staple crop), coffee, vanilla, cinchona, maize, vegetables (potatoes, &c.), spices, tobacco, &c. are grown. By far the chief export is sugar; coffee, vanilla, rum, potatoes, and tapioca are the other exports. The capital is St Denis, on the north coast, with 33,000 inhabitants, a college, a botanic garden, &c.; it is a bishop's seat. St Paul, on the north-west, has 29,000 inhabitants; St Pierre, on the south-west coast, 25,000. The coast towns are connected by a railway 78 miles long. Réunion and Mauritius, the 'Mascarene Islands,' were discovered by the Portuguese, Mascarenhas. The French took this island in 1649, calling it successively Île de Bourbon, Réunion (1793), Isle Bonaparte (1809), and Réunion again since 1848. The island was held by Britain from 1810 to 1815.

Reus (*Ray'oos*), a town of Spain, 58 miles by rail SW. of Barcelona and 4 N. of its seaport, Salou. Its prosperity dates from 1750, when English merchants settled here. It manufactures cotton, silk, ribbons, wine, soap, brandy, and leather. Pop. 27,500.

Reuss (*Roiss*), a tributary, 190 miles long, of the Aar (q.v.), in Switzerland.

Reuss (*Roiss*), two sovereign principalities of Germany, lying between Saxony, Prussian Saxony, and Bavaria. Since 1666 the possessions of the House of Reuss have been divided between the Elder and the Younger lines. The principality of Reuss-Greiz (the Elder Line) is 122 sq. m. in extent, and has some 70,000 inhabitants; the chief town is Greiz (q.v.). The principality of the Younger Line is Reuss-Schleiz-Gera; area, 319 sq. m.; population, 142,000; capital, Schleiz (q.v.). Of both principalities the surface is hilly, being traversed by the Frankenwald (Thüringer Wald), whose summits exceed 2000 feet. The chief rivers are the Saale and White Elster.

Reutlingen (*Roit'ling-en*), a pleasant town of Würtemberg, on a feeder of the Neckar, 8 miles E. by S. of Tübingen, manufacturing woollen and cotton yarns, cloth, leather, cutlery, hosiery, paper, &c. The noble church of St Mary (1247–1343), has a tower 243 feet high. Pop. 21,500.

Rev'al, or Revel, a Russian seaport, capital of Esthonia, stands on a small bay on the south side of the Gulf of Finland, opposite Helsingfors (52 miles distant), and 232 miles by rail WSW. of St Petersburg. The (old) upper town contains the cathedral, the castle, governor's residence, and the houses of the (German) nobility. There are several mediæval guild-houses, and an important museum of antiquities. Reval exports cereals (chiefly oats), spirits, flax, &c.; and imports cotton, coal, &c. Brandy, vinegar, and wool are manufactured. Pop. 64,600, one-half being Esthonians, and one-fourth of German descent. Founded by Waldemar II. of Denmark in 1219, Reval became a flourishing Hanse town. It was long held (from 1346) by the Livonian Knights, was made over to Sweden in 1561, and was annexed to Russia in 1710.

Revere, a town and bathing-place of Massachusetts, 5 miles N. of Boston, named after the patriot Paul Revere. Pop. 11,000.

Revilla-Gigedo (Span. pron. *Re-veel'ya-Hee-hay'do*), a rocky and uninhabited island-group in the Pacific, 400 miles W. of the coast of Mexico, to which it belongs. Socorro, a mountain-island 24 miles long, is the largest.

Rewá (*Ray-wa*), the principal native state of Baghelkhand (q.v.), named from a tributary of the Son, which flows NE. to the Ganges near Dinapur; its chief town, also called Rewá (pop. 24,626), is 130 miles SW. of Allahabad.—Rewá Kanthá ('Banks of the Rewá') is a political agency under the government of Bombay, containing sixty-one small states, mostly tributary to Baroda. Covering 4980 miles, with a pop. of 500,000, it lies mainly along the south bank of the lower Nerbudda, and on the west borders on Broach, Baroda, and Ahmadabad.

Rewari (*Ray-wáh'ree*), a town of Gurgaon district, 50 miles SW. of Delhi by rail. Pop. 27,934.

Reyk'javik. See Iceland.

Rhætia (*Reeshia*), an ancient Roman province embracing a large part of the Alpine tract between the basins of the Po and the Danube, now included in the Grisons and the Austrian Tyrol.

Rhayader (Welsh, 'waterfall'), a Radnorshire (q.v.) market-town, on the Wye, 14 miles S. of Llanidloes. Pop. of parish, 788.

Rhé (*Ray*), Île de. See Ré.

Rhegium. See Reggio.

Rheidol, a Cardiganshire river, flowing 22 miles to the sea at Aberystwith.

Rheims (*Reems*; Fr. pron. *Ranss*), or Reims, a city in the French dep. of Marne, situated on the Vesle (a tributary of the Aisne), 100 miles ENE. of Paris by rail. Strongly fortified with detached forts since the Franco-German war, when it was for a time the German headquarters, it is well built, and has a picturesque appearance. It is built on the site of *Durocortorum*, which Cæsar mentions as the capital of the Remi, from whom it subsequently took its present name. Under the Frank rule it was a place of much importance, and in 496 it was the scene of the baptism of Clovis and his chief officers by the bishop, St Remy. About 360 it became a bishopric, and in the 8th century an archbishopric. From 1179, when Philip Augustus was crowned here, it was the coronation place of the kings of France, who were anointed from a vessel of sacred oil, the *Sainte Ampoule*, said to have been carried to St Remy from heaven by a dove. Joan of Arc brought the dauphin hither, and the only sovereigns down to 1825 not crowned at Rheims were Henry IV., Napoleon I., and Louis XVIII. In 1793 the cathedral was attacked by the populace, and the sainte ampoule smashed by a sansculotte. The cathedral (1212–1430), although the towers of the original design are still unfinished, is one of the finest extant specimens of Gothic architecture. Its nave is 466 feet long by 99 in breadth, with a transept of 160 feet, and the height is 144 feet. Its grandest features are the west façade, which is almost unrivalled, with its magnificent doorway, and the so-called Angel Tower, which rises 59 feet above the lofty roof. The Romanesque church of St Remy (mainly 1160–80), with the saint's shrine, is nearly of equal size. Also noteworthy are the hôtel-de-ville (1627–1880); the ancient 'Maison des Musiciens' and archiepiscopal palace; the Porta Martis, a Roman triumphal arch; the Lycée, representing a former university (1547–1793); and and Marshal Drouis XV. and two natives, Colbert principal entrepôts for cet. Rheims is one of the and the hills round the m the wines of Champagne, vineyards. It is one of the l town are planted with woollen manufacture in Fra s a great centres of the factures, embracing woollen s nce, and its manumerinoes), mixed fabrics in silk a goods (especially known in commerce as *Articles de* d wool, &c., are (1872) 71,397; (1901) 108,385. *Reims.* Pop.

Rheingau (*Rine'gow*), a wine-growing district, 14 miles long, stretching along the right b ank of the Rhine, from opposite Mainz to the villa ge of Lorch, 8 miles below Bingen.

Rhenish Prussia (Ger. *Rheinland*, or *Rhei nal-preussen*), the most western and most thickly peopled of the provinces of Prussia, lies on th y Rhine and Lower Moselle, and is bounded W. by Luxemburg, Belgium, and the Netherlands. Long and narrow, it extends from Cleves in the north to Saargemünd in the south, and contains Cologne, Aix-la-Chapelle (Aachen), Treves, Coblenz (the capital), Elberfeld-Barmen, Essen, Bonn, Düsseldorf, and Crefeld. Area, 10,419 sq. m.; pop. (1885) 4,344,527; (1900) 5,759,798, of whom 4,400,000 were Roman Catholics and 15,000 Walloons. The surface is everywhere more or less mountainous, except in the extreme north, reaching 2500 feet on the west of the Rhine, but only 1800 on the east side. The valleys of the Rhine, Moselle, and Nahe are very fruitful, and so are the flat districts in the north. Of the total area, 64 per cent. is cultivated, including meadows and vineyards, and nearly 31 per cent. under forest. More than sixteen million tons of coal are mined in the year, also large quantities of iron, zinc, and lead ore. The sulphur-springs of Aix-la-Chapelle and Burtscheid have a European reputation. Industry and manufactures are prosecuted with the greatest energy and success, this province ranking first in all Prussia in this respect. It was formed in 1815 out of the duchies of Cleves, Jülich (Juliers), Guelders, Berg, &c.

Rheydt (*Rite*), a town of Rhenish Prussia, 19 miles by rail W. by S. from Düsseldorf. It manufactures silks, velvets, cottons, machinery, hardware, paper, dyeworks, and breweries. Pop. 35,000.

Rhin (*Ran*), Bas and Haut, until 1871 frontier deps. of France, corresponded nearly to what are now the two districts of Lower and Upper Alsace, in German Alsace-Lorraine (q.v.). See Belfort.

Rhine (Ger. *Rhein*, Fr. *Rhin*, Dutch *Rhijn*, Lat. *Rhenus*), one of the most important rivers of Europe. A large number of rivulets, issuing from Swiss glaciers, unite to form the young Rhine; but two are recognised as the principal sources—the Nearer and the Farther Rhine. The former emerges on the north-east slope of the St Gotthard mass (7690 feet above sea-level), the other side of which is the cradle of the Rhone; the Farther Rhine has its origin on the flank of the Rheinwaldhorn (7270 feet), not far from the Pass of Bernardino. The two mountain-torrents meet at Reichenau, 6 miles SW. of Coire (Chur) in the Grisons canton, after they have descended, the Nearer Rhine 5767 feet in 28 miles, the Farther Rhine 5347 feet in 27 miles. After ploughing its way N. for 45 miles between Switzerland and Austrian Vorarlberg, the river enters the Lake of Constance, soon after leaving which, its water a deep transparent green, it plunges down the falls of Schaffhausen, nearly 70 feet in three leaps, and flows westwards to Basel, separating Baden from Switzerland. In this stretch the river (490 feet wide), receives from the left the waters of the Aar. At Basel (742 feet), now 225 yards wide, it wheels round to the north, and traversing an open shallow valley that separates Alsace and the Bavarian Palatinate from Baden, reaches Mainz, split into many side arms and studded with green islands. Navigation begins at Basel. Of the numerous affluents here the largest are the navigable Neckar and the Main from the right, and the navigable Ill from the left. A little below Mainz the Rhine (685 yards wide) is turned west by the Taunus range; but at Bingen it forces a passage through, and pursues a northwesterly direction across Rhenish Prussia, past Coblenz, Bonn, Cologne, Düsseldorf, Ruhrort, and Wesel as far as the Dutch frontier; here it is 1085 yards wide and 36 feet above sea-level. The first half of this portion of the river from Bingen to Bonn is the Rhine of song and legend, the Rhine of romance, the Rhine of German patriotism. Its banks are clothed with vineyards that yield wine esteemed the world over; the rugged and fantastic crags that hem in its channel are crowned by ruined castles; the treasure of the Nibelungs rests at the bottom of the river (higher up, at Worms); the Bingerloch (see Bingen) and the Mouse Tower of Bishop Hatto, the fortress of Ehrenbreitstein, the rock of the siren Lorelei, the commanding statue of

Germania (the trophy of German victory in 1870), and innumerable other features lend interest to this the middle course of 'Father Rhine.' Between Bingen and Bonn the steep rocky walls that fence in the river approach so close that road and railway have to find their way through tunnels. The Nahe enters the Rhine at Bingen, the Moselle at Coblenz; from the right side the Lahn enters above Coblenz. Gigantic rafts are floated down from the Black Forest to Dordrecht in Holland. Below Bonn the Rhine is joined by the Sieg, Wupper, Ruhr, and Lippe from the right.

At Bonn the river enters the plains, and almost immediately after passing the Netherlands frontier its delta begins. The principal arm, carrying two-thirds of the volume, flows under the name of the Waal, and later the Mermede, to Dordrecht, picking up the Maas (Meuse) from the left. At Dordrecht the river again divides for a bit, one branch, the old Maas, running out to sea; the other, the Noord, forming a loop by way of Rotterdam. The northern arm sends one branch, the Yssel, due north to the Zuider Zee; the other branch is the Lek, which runs into the Waal-Maas arm above Rotterdam. A thin stream, called the 'Winding Rhine,' leaves the Lek and splits at Utrecht into two channels, of which the Old Rhine, a mere ditch, manages with the help of a canal and locks to struggle into the North Sea at Katwyk, NW. of Leyden, while the Vecht flows due north from Utrecht to the Zuider Zee near Amsterdam. In the delta the streams have to be bordered by dykes. The area drained by the Rhine is estimated to be 75,773 sq. m., and its total length to be 760 miles, of which 550 in all are navigable. By canals it is connected with the Danube, Rhone, and Marne. Salmon, carp, pike, sturgeon, and lampreys are fished. The Rhine was the Romans' bulwark against the Teutonic invaders. Under Charlemagne the Rhine valley became the focus of civilisation. Except between 1697 and 1871 the Rhine was always a purely German river; at the peace of Ryswick, Alsace-Lorraine was appropriated by France, and the Rhine became part of the dividing line between France and Germany. In 1801 Napoleon incorporated the whole of the left bank with France; in 1815 the arrangement in force before 1801 was restored; and after 1871 the Rhine became once more wholly German. Down to the 19th century navigation was hampered by the riparian sovereigns or petty princelings, who levied vexatious dues. From 1803 all the powers concerned, except Holland, abolished most of the shipping dues on their own vessels navigating the Rhine, and Holland followed suit in 1831; but it was not until 1st July 1869 that the river was declared an absolutely free waterway to the ships of all nations. The first steamboat churned up its waters in 1817; now scores ply between Rotterdam and Mainz, and others along other stretches. More than 18,000 vessels of about 2,000,000 tons burden pass the frontier town of Emmerich going up stream every year. See Murray and Baedeker, and books by Stieler (trans. 1878), Simrock (1865–83), and Mehlis (1876–79).

Rhinns. See WIGTOWNSHIRE.

Rhode Island, the smallest of the United States, and one of the original thirteen states of the Union, is not itself an island, but takes its name from the *island* of Rhode Island (perhaps a corruption of the Dutch *Roodt Eylandt*, 'Red Island') in Narragansett Bay, which is but 15 miles long by 3½ broad. The length of the state from north to south is not quite 50 miles, its width about 40 miles, and its area 1085 sq. m. The northern and eastern sections are hilly, and the land slopes toward a level region in the south. The coast along the Atlantic Ocean measures about 45 miles, but Narragansett Bay penetrates inland some 30. The southern coast west of Point Judith is low and sandy. To the west the shores are formed by high rocky cliffs interspersed with beaches of sand. Newport (q.v.), Narragansett Pier, and Watch Hill, on the ocean coast, are famous seaside resorts. Coal of inferior quality has been mined; and there are deposits of iron ore, and excellent limestones and granite. Market-gardening is a leading occupation. Cotton manufacturing, with dyeing, bleaching, and calico-printing, are the great industries. The principal towns are Providence (since 1900 sole capital), Pawtucket, Woonsocket, Newport (till 1900 joint capital with Providence), and Central Falls. The Northmen are supposed to have visited Rhode Island in the 10th century. The first permanent settlement was made at Providence by Roger Williams in 1636. Pop. (1730) 17,935; (1830) 97,199; (1900) 428,556.

Rhodes, once a wealthy state of ancient Greece, now Turkish, lies 12 miles off the SW. coast of Asia Minor. It is 49 miles long by 21 broad, and 563 sq. m. in area, and is traversed by a chain of mountains, which in Mount Artemira (anc. *Atabyris*) attain 4070 feet. The soil produces wine, oranges, figs, olives, and other fruits; but much land lies waste, and the population is decreasing —34,000 in 1843, now barely 30,000, all Greeks except 7000 Turks and 2500 Jews. Sponges are an article of export. The Rhodians submitted to the Persians in 490 B.C., and to Alexander of Macedon in 332 B.C., beating off Mithridates in 88 B.C., and sided with Cæsar. In 1309, after a three years' siege, the city fell into the hands of the Knights Hospitallers of St John. The Turks besieged them there in 1480, and again in 1522–23, when they compelled them to capitulate. —The *city* stood at the northern extremity of the island, on the slopes of a natural amphitheatre; at the entrance of one of its two harbours stood the bronze colossus of Helios, the Sun-god (280 B.C.), 90 to 120 feet high, one of the seven wonders of the ancient world. The city has often suffered from earthquake; the existing buildings date mostly from the period of the Knights' occupation—the principal the church of St John (now a mosque), the Knights' hospital, and the grand-master's palace. Pop. 10,000. See a work on Rhodes by Torr (1885–87).

Rhodesia, named from Cecil Rhodes, founder of the British South Africa Company, is a vast region extending from the frontiers of the Transvaal and the 22d degree of south latitude to the southern limits of the Congo Free State, and from Portuguese West Africa on the west to Portuguese East Africa and the British Central Africa Protectorate on the east, and German East Africa on the north-east. The region, sometimes called Zambesia, is divided by the Zambesi into (unequal) southern and northern divisions. In 1889 a charter was given to the British South Africa Company, with large administrative powers, for the development of the region now known as Rhodesia. Subsequent orders-in-council in 1891, 1894, 1898, 1899, 1900, and 1903 further prescribed the company's powers, and appointed a Resident Commissioner to be nominated by the Secretary of State. *Southern Rhodesia*, which is much more fully developed

than the northern portion, consists of the two provinces of Mashonaland and Matabeleland, and has an area of about 144,000 sq. m. and a native pop. of 565,000, besides about 12,600 Europeans and 2000 colonial natives and Asiatics. The seat of government is Salisbury (pop. 1726), the capital of Mashonaland. There are executive and legislative councils, a high court with civil and criminal jurisdiction, and magistrates' courts in the various districts, municipalities at Salisbury and Bulawayo (chief town of Matabeleland), with churches, banks, schools, hotels, public libraries, and telephones. There were in 1905 about 1900 miles of railway open, and the 'Cape to Cairo' line reached the Victoria Falls in 1904, and is being continued across Northern Rhodesia to Lake Tanganyika. There are about 300 registered companies interested in mining and development work in the territory. The output of gold in 1904 was 267,737 oz. Other minerals are silver, copper, blende, antimony, arsenic, lead, and coal. The imports into Southern Rhodesia in 1904 were valued at £1,576,619, and the exports, excluding goods to Customs Union Territories (which it joined in 1903), to £334,717. *Northern Rhodesia* (subdivided into North-eastern and North-western Rhodesia) is still practically held by the natives. Barotseland (North-western Rhodesia) is ruled by King Lewanika. North-eastern Rhodesia is divided into nine districts, Fort Jameson on the Tanganyika plateau being the administrative headquarters. Ivory and rubber are exported, and cotton is being grown with success. The area of North-eastern Rhodesia is about 120,000 sq. m., and the native pop. is estimated at about 350,000, with 250 Europeans, mostly British. Postal and telegraph services have been organised. The capital of the British South Africa Company is £6,000,000, and the administrative revenue for the whole region, from mining, trading, and professional licenses, hut tax, customs, and postal and telegraph services, amounted in 1903 to £633,038, and the expenditure to £1,051,400.

Rhodope (*Rod'o-pee*), the ancient name of a mountain-chain (7474 feet) on the borders of Macedonia and Thrace (between Turkish and Bulgarian territory). The Bulgarians call it *Despoto Dagh*. Of its many monasteries the chief is the Bulgarian fortress-monastery of Rilo.

Rhondda (*Ron'tha*) is, since 1894, the official name of an urban district (pop. 115,000) in Glamorgan, South Wales, formerly known as the township of Ystradyfodwg. The Rhondda Valley is a great centre of coal-mining.

Rhone (Lat. *Rhodănus*), the only important French river which falls into the Mediterranean, takes its rise in the Swiss Alps, on the western side of Mount St Gothard, at an altitude of 5752 feet, and not far from the sources of the Rhine. Its entire length, from its source to its mouth in the Gulf of Lyons, is 504 miles. It first runs SW. through Valais to the Lake of Geneva (q.v.); thence it forces a passage westward through the Jura. At Lyons it is joined by its largest tributary, the Saône (q.v.), from the north, and flows southward by Avignon and Arles, where begins its delta. Affluents are, on the right, the Ain, Saône, Ardèche, and Gard; on the left, the Arve, Isère, Drôme, and Durance. From Lyons southward the Rhone is navigable, but by reason of the swift current, sandbanks, and other obstructions, communication with the Mediterranean is mainly by canals. Canals likewise connect the Rhone with the Rhine by the Saône, with the Seine, the Loire, and the Garonne. See a French work by Lenthéric (2 vols. 1892).

Rhône (*Roan*), a dep. of France, part of the former Lyonnais. Area, 1077 sq. m.; pop. (1881) 741,479; (1901) 843,179. Its arrondissements are Lyons (the capital) and Villefranche.

Rhuddlan (*Hrith'lan*), a decayed town of Flintshire, North Wales, on the Clwyd, 8 miles SSE. of Rhyl. Its ruined castle, dating from 1015, and dismantled after its capture by the Roundheads in 1646, was the scene of the betrayal of Richard II. (1399); at the marsh of Morfa Rhuddlan, across the river, Offa defeated Caradoc (795). With Flint, &c., Rhuddlan returns one member. Pop. 1357.

Rhyl (*Hril*), a watering-place of Flintshire, North Wales, at the mouth of the Clwyd, 30 miles NW. of Chester. A mere fishing-village so late as 1830, it has fine sands, a promenade pier 705 yards long, built in 1867 at a cost of £17,000, an esplanade, an aquarium and winter garden, a dozen hotels, baths, &c.; and, though the country around is flat, it commands fine views of the Snowdonian mountains. Pop. 8500.

Rhymer's Glen, a traditional haunt of Thomas of Ercildoune, on Huntly Burn, near Abbotsford.

Rhymney, a town of Monmouthshire, on the river Rhymney (running to the Bristol Channel near Cardiff), 2½ miles W. of Tredegar. It is the seat of ironworks. Pop. (1861) 7630; (1901) 7914.

Riad, capital of Nejd, a town in the highlands of central Arabia. Pop. 30,000.

Riazan (*Ree-a-zan'*), a town of Russia, near the Oka's right bank, 115 miles by rail SE. of Moscow. Pop. 46,150.—The *government* has an area of 16,250 sq. m. and a pop. of 1,802,200.

Ribble. See PRESTON.

Rib'chester, a town of Lancashire, on the Ribble, 5½ miles NNW. of Blackburn. It occupies the site of a Roman station. Pop. 1235.

Ribeauville (*Ri-bo-veel'*; Ger. *Rappoltsweiler*), a town of Upper Alsace, pleasantly situated amid vineyards at the west foot of the Vosges, 33 miles SSW. of Strasburg. Pop. 6902.

Ribstone Hall, a seat in the East Riding of Yorkshire, on the Nidd, 3½ miles SE. of Knaresborough. Here was grown the first 'Ribstone pippin' in England.

Richborough. See SANDWICH.

Richmond, an ancient municipal borough in the North Riding of Yorkshire, on the left bank of the deep-channelled Swale, 49 miles by a branch-line NW. of York. Its Norman castle (1072–1146), now utilised for barracks, stores, &c., has a very fine banqueting-hall and a keep 100 feet high. Other buildings are the parish church, with good wood-carvings; Queen Elizabeth's grammar-school (1567; rebuilt, 1849–68); the market-house (1854); and the Perpendicular tower of a Franciscan friary (1258). The racecourse (847 feet above sea-level) commands a magnificent view. Till 1867 Richmond returned two members, and then till 1885 one. Pop. 3830. See works by R. Gale (Latin, 1722), Clarkson (1821), Whitaker (2 vols. 1823), Robinson (1833), and Longstaffe (1852).

Richmond, a town of Surrey, 8½ miles WSW. of London (by rail 9½, by river 16), stands partly on the summit and declivity of Richmond Hill, and partly on the level right bank of the Thames. The Terrace, stretching along the brow of the hill, commands an unrivalled prospect of hill and dale, woodland and winding stream; and one of the fairest river-views in England may be gained

from Richmond Bridge, which, 100 yards long, was built in 1774–77 at a cost of £26,000. Only a gateway remains of the ancient royal palace of Sheen, where died Edward III., Anne of Bohemia, Henry VII., and Elizabeth, and which was rebuilt by Henry V. and Henry VII. (1499), who renamed the place Richmond after his own former Yorkshire earldom. That palace, which has memories also of Wolsey, Charles V., and many others, was dismantled in 1648; but the splendid deer-park, formed by Charles I. in 1634, remains. It covers 2253 acres; and its brick wall is nearly 8 miles in circumference. Scott here makes Jeanie Deans have her audience with Queen Caroline. The well-known 'Star and Garter,' which dates from 1738, was largely destroyed by fire in 1870, but rebuilt in 1872–74 at a cost of £24,000; its banqueting-house escaped, built by Barry in 1865. At the parish church are buried the poet Thomson, Kean, Lady Di Beauclerk, and Dr John Moore; and here, too, Swift's Stella was baptised. St Mathias' (1858) is a striking building by Scott, with a spire 195 feet high; the municipal buildings, opened by the Duke of York in 1893, cost £24,000; and there are also a Wesleyan theological college (1834), a free library (1881), &c.; whilst Richmond worthies, other than those above mentioned, have been Reynolds, Gainsborough, Collins, and Earl Russell. Market and nursery gardening is a chief industry. Richmond was incorporated as a municipal borough in 1890. Pop. (1861) 7423; (1901) 31,672. See works by Crisp (1866) and Chancellor (1885 and 1894).

Richmond, (1) capital of Wayne county, Indiana, on the East Fork of Whitewater River, 69 miles by rail NNW. of Cincinnati. It was founded by the Society of Friends, who in 1859 established Earlham College here, for both sexes. There are manufactures of agricultural implements, machinery, boilers, flour, &c. Pop. (1880) 12,743; (1900) 18,226.—(2) Capital of Madison county, Kentucky, 120 miles by rail S. of Cincinnati. It is the seat of the Central University (Presbyterian; 1874). Pop. 4700.—(3) The capital of Virginia, on the left bank of the James River, at the head of tide water, 150 miles from its mouth, and 116 by rail S. of Washington. It is a port of entry, and vessels drawing 14 feet of water can come up to the lower end of the city, where there are large docks. Richmond is picturesquely situated on a group of hills, the summit of one—Shockoe Hill—being occupied by the capitol (1796), which possesses a marble statue of Washington, and in whose grounds are statues of Henry Clay and 'Stonewall' Jackson, and the Washington monument, a noble bronze group by Thomas Crawford. Patrick Henry is buried in St John's churchyard, and President Monroe and Jefferson Davis in Hollywood Cemetery, where is a Confederate monument 90 feet high. In the city are Richmond College (Baptist; 1832) and the Virginia Medical College. The James River Falls here supply immense water-power for tobacco-factories, rolling-mills, iron-foundries, nail-works, machine and locomotive-works, flour, meal-flour, and paper mills, and fertiliser-works. The chief exports are cotton, flour, and tobacco. Richmond was founded in 1737, and became the capital in 1779. On 26th December 1811 the burning of a theatre cost sixty lives. In 1861 Richmond was selected as the Confederate capital, but on 2d April 1865 it had to surrender, after almost a year's siege and a series of sanguinary battles. A considerable portion of the city was burned by the retreating Confederates. Pop. (1860) 37,910; (1870) 51,038; (1900) 85,050.

Richmond, a SE. suburb of Melbourne (q.v.).

Rickmansworth, a town of Hertfordshire, at the confluence of the Colne, Gade, and Chess, 4 miles W. by S. of Watford. It has a church (rebuilt in 1890) with interesting monuments; and near it is Moor Park, the seat of the ill-fated Duke of Monmouth. Population, 5800. See R. Bayne's *Historical Sketch* (1870).

Riddings, a Derbyshire market-town, 3 miles SE. of Alfreton, with neighbouring coal-pits and ironworks. Pop. 6000.

Riddon, Loch, an Argyllshire sea-loch, striking 4 miles N. from the Kyles of Bute.

Riesengebirge (*Ree'zen-ge-beer'geh*, *g's* hard; 'Giant Mountains'), a mountain-range, 23 miles long by 16 broad, separating Bohemia from Prussian Silesia. The highest peak is the Schneekoppe (5260 feet).

Riesi (*Re-ay'zee*), a town of south Sicily, 10 miles NW. of Terranova. Pop. 14,914.

Rieti (*Re-ay'tee*; anc. *Reate*), a walled city of Italy, 40 miles NE. of Rome; the fine cathedral has a monument by Thorwaldsen. Pop. 18,000.

Rievaulx Abbey (*Ree'voas*), 26 miles N. of York and 10 E. by N. of Thirsk, a ruined Cistercian monastery (1131), Norman and Early English in style, occupying a beautiful site in the valley of the river Rye. The meaning of Rievaulx is 'Rye vale.'

Riff, the coast districts of northern Morocco, extending from Ceuta to the western frontier of Algiers, and forming a line of steep cliffs with few harbours. Its Berber inhabitants, once savage pirates, are still turbulent.

Riga (*Ree'ga*), capital of Livonia, and next after St Petersburg and Odessa the third seaport of Russia, lies on the Dwina, 7 miles from its mouth, and 350 by rail SW. of St Petersburg. The old town has narrow streets and mediæval houses; but the suburbs are laid out in broad streets with handsome buildings. The chief edifices are the archiepiscopal cathedral, built in 1204, burned down in 1547, but rebuilt; St Peter's Church (1406), with a steeple 460 feet high; the castle of the old Knights of the Sword, built 1494–1515; and several old guild houses and Hanseatic halls. Its industries include the manufacture of cottons, machines, tobacco, corks, spirits, oil, metal wares, glass, paper, flax, jute, and oilcloth. Pop. (1867) 102,590; (1881) 169,329; (1897) 282,950. Nearly one-half are Germans (with German-speaking Jews), one-fourth Russians, and one-fourth Letts. Riga was founded in 1201, and soon became a first-rate commercial place and a Hanse town. It belonged to Poland from 1561, in 1621 was taken by Gustavus Adolphus, and in 1710 was annexed to Russia.

The Gulf of Riga is an inlet on the east side of the Baltic Sea, which washes the shores of Courland, Livonia, and Esthonia. It is 105 miles long from north to south, and 60 broad. The islands of Oesel, Dagö, Mohn, and Worms lie athwart the entrance, and there are many sandbanks. The Dwina falls into the gulf.

Rigi (*Ree'gee*, *g* hard), or Righi, an isolated Swiss mountain (5906 feet), standing between the Lakes of Lucerne, Zug, and Lowerz, commands views of some of the finest Swiss scenery. Verdant pastures clothe the summit, and the slopes are belted with forests. About 100,000 tourists ascend it every season, principally by means of two toothed railways—one from

Vitznau (1871) on the Lake of Lucerne, the other from Arth (1875) on the Lake of Zug, 4¼ and 7 miles long respectively. There are half-a-dozen hotels near or at the summit, as well as a Capuchin monastery (1689), whose church contains a wonder-working image of the Madonna.

Rilo. See RHODOPE.

Rimini (*Rim'i-nee*), a walled city of Italy, stands on the Adriatic, 69 miles by rail SE. of Bologna. The cathedral, a beautiful Renaissance structure, dates from 1446–50; the church of St Giuliano is adorned with pictures by Veronese. The ancient castle of the Malatestas is now a prison. The little river on which the city stands is spanned by a five-arch white marble Roman bridge, 236 feet long. Beside one of the gates stands the triumphal arch, 46 feet high, erected in honour of Augustus. The spot where Cæsar stood to address his soldiers after crossing the Rubicon (q.v.) is marked in one of the squares by a monumental pillar. The city manufactures silks and sail-cloth. Pop. 20,000; with suburbs, 43,200. One of these suburbs is much visited for sea-bathing. Originally an Umbrian, and then for several centuries an Etruscan city, Rimini (Arimĭnum) fell into the hands of the Romans in 286 B.C. After being battled for by Goths and Byzantines, and held by the latter, the Lombards, and the Franks, it became a shuttlecock between the emperor and the pope. At last Rimini put herself under the protection of the House of Malatesta (1237), in whose family-history befell the killing of Francesca da Rimini and her lover by his brother (1285), and the story of Parisina, the subject of Byron's poem.

Rimouski (*Ri-moos'kee*), a Canadian town, on the south shore of the St Lawrence, at the influx of the Rimouski River, 182 miles by rail NE. of Quebec. It is a bishop's seat, a watering-place, and a telegraphing station for ships. Pop. 2417.

Ringwood, a town on the Hampshire Avon, 25 miles WSW. of Southampton. Pop. of par. 4700.

Riobamba. See CAJABAMBA.

Rio Bravo. See RIO GRANDE.

Rio Cuarto (*Ree'o Kwahr'to*), a city in the Argentine province of Cordoba, on the river of the same name, 500 miles NW. of Buenos Ayres and 170 by rail S. of Cordoba. Pop. 14,000.

Rio de Janeiro (*Ree'o deh Zha-nay'e-ro*), the capital of Brazil, stands on the west side of one of the most magnificent natural harbours in the world. An inlet of the Atlantic, the bay of Rio de Janeiro runs 15 miles northwards, varying in width from 2 miles to 7; it is girdled on all sides by picturesque mountains (1500 to 3000 feet), covered with tropical vegetation. The entrance, less than a mile wide, passes between two bold headlands, one of them called the Sugar-loaf (1270 feet). The city and its suburbs stretch nearly 10 miles along the shore. About 3 miles SW. of the city stands the precipitous cone of Corcovado (2336 feet), with a cog-railway up to the top. Public institutions are the vast hospital of La Misericordia (1200 patients), the national library (1807), with 250,000 volumes, the national museum, the large lunatic asylum (1841), the botanical gardens, with a celebrated avenue of palms, the observatory, the Geographical and Historical institute (1838), the former royal palace at São Christovão, the arsenal, the naval dockyards, the academy of fine arts, a cadet-school, a school of medicine, a conservatory of music, a polytechnic school, &c. In spite of a good water-supply, chiefly by an aqueduct (1750) 12 miles long, and a new system of sewage-draining, the city is not really healthy; the surrounding hills shut out the breezes, and the heat grows intense in summer. Yellow fever prevails during the hot season; and the Negro population suffer from smallpox. Pop. (1872) 274,972; (1902) 750,000, including many foreigners—Portuguese, British, French, and Germans. Rio is the commercial capital, sending out 51 per cent. of the total exports of Brazil, and bringing in 45 per cent. of the imports. The chief export is coffee; the imports include cotton, gold and silver, metals, wool, provisions, and machinery. The whole sea-frontage of the city is lined with quays, and in 1889 extensive new harbour-works were begun, embracing a dock of 75 acres, a breakwater 3200 yards long, an elevated railway, hydraulic cranes, warehouses, &c. The city possesses cotton, jute, and silk mills, tobacco and hat factories, machine-shops, tanneries, &c.

On 1st January 1531 a Portuguese captain, De Souza, entered the bay, and thinking it was the mouth of a large river he called it Rio de Janeiro —'January River.' The French held one of the islands in 1555–67. Rio was founded in 1566; was plundered by Duguay-Trouin in 1711; supplanted Bahia as the capital of the viceroy in 1763; and in 1822 was made the capital of the empire of Brazil. The revolution of 1889 centred in Rio; and after the reconstitution of the united states of Brazil Rio remained the capital, the federal district in which the city stands (area 538 sq. m.) being administered directly by the federal authorities. Rio suffered much from bombardment during the rebellion of the fleet (1893–94).—The maritime *state* of Rio de Janeiro has an area of 26,627 sq. m., and a pop., exclusive of the city, of 1,230,000.

Rio de la Plata. See LA PLATA.

Rio Grande (*Ree'o Grandeh*), also *Rio Grande del Norte*, and *Rio Bravo del Norte*, a large river of North America, rises in the San Juan Mountains in SW. Colorado, and flows generally SE. to the Gulf of Mexico, forming the boundary between Texas and Mexico. Its length is 1800 miles; small steamboats ascend nearly 500 miles. Its chief affluent is the Rio Pecos.—See also PARANÁ and SENEGAMBIA.

Rio Grande do Norte (*Ree'o Gran'deh do Nor'teh*), a maritime state of Brazil, occupies the north-east angle of the country. Area, 22,195 sq. m.; pop. 325,000, one-half Indians. It is named from the river Rio Grande, flowing into the Atlantic at the capital, Rio Grande do Norte or Natal (q.v.); but the principal river is the Piranhas.

Rio Grande do Sul (*Ree'o Gran'deh do Sool*; 'Great River of the South'), sometimes called SAN PEDRO, the southernmost province of Brazil, is bounded N. and W. by the river Uruguay, S. by the republic of Uruguay, and E. by the Atlantic. Area, 91,310 sq. m.; population, 970,000, of whom 100,000 are Germans and 52,000 Italians. The principal towns are Porto Alegre (q.v.), the capital, Rio Grande, and Pelotas.—The town of Rio Grande stands on the south side of the strait leading into the southern end of the Lagôa dos Patos; pop. 18,000.

Rioja (*Ree-o'ha*), a western province of the Argentine Republic, with an area of 34,365 sq. m. and a pop. of 86,000.—RIOJA, the capital, founded in 1591, lies at the foot of the Sierra Velasco, 350 miles by rail NW. of Cordoba. Pop. 6000.

Riom (*Ree-on*^{g}), a town of France (dep. Puy-de-Dôme), on a hill, 8 miles by rail N. of Clermont-Ferrand. Pop. 9700.

Rion. See PHASIS.

Rio Negro (*Ree'o Nay'gro*), a principal affluent of the Amazon, rises as the Guainia in SE. Colombia, and flows 1350 miles E., S., E., and SE. through Venezuela and Brazil, to the Marañon.—(2) A river of Argentina, which rises in the Andean lake of Nahuel-Huapi, and flows over 500 miles NE., E., and SE. to the Atlantic. It bounds and gives name to a national territory, formerly part of Patagonia, with an area of 81,895 sq. m. of mostly level but barren soil.

Rionegro, a town of Colombia, in Antioquia, 15 miles SE. of Medellin. Pop. 9000.

Rionero (*Ree'o-nay'ro*), a town of southern Italy, 12 miles N. of Potenza. Pop. 11,383.

Rio Tinto (*Ree'o*), a river in southern Spain, in the province of Huelva, near whose sources are very rich copper-mines, worked by the Romans, and bought in 1872 by the Rio Tinto (London-Bremen) Syndicate for £4,000,000.

Riouw (*Ree-ow'*), capital of Bintang (q.v.).

Ripley, (1) a town of Derbyshire, 10 miles NNE. of Derby, with silk-lace manufactures and large neighbouring collieries and ironworks. Pop. (1851) 3071; (1901) 10,111.—(2) A pretty village in the West Riding of Yorkshire, on the Nidd, 3½ miles NNW. of Harrogate. Rebuilt in 1829-30, it has an hôtel-de-ville (1854), an interesting church, and Ripley Castle (1555), where Cromwell slept the night before Marston Moor. Pop. 291.

Rip'on, a city in the West Riding of Yorkshire, on the Ure, 23 miles NW. of York, 28 N. of Leeds, and 11 N. of Harrogate. A monastery, founded here in 660 by St Cuthbert and other monks of Melrose, was granted about 664 to St Wilfrid, who rebuilt the church with stone, and dedicated it to St Peter. Willibrord, the apostle of the Frisians, was trained in this monastery, which in 678 was made the seat of a short-lived bishopric, re-erected in 1836 after a lapse of more than eleven centuries. The beautiful minster, which from the Conquest to the Dissolution was the church of Augustinian canons, was built between 1154 and 1520, so exhibits every variety of style from Transition-Norman to Perpendicular. A cruciform pile, 266 feet long, with three towers 120 feet high, which lost their spires in 1660, and with a Saxon crypt, where a hole called 'St Wilfrid's Needle' was anciently used as an ordeal of chastity, it suffered much through the Scots (1319), decay, and vandalism, but in 1861-76 was restored by Sir G. G. Scott at a cost of £40,000. An obelisk, 90 feet high, in the market-place was erected in 1781 by W. Aislabie, for sixty years one of the two members for Ripon, whose representation was reduced to one in 1867, and merged in the county in 1885. At the free grammar-school (1546) Bishop Stubbs was educated. Studley Royal, the fine seat of the Marquis of Ripon, is 2 miles south-west; and near it is Fountains Abbey (q.v.). Ripon spurs, once famous, belong to the past, but saddle-trees are manufactured, besides varnish, leather, machinery, &c. The municipal borough was chartered by James I. Pop. 5150. See works by Gent (1733), Waddilove (1810), Walbran, Fowler (1888), and on the cathedral by Archdeacon Danks (1899).

Risca, a town of Monmouthshire, on the Ebbw, 5½ miles WNW. of Newport. Pop. 9670.

Ri'singham, a Roman camp in Northumberland, on the Reed, 4¼ miles NE. of Bellingham.

Ristigouche. See RESTIGOUCHE.

Rivas (*Ree-vas*), a decayed town of Nicaragua, 6 miles from Lake Nicaragua. Pop. 8000.

Rivaulx Abbey. See RIEVAULX.

Rive-de-Gier (*Reev-deh-Zhe-ay'*), a town of France (dep. Loire), on the Gier, in the middle of the best coalfield in France, 13 miles NE. of St Étienne by rail. In 1815 it had less than 4000 inhabitants; now it has about 16,000.

Rivera (*Reevay'ra*), a dep. in the north-east of Uruguay, separated by a mountain-chain from Brazil. Area, 3790 sq. m.; pop. 27,100.

Riverina (*Riveree'na*), a name given to the extensive grazing districts in the western part of New South Wales.

Riviera (*Ree-vee-ay'ra*; 'seashore'), a term applied to the narrow strip of coast-land bordering the Gulf of Genoa, strictly from Nice to Spezzia, but generally understood to include the whole coast of the dep. of the Alpes Maritimes, and the Italian coast as far as Leghorn. West of Genoa it is called the Riviera di Ponente, or western coast, and beyond Genoa the Riviera di Levante, or eastern coast. From Hyères to Genoa is 203 miles; from Genoa to Leghorn, 112. Sheltered on the north by mountains, the district enjoys an exceptionally favoured climate, no other region north of Palermo and Valencia being so mild in winter. The western section is the mildest and most frequented. It abounds in the most striking and beautiful scenery, and is planted with numerous health and fashion resorts—Nice, Monaco, Mentone, Ventimiglia, San Remo, Bordighera, &c.; and west of Nice are Hyères, Fréjus, Cannes, Grasse, Antibes. The famous *Corniche* (Ital. *Cornice*) road, widened by Napoleon I., leads along the coast from Nice to Genoa, and commands magnificent views. See guidebooks by Baedeker, Murray (1890), Black (1890), and Macmillan (new ed. 1892); Augustus Hare's *South-eastern France* (1890), and Miss Dempster's *Maritime Alps and their Seaboard* (1884).

Rivières du Sud (*Ree-vee-ehr' dü Süd*; 'Southern Rivers') was, up till 1893, the name of the coast region of French Guinea, on the west coast of Africa, which lies between Portuguese Guinea and the British colony of Sierra Leone. The district has an area of about 95,000 sq. m., and a population estimated at about 2,200,000. The capital is Konakry. See GUINEA, SENEGAMBIA.

Rivoli (*Ree'vo-lee*), a town of northern Italy, 8 miles W. of Turin. Pop. 5314. It was not here, but at another Rivoli, 12 miles NW. of Verona, that Napoleon on 14th and 15th January 1797 defeated the Austrians.

Rizeh (*Ree'zeh*), a town of Asia Minor, on the Black Sea, 40 miles E. of Trebizond. Pop. 3000.

Roag, a sea-loch 10 miles long and 8 wide across the entrance, on the W. side of Lewis.

Roanne (*Ro-ann'*), a town of France (dep. Loire), 52 miles by rail NW. of Lyons, stands on the left bank of the Loire, which here becomes navigable, and is crossed by a stone bridge (1820). It has an old castle, a new hôtel-de-ville with a museum, some manufactures, &c. Pop. (1872) 18,615; (1901) 33,775.

Roanoke (*Ro-an-oak'*), a river of Virginia and North Carolina, formed by the union, a mile above Clarksville, Virginia, of the Dan and Staunton rivers, which rise in the Alleghanies. It flows 230 SE. through the north-eastern portion of North Carolina to Albemarle Sound.

Roanoke, a city of Virginia, on the Roanoke River, 258 miles by rail W. of Norfolk. In 1880 it was a secluded hamlet; by 1890 it was grown to a bustling city, with a court-house, opera-house, hotels, churches, jail, gas and electric

lights, large machine-shops, steel and iron works, a rolling-mill, tobacco, spoke, and canning factories, mills, bottle-works, &c. Pop. (1880) 669; (1890) 16,159; (1900) 21,495.

Roaring Forties, a sailor's term for a region of the great Southern Ocean lying south of 40° S. lat. (especially south of 45°), where the prevailing strong WNW. and NW. winds are often stormy.

Robben Island (Dutch, 'seal island'), an islet of Table Bay, 10 miles NW. of Capetown, with a lunatic asylum and a leper colony.

Robin Hood's Bay, a fishing-village in the North Riding of Yorkshire, 6¾ miles SE. of Whitby by the coast railway (1885) to Scarborough. The bay is picturesquely fringed by lofty cliffs, the Old Peak, its southern horn, attaining 585 feet. It owes its name to traditions of Robin Hood, whose arrows shot from the tower of Whitby Priory reached Hawkser, 3 miles distant.

Rocha, a SE. dep. of Uruguay, on the Atlantic. Area, 4280 sq. m.; pop. 30,500.

Rochdale (*Roich-dale*), a manufacturing town of Lancashire, a municipal, parliamentary, and county borough, on the Roche, 11 miles N. by E. of Manchester and 202 NNW. of London. St Chad's parish church, on an eminence approached by a flight of 122 steps, dates from the 12th century, but is mainly Perpendicular in style. It is a handsome edifice, on which £10,000 was expended in 1884–85. The town-hall (1866–71) is a very fine Domestic Gothic building. The town besides has an infirmary (1883), a free grammar-school, founded in 1565 by Archbishop Parker, and rebuilt in 1846, a free library (1884), a post-office (1875), public baths (1868), a bronze statue of John Bright (1891), and a public park of 12 acres. The trade in woollen goods dates from the days of Elizabeth, when cotton goods also were sold here, and coal-pits worked. It was not till 1795 that the first cotton-mill was built, in which in 1802 the father of John Bright began his career as a weaver. Flannels and calicoes are now the staple manufactures, but there are also cotton-mills, foundries, ironworks, machine-shops, &c. Rochdale is the birthplace of Co-operation, and the membership of its Equitable Pioneers' Society (1844) has increased from 28 to over 11,000, with an annual business representing more than a quarter million. Since 1832 Rochdale has returned one member to parliament, and in 1856 it became a municipal borough. The latter in 1872 was made coterminous with the parliamentary borough, whose boundary had been extended in 1867. The manor of Rochdale (*Recedam* in Domesday) was originally held by the Lacys of Pontefract, and through their descendants, the Dukes of Lancaster, passed to the crown. In 1628 it was sold to Sir John Byron, whose ancestors had been connected with it since 1462, and whose descendant, the poet Lord Byron, in 1823 sold it to Mr Dearden. Pop. of county borough (1901) as extended in 1900, 83,114; of parliamentary borough, 76,124. See Fishwick's *History of the Parish of Rochdale* (1889).

Roche Abbey, a ruined Yorkshire Cistercian monastery (*c.* 1147), 8 miles E. of Rotherham.

Rochefort-sur-Mer (*Rosh-forr'-sür-Mayr*), a French seaport, naval arsenal, and fortress of the first class, in the dep. of Charente-Inférieure, stands on the Charente's right bank, 9 miles from its mouth, and 18 miles SSE. of Rochelle, 89 SW. of Poitiers. It was founded in 1665 as a naval station by Colbert, and fortified by Vauban, being covered now on the sea side by strong forts; and it is a modern, clean, well-built place. The naval hospital (1783–88) has nearly 1300 beds and an artesian well 2758 feet deep. There are both a naval harbour and, higher up the river, a commercial harbour with three basins; and Rochefort besides possesses rope-walks, cannon-foundries, &c. From 1777 till 1852 it was the seat of a great convict prison. Napoleon meant to take ship for America at Rochefort, but instead had to surrender to Captain Maitland of the *Bellerophon*, 15th July 1815. Pop. (1872) 26,619; (1901) 31,613.

Rochelle, La (*Ro-shell'*), a French fortified seaport, capital of the dep. of Charente-Inférieure, on an inlet of the Bay of Biscay, formed by the islands Ré and Oléron, 91 miles WSW. of Poitiers and 297 SW. of Paris. Its harbour, still showing the remains of Richelieu's famous dyke, is surrounded by fine quays, close to which lie the principal streets and squares. The most noteworthy public buildings are the hôtel-de-ville (1486–1607), the palais-de-justice (1614), and the heavy Grecian cathedral (1742–1862). Besides the fine promenade of the Place du Château, there are, outside the city, La Promenade du Mail and the Champs de Mars. Shipbuilding is actively carried on, specially for the Newfoundland fishing trade; and besides the manufacture of briquettes and cotton yarns, Rochelle has numerous glass-works, sugar-refineries, and brandy distilleries. Pop. (1872) 19,070; (1901) 28,578. Known till the 12th century under its Latin name of *Rupella*, 'Little Rock,' of which its present name is a translation, Rochelle originated in a colony of runaway serfs of Lower Poitou. On the marriage of Eleanor of Aquitaine with Henry II., it came, as part of her dowry, to the English kings, who retained it till 1224; and, though it was restored to England in 1360, it has been French since 1372. A Huguenot stronghold, it was unsuccessfully besieged in 1573, and in 1627–28 it for fourteen months again offered a heroic though unavailing resistance to Cardinal Richelieu. Buckingham's expedition to relieve it failed, and at last the defenders, reduced from 27,000 to 5000, had to surrender. With the exception of three towers (1384–1476) its old fortifications were destroyed, and new lines of defences subsequently erected by the great Vauban. Réaumur, Bonpland, Billaud-Varenne, Fromentin, Bougueréau, and Admiral Duperré were natives. Of the last a statue was erected in 1869.

Rochester (*Rotch'es-ter*), a city of Kent, 29 miles ESE. of London, lies chiefly on the right bank of the tidal Medway, continuous with Chatham, and joined to Strood by an iron swing bridge, constructed in 1850–56 at a cost of £170,000. The castle or keep (1126), which crowns a steep eminence near the bridge, is 104 feet high and 70 feet square, with walls 12 feet thick, and is a very fine specimen of Norman architecture; it was taken by John (1215), vainly attacked by De Montfort (1264), and taken again by Tyler (1381). Both castle and grounds were purchased in 1883 by the corporation from the Earl of Jersey. The episcopal see was founded in 604 by St Augustine, and the foundations remain still of his cathedral. Bishop Gundulf (1077–1107) built a new cathedral, part of whose crypt survives. This cathedral was rebuilt by Ernulf and John of Canterbury (1115–37), the existing nave and the choir was again rebuilt and enlarged in the 13th century in part out of offerings of pilgrims at the shrine of St William of Perth, a Scotch baker, who, on a pilgrimage to the Holy Land, was murdered near Chatham by his companion

and adopted son. The tower was rebuilt by Cottingham (1825–26), the choir and transepts restored by Scott (1871–77), and the west front restored by Pearson in 1891. The whole pile measures 306 feet in length, and has double transepts; and special features of interest are the Norman west doorway and nave, the Early English choir, the spacious crypt, and a fine Decorated doorway leading to the modern library. Of Rochester's bishops since 604, some eighty in number, may be mentioned Paulinus (previously first bishop of York), Gundulf, Walter de Merton, Fisher, Ridley, Atterbury, and Horsley. St Bartholomew's Hospital, founded in 1078 for lepers, was refounded in 1863; the Norman chapel remains. Watts' Charity House, founded in 1579 to lodge 'six poor travellers, not being rogues or proctors,' has been immortalised by Dickens, whose home, Gadshill (q.v.), is 3 miles distant, and who introduces Rochester into *Pickwick*, *Edwin Drood*, and other novels. Three schools are the cathedral grammar-school (Henry VIII.), Williamson's mathematical school (1701; reopened under a new scheme, 1880), and a grammar-school for girls (1888); other buildings are Satis House, Restoration House (Charles II. slept here in 1660), the guild-hall (1687), and the corn exchange (1871). Rochester—the Roman *Durobrivæ* and Anglo-Saxon *Hrofe-ceastre*—was made a municipal borough by Henry II. It lost one of its two members in 1885. James II. embarked here in his flight (1688). Pop. (1851) 16,508; (1901) 30,590. See works by Wharton (1691), Thorpe (1769–88), Rawlinson (1717), Fisher (1772), Rye (1861–65), Walcott (1866), and Langton (1880).

Rochester, (1) capital of Monroe county, New York, is on the Genesee River, 7 miles above its entrance into Lake Ontario, 67 miles ENE. of Buffalo and 360 NW. of New York. The river has here three perpendicular falls of 96, 26, and 83 feet, and affords immense water-power. Among the principal buildings are the city hall, of blue limestone, and the court-house; a state industrial school for 500 boys and 200 girls; a Roman Catholic cathedral; the Free Academy; the Baptist university (1850), and a Baptist theological seminary (whose library of 21,000 vols. includes that of Neander). There is a handsome stone aqueduct of seven arches (850 feet long) by which the Erie Canal crosses the river. The principal industries are flour-milling, and the manufacture of ready-made clothing and boots and shoes, rubber goods, photographic apparatus, furniture, agricultural implements and machinery, steam-engines, glass, tobacco, perfumery, &c.; and there are besides numerous foundries, iron-bridge works, cotton-mills, breweries, seed-packing and fruit-canning establishments. Rochester, a port of entry, was settled in 1810 by Colonel Rochester, and incorporated in 1834. Pop. (1840) 20,191; (1880) 89,366; (1900) 162,608.—(2) Capital of Olmsted county, Minnesota, on the Zumbro River, 347 miles by rail NW. of Chicago. It has flour-mills, foundries, and manufactories of furniture, farming implements, &c. Pop. 6850.—(3) A town of New Hampshire, 22 miles by rail NW. of Portsmouth, with manufactures of flannel, blankets, shoes, &c. Pop. 8470.—(4) A borough of Pennsylvania, on the Ohio's north bank, at the mouth of the Beaver River, 25 miles NW. of Pittsburgh. Pop. 4690.

Roche-sur-Yon (*Rosh-sür-Yon'*), capital of the French dep. of Vendée, on the Yon, 50 miles SSE. of Nantes by rail, has a prefecture, lyceum, library of 12,000 volumes, a museum, and a theatre. In 1805 Napoleon selected it—then a mere village—to be the departmental capital. From 1815 to 1848 it was called *Bourbon-Vendée*, from 1848 to 1870 *Napoléon-Vendée*. Pop. 11,190.

Rochford, an Essex town, on the Roche, 1½ miles SE. of Chelmsford. Anne Boleyn was born at Rochford Hall. Pop. of parish, 1812.

Rockall, on a sandbank in the Atlantic 50 miles long and 25 broad, in 57° 36′ N. lat., 13° 41′ W. long., 184 miles W. of St Kilda, 290 from the nearest point of the Scottish mainland, and 260 from the north of Ireland. It is a granite rock of a rounded form, rising 70 feet above the sea, and about 100 yards in circumference; and is situated at a greater distance from the mainland than any other rock or islet of the same diminutive size in any part of the world.

Rockford, capital of Winnebago county, Illinois, on the Rock River, 86 miles WNW. of Chicago. It has foundries, flour, paper, cotton, and woollen mills, and manufactures of carriages, pumps, churns, furniture, cutlery, &c. Pop. (1880) 13,129; (1900) 31,050.

Rockhampton, a town of Queensland, Australia, on the Fitzroy, 35 miles from its mouth, and 420 NW. of Brisbane. It has wide tree-lined streets, and owes its beginning (1858) to extensive gold-fields, the annual yield of which is valued at £1,000,000 to £1,250,000; copper and silver are also worked. The industries include tanning, soap and boot making, and meat-preserving; and it is the chief port for central Queensland. A bridge across the Fitzroy, with five spans of 232 feet each, connects Rockhampton with its suburb North Rockhampton. Pop. (1901) 18,470.

Rockingham Castle, Northamptonshire, on the Welland, 10 miles ENE. of Market Harborough, is the ancient seat of the Watsons. See a work by C. Wise (1892).

Rock Island, capital of a county in Illinois, on the Mississippi, opposite Davenport, Iowa (the two are connected by a wrought-iron bridge which cost $1,300,000), 181 miles by rail WSW. of Chicago. The island from which the town is named is used as a public park; on it are also an arsenal and armoury. The channel to the east of the island has been dammed so as to furnish immense water-power, and the city has flour and saw mills, foundries, machine-shops, glass-works, &c. Pop. (1880) 11,659; (1900) 19,500.

Rockland, (1) capital of Knox county, Maine, on the west side of Penobscot Bay, 88 miles by rail ENE. of Portland, with granite quarries, lime-kilns, iron and brass foundries, shipbuilding, &c. Pop. 8174.—(2) Rockland, Massachusetts, 19 miles by rail SSE. of Boston, has large boot and shoe factories. Pop. 5400.

Rockland Lake, near the Hudson, 30 miles N. of New York City, is 3 miles in circumference, and furnishes 200,000 tons of ice annually.

Rock River rises in SE. of Wisconsin, and flows (with many falls) 375 miles S. and SW. through Illinois to the Mississippi, 3 miles below Rock Island.

Rock Springs, a town of Wyoming, 258 miles W. of Laramie. Pop. 4370.

Rocky Mountains, the eastern ranges of the great Cordilleran system in North America, which attains its greatest breadth within the United States (over 1000 miles between 38° and 42° N.). The mountain-chains forming the western boundary of the plateaus of this highland region are the Sierra Nevada and the Cascade Ranges (q.v.), and the eastern chains stretching con-

tinuously from the southern borders of the United States through Canada to the Arctic Ocean constitute the Rocky Mountains. The name 'Rocky Mountains' is peculiarly appropriate, as there probably exists nowhere else such an extensive region of naked rock almost entirely devoid of vegetation. The geological structure is complex, but the greater part of the rocks exposed are Mesozoic intermingled with Tertiary and Quaternary deposits. In comparatively recent ages this whole region has been the scene of vast volcanic eruptions, and the lava overflows which have covered the stratified rocks in many places to a depth of thousands of feet have augmented the expanse of sterile surface. The high mountain barrier at the western boundary of the highland robs the winds which sweep across the Pacific of much of their moisture, and the great aridity of this region thus prevents the growth of vegetation. The surface is exposed to continued erosive action, and the region displays a labyrinth of naked crags and peaks rising from plateaus crossed by towering cliffs or deep cañons, with here and there an isolated butte. The wonderful *mesa* or plateau region extends from southern Wyoming through western Colorado, eastern Utah, and south into New Mexico and Arizona. The country is divided by faults, flexures, and deep cañons into numerous blocks or separate plateaus, and the carving of the rocks and the brilliant colouring of the exposed strata almost surpass belief.

A high plateau region in Wyoming, over which passes the Union Pacific Railroad, marks a separation of the Rocky Mountains into a northern and a southern group, each of which has its characteristic features; and in the continental divide here are found the head-waters of the three great river-systems of the United States—the Mississippi, the Columbia, and the Colorado. The ranges of the southern group are higher, and as there are several elevated valleys known as 'Parks' enclosed between the parallel ranges, are known as the Park System. Its greatest development is in Colorado, where there are nearly forty peaks over 14,000 feet in height. The Medicine Bow Range and the Colorado or Front Range form the eastern edge of the Rocky Mountain System, and rise abruptly from the gentler slope of the Plains. In this range are the well-known landmarks, Long's Peak (14,271 feet) and Pike's Peak (14,134 feet), as well as Gray's Peak (14,341 feet), its highest point, which is too far west to be visible from the Plains. In the Sawatch Range to the west are the Mount of the Holy Cross (14,176 feet) and Mount Harvard (14,375 feet). In the Sangre de Cristo Range, almost a continuation of the Sawatch, is Blanca Peak (14,463 feet), the highest point of the 'Rockies.' In the Parks rise the head-waters of the North and the South Platte, the Arkansas, the Grand, and the Rio Grande. The Uintah Mountains connect the eastern and western ranges of the Rocky Mountain System. The most important of the western ranges are the Wahsatch Mountains, which form a part of the eastern rim of the Great Basin, and which serve as the connecting link between the northern and southern groups of this system. The Wind River Mountains in Wyoming are the highest of the ranges in the northern group, with Fremont's Peak (13,790 feet). The mountains of the northern group are wilder and less accessible than those of the southern chains, but not so high. Yellowstone Park (q.v.), in Wyoming, is famous for its wonderful scenery. Mount Hooker and Mount Brown are the most noted peaks beyond the Canadian line. The highland gradually descends northward to an elevation of about 800 feet near the Arctic Ocean.

Rocroi (*Rokr-wa'*), a fortress of France, dep. Ardennes, 24 miles NW. of Sedan, and 2 from the Belgian frontier. Here Condé defeated the Spaniards in 1643. Pop. 2100.

Rodez (*Ro-day'*), a town of southern France (dep. Aveyron), stands on a bold bluff encircled by the Aveyron, 148 miles by rail NW. of Montpellier. The Gothic cathedral (1277–1535) has a tower 260 feet high, crowned by a colossal image of the Virgin. There are several mediæval houses, remains of a Roman amphitheatre, and a restored Roman aqueduct. Coal-mining, cloth-making, tanning, and cattle-dealing are carried on. Pop. 12,000.

Roding, an Essex river flowing 30 miles to the Thames, near East Ham.

Rodos'to (anc. *Rhœdestos*), a town of Turkey, on the north shore of the Sea of Marmora, 60 miles W. of Constantinople. Pop. 18,600.

Rodriguez (*Ro-dree'ghez*), or RODRIGUES, a hilly volcanic island (1760 feet), 18 miles long by 7 broad, lies 380 miles E. by N. of Mauritius, of which it is a dependency. Hurricanes often cause great damage to the island, which is encircled by a coral-reef. It was discovered by the Portuguese in 1645, and has been a British colony since 1814. The chief port is Port Mathurin. Pop. 3200.

Roermond (*Roor-mond*), an old Dutch town, at the junction of the Roer and the Maas (Meuse), 29 miles N. by E. of Maestricht. The fine cathedral (1218) is Romanesque. Pop. 12,350.

Roeskilde (*Rus-keel'deh*), a city on the Danish island of Zealand, at the southern end of the Roeskilder Fjord, 20 miles by rail W. by S. of Copenhagen. Founded in 980, it was the capital of the Danish kings and the seat of the bishops. The 13th-c. cathedral contains the tombs of most of the kings. Here peace was signed between Sweden and Denmark in 1658. Pop. 8370.

Rohilkhand, a division of the United Provinces of Agra and Oudh, has an area of 10,908 sq. m. and a pop. of 5,500,000.

Rohtak, a town of British India, in the Punjab, 42 miles NW. of Delhi. Pop. 16,700.

Rokeby, a parish in the North Riding of Yorkshire, 2½ miles SE. of Barnard Castle. Rokeby Hall (1724), after which Scott's poem is named, is the seat now of the Morritts.

Rokitno, a vast swampy region, now being gradually drained, between the rivers Pripet, Dnieper, and Beresina in West Russia.

Romagna (*Ro-man'ya*), a region of Italy, formerly the northern portion of the States of the Church, and comprising the *delegations* of Bologna, Ravenna, Ferrara, and Forli.

Romania, an old name for the eastern part of the Morea, and for Roumelia (q.v.).

Romans (*Romon²*), a town of France (dep. Drôme), on the Isère's right bank, 12 miles by rail NE. of Valence. A 9th-century bridge connects it with Péage on the left bank. Romans owes its origin to an abbey founded in 837. Pop. 15,000.

Roman's Horn, a Swiss village on Lake Constance, 12 miles SE. of Constance. Pop. 3200.

Roman Wall. See HADRIAN'S WALL.

Rome, the capital of the modern kingdom of Italy, stands on the Tiber, about 15 miles from

its mouth (from 35 to 44 hours' journey from Paris by rail). Roman legend ascribed its foundation to Romulus in 753 B.C.; but recent explorations have proved that the site was inhabited in the neolithic and early bronze period. In the time of the kings (753–510 B.C.) the city occupied seven hills (Palatine, Capitoline, Aventine, Cælian, Esquiline, Quirinal, and Viminal), whose summits rise from 80 to 120 feet above the river and the intervening valleys. The settlement on the Palatine attributed to Romulus was certainly fortified at a very early period. In the time of the later or Etruscan kings at least five of the settlements on the seven hills had been surrounded by separate defences. These fortified hills, with the marshy hollows between them, were enclosed under Servius by a huge rampart or *agger* of earth, faced with an exterior wall of unmortared masonry. For 800 years, till the reign of the Emperor Aurelian, the Servian agger formed the only defence of the city. The wall which bears the name of Aurelian is to a great extent identical with the present walls; it enclosed the suburbs which had grown up beyond the Cælian, the Esquiline, and the Quirinal, and included two additional hills, the Pincian, and part of the Janiculum, as well as the low-lying ground near the Tiber called the Campus Martius. The Aurelian Wall, begun by Aurelian in 271 A.D., completed by Probus in 280, restored by Honorius, and repaired by Belisarius, is 12 miles in circuit. The Leonine Wall, enclosing the Vatican Hill and the remainder of the Janiculum, was built by Leo IV. in 848. At the present time populous suburbs have arisen to the east and north beyond the walls, while to the south extensive spaces within the wall are uninhabited. Some 1500 acres, chiefly on the Cælian and the Aventine, are occupied by vineyards, fields, and gardens, while public gardens and squares occupy over 100 acres. To the period of the kings belongs the *Cloaca Maxima*, a huge arched sewer of Etruscan masonry. The so-called Mamertine prison at the foot of the Capitol was a deep vaulted well, and is perhaps the most ancient structure in Rome; in it, afterwards made into a prison, Jugurtha and the Catiline conspirators (and according to tradition St Peter) were confined. Of the fourteen aqueducts, with an aggregate length of 351 miles, several date from the republican period, some from the imperial age; these vast structures, striding on their huge arches across the Campagna, and still bringing water from the Apennines and the Alban hills, are among the most striking features of modern Rome.

In the time of the Republic the centre of the public life of the city was the *Forum Romanum*, an oblong space, containing about 2½ acres, and traversed by the *Via Sacra*. Here are still to be seen the remains of the temples of Saturn (491 B.C.), of Concord, of Castor and Pollux (496 B.C.), of Vesta, of Julius Cæsar, of Vespasian, and of Faustina. We see also the foundations of the Triumphal Arch of Augustus, the vast ruins of the Basilica Julia, and the milestone from which all Roman roads were measured. To the north of the Forum stands the Triumphal Arch of Septimius Severus, to the south the Arch of Titus. In the time of the emperors additional fora were laid out to the east, and remains still mark the Forum Julium, the Forum of Augustus, the Forum of Nerva, the Forum Pacis (built by Vespasian), and, most magnificent, the Forum of Trajan. Beyond it stands the great Column of Trajan, 124 feet in height, with spiral bas-reliefs representing scenes from Trajan's campaigns against the Dacians. Of inferior art is the Column of Marcus Aurelius (the Antonine Column) in the Piazza Colonna on the Corso. On the western side of the Forum Romanum rises the Palatine Hill, its summit covered with the substructures of the Palaces of the Emperors and the Houses of Augustus, Tiberius, Livia, Caligula, Domitian, Hadrian, and Septimius Severus. Of the 300 temples in ancient Rome, the names, and in many cases the sites, of 153 are known—several of them having been converted into churches. S. Maria del Sole is a round temple formerly called the Temple of Vesta, but now believed to be the Temple of Hercules Victor. Another temple, supposed to be the Temple of Fortuna Virilis, is now the church of S. Mary of Egypt. The church of SS. Cosmo e Damiano is the Temple of Sacra Urbs, erected by the Emperor Maxentius. The church of Santa Maria sopra Minerva stands on the ruins of a Temple of Minerva. In 27 B.C. Agrippa built a vast dome in front of the Thermæ which he erected in the Campus Martius; it is called by Pliny and other writers the Pantheon, and may have served as a sort of entrance-hall to the Thermæ. It is now known to have been rebuilt by Hadrian; in 608 it was consecrated as the church of S. Maria ad Martyres, and now, perfectly preserved, goes by the name of S. Maria Rotonda. The diameter (142 feet) of the dome, which is lighted only by a central aperture in the roof, is larger than the dome of St Peter's; the walls are 19 feet in thickness. The Thermæ of Agrippa were the earliest of the eleven great public baths—those of Trajan, of Constantine, &c. The Thermæ Antoninianæ, usually called the Baths of Caracalla, by whom they were begun in 212 A.D., and completed by Alexander Severus, were built to accommodate 1600 bathers; and, after serving for centuries as a quarry, they are still the vastest of all the ruins in Rome. A large marshy plain, which now forms the most densely populated part of Rome, lay outside the Servian Walls, extending from the foot of the Capitoline and Quirinal hills to the Tiber. This, being used for military exercises, was called the Campus Martius. On these fields were built the Baths of Agrippa and the Baths of Nero; and here were erected the Theatre of Balbus and the vast Theatre of Pompey, said to have contained seats for 40,000 spectators. Somewhat nearer to the Capitol was the Theatre of Marcellus, of which a considerable portion still stands. This theatre was begun by Julius Cæsar, and finished in the year 11 B.C. by Augustus, who named it after his nephew Marcellus. The great Flavian Amphitheatre, built for gladiatorial exhibitions and for the combats of wild beasts, goes by the name of the Colosseum; commenced by Vespasian, it was dedicated by Titus 80 A.D., and finished by Domitian. It is built in the form of an ellipse, the longer diameter measuring 613 feet and the shorter 510 feet. It rises to a height of 160 feet, covering 5 acres of ground. In the middle ages it was used as a fortress and afterwards as a quarry; but, though so large a portion has been demolished, it constitutes perhaps the most imposing monument of Roman magnificence which is left. The roads leading out of Rome beyond the Servian Walls were bordered by tombs, many of which, on the erection of the Aurelian Wall, were included within the city. On the Appian Way are the tombs of the Scipios. Outside the Aurelian Wall is the Tomb of Cæcilia Metella, wife of the triumvir Crassus, which in the 13th century was converted into a fortress; it is a

cylindrical block of masonry, 65 feet in diameter, resembling the keep of a feudal castle. The most magnificent of Roman tombs was the Mausoleum of Hadrian, now the castle of S. Angelo. It was a cylindrical tower of masonry, 240 feet in diameter and 165 feet in height, surmounted by a colossal statue of the emperor. When the Goths besieged Rome the tomb was converted into a fortress by Belisarius. It afterwards became the castle of the popes, and citadel of Rome, and in 1527 was defended against the French by Benvenuto Cellini. The Mausoleum of Augustus formed, in the middle ages, the castle of the Colonna family, and is now occupied as the Teatro Corea. Eleven Egyptian obelisks still ornament the gardens and piazzas of Rome, brought by Augustus and others. That in the Piazza of S. John Lateran, 104 feet in height, is the largest in existence. It was erected at Thebes by Thothmes III., and removed by Constantine to the Circus Maximus. The triumphal arches of Septimius Severus, of Titus, and of Constantine are still conspicuous. Of the bridges over the Tiber, three are ancient.

Of modern Rome, the pop. was 226,022 in 1870; 300,467 in 1881; and 462,783 in 1901. The walls are 14 miles in circuit. In the last thirty years of the 19th century many thousands of houses were built, miles of street constructed, and millions of money laid out. Under the strict building regulations adopted in 1887, the streets are much more spacious, and even the tenement-houses of better character; meanwhile the government has carefully guarded against the destruction of buildings of historic or antiquarian interest. During recent excavations interesting sites have been laid bare (especially near the Forum), and many statues, busts, inscriptions, and coins recovered. Old Rome stands on the left bank of the Tiber; on the right bank, occupying the Vatican and Janiculum hills and the low ground between these hills and the river, are St Peter's, the Vatican Palace, the Borgo, and the Trastevere ('*trans Tiberim*,' the section beyond the Tiber). The business part of the city occupies the plain on the left bank between the hills and the river, traversed by the Corso, the principal thoroughfare of Rome, about a mile in length, leading from the Porta del Popolo to the foot of the Capitoline Hill, where is the great national monument to Victor Emmanuel (1890–94). From the Piazza del Popolo two great streets diverge on either side of the Corso, the Via di Ripetta to the right, skirting the Tiber, and to the left the Via del Babuino, leading to the Piazza di Spagna, whence the Scala di Spagna, the resort of artists' models, ascends to the Pincian Gardens, on the site of the gardens of Lucullus, which command a splendid view of the city, and form the fashionable drive and promenade.

Before Rome became in 1870 the capital of Italy, the greater part of the Pincian, Quirinal, and Esquiline hills was occupied by villas of the Roman nobles, with extensive gardens planted with ilexes and vines. With two exceptions these have been destroyed, and their sites have been covered with modern houses, and too often by blocks of ugly barrack-like buildings, many stories in height, let out in tenements. The dirty but picturesque mediæval city is assuming the aspect of a modern capital, broad, straight thoroughfares having been driven through quarters formerly occupied by narrow streets and mean, crowded houses. Of the new streets the most important are the Via Venti Settembre, the Via Cavour, and the Via Nazionale. The older foreign quarter lay at the foot of the Pincian, around the Piazza di Spagna, but the healthier sites on the slopes and summits of the Quirinal and Esquiline are now more frequented.

Of the palaces the largest are the Vatican, the residence of the pope, and the Quirinal, now the residence of the king, but formerly a papal palace, in which the conclaves were held for the election of the popes. Many of the palaces of the Roman nobles contain collections of pictures and statuary. Chief among them are the Palazzo Borghese, containing, next to the Vatican, the best collection of pictures in Rome, the Palazzi Colonna, Doria, Barberini, Rospigliosi, Chigi, Torlonia, Farnese, Corsini, and di Venezia, now the Austrian embassy. Among the notable villas are the Villa Borghese, standing in a great park below the Pincian; the Villa Ludovisi, on the Pincian; the Villa Albani, outside the Porta Salara; and the Villa Medici, on the Pincian, now the Académie Française, with a splendid collection of casts. The Collegio Romano, formerly a great Jesuit college, is now occupied by a public library of modern books, by the Kircherian Museum of Antiquities, and by a well-arranged prehistoric and ethnological museum. The Palazzo dei Conservatori, on the Capitol, contains many of the best ancient statues. In the cloisters of the Carthusian convent in the Thermæ of Diocletian are stored the antiquities brought to light during the recent excavations. The Villa Medici contains a good collection of casts from ancient statues. The Lateran Palace contains an unrivalled collection of inscriptions and sculptures from the Catacombs, and a few good statues and mosaics. The chief papal collections are contained in the galleries attached to the Vatican, probably the largest palace in the world. In addition to the private gardens and apartments of the pope, the Vatican Palace comprises immense reception-halls with a series of chapels, libraries, picture-galleries, and vast museums of sculptures, antiquities, and inscriptions. The Sistine Chapel, built in 1473 by Sixtus IV., is covered with magnificent frescoes by Michael Angelo and the great Florentine masters. The Capella Nicolina, built by Nicolas V., and the Pauline Chapel, built by Paul III. in 1590, are also painted in fresco; the first by Fra Angelico, and the second by Michael Angelo. Raphael's Stanze and Loggie are halls and solars covered with inimitable frescoes executed by Raphael, Perugino, Giulio Romano, and other masters of their school. Beyond the Loggie is the great picture-gallery. The Vatican Library, with its priceless MSS., its collections of early printed books, of Christian antiquities, ancient maps and jewellery, is contained in two immense halls. The vast sculpture-galleries, with their unrivalled collections, comprise the Museo Chiaramonte, the Braccio Nuovo, and the Museo Pio-Clemente, which includes the Cortile di Belvedere, containing the Laocoon, the Apollo Belvedere, and the so-called Antinous.

Of the churches, over 300 in number, many are rather mortuary or memorial churches, opened only once a year on the festival of their patron saint. The most noteworthy are the five patriarchal churches, the seven pilgrimage churches, and the eight basilican churches. Others are interesting either from their early date, their historical associations, the archæological or artistic treasures they contain, or the fragments of earlier structures which they enclose. St John Lateran (S. Giovanni in Laterano), between the Cælian and Esquiline hills, ranks as the first

church in Christendom. It dates from the time of Constantine, and was, till the rebuilding of S. Peter's, the metropolitan cathedral of Rome. It retains its 5th-century baptistery and the beautiful 13th-century cloisters. The Santa Scala, said to have been brought by the Empress Helena from Jerusalem, is still venerated by pilgrims. The church itself was burned down and rebuilt in the 14th century; the adjoining palace of the popes is now a museum, chiefly of Christian antiquities. The Basilica of St Peter (S. Pietro in Vaticano), the largest church in the world, was rebuilt in the 16th century from the designs of Bramante, Michael Angelo, and Bernini. Begun in 1506, and consecrated in 1626, it is in the form of a Latin cross, with a vast central dome. The interior length is 615 feet, the height of the nave 150 feet, and of the cross which surmounts the dome 435 feet. S. Paul beyond the Walls, till the fire of 1823 a vast 4th-century church, has been rebuilt in a style of great magnificence. S. Lorenzo beyond the Walls was rebuilt in 578, and remodelled in the 13th century. The Basilica Liberiana, commonly called S. Maria Maggiore (as being the largest of the eighty churches in Rome dedicated to the Virgin Mary), is one of the oldest churches in Rome, the nave dating from the 5th century. These five patriarchal churches, together with S. Croce and S. Sebastiano, constitute the seven ancient pilgrimage churches. The five patriarchal churches, together with S. Agnese, S. Croce, and S. Clemente, are the eight basilican churches. S. Agnes beyond the Walls was founded by Constantine, and rebuilt in the 7th century. S. Croce is a 5th-century basilica. S. Clemente is the most archaic church in Rome. In addition to the eight basilican churches, others conserve the remains of earlier buildings. S. Pietro in Vincoli, a 5th-century basilica, with twenty ancient Doric columns, contains Michael Angelo's statue of Moses, and the supposed chains of St Peter. S. Maria sopra Minerva, near the Pantheon, the chief Dominican church, is the only Gothic church in Rome. Among the vast modern churches are the Gesù, the gorgeous church of the Jesuits, containing the tomb of S. Ignatius Loyola; S. Carlo al Corso, now the fashionable church of Rome; S. Andrea della Valle; SS. Apostoli; S. Maria Vallicella, commonly called Chiesa Nuova; and the Cappuccini. Other objects of interest are the vast Catacombs, extending underground for many miles, the Ghetto (now almost wholly reconstructed), the Sapienza, the Propaganda, and the Protestant cemetery with the tombs of Keats and Shelley.

Rome is now a fairly healthy city, except in the late summer months; the water-supply is unrivalled both for quality and quantity, and the streets are well cleansed. No city excels Rome in its public fountains. One of the greatest improvements which has been effected is the embankment of the Tiber, and the straightening and deepening of its channel. This has put a stop to the disastrous floods by which the lower parts of the city were formerly inundated. The opening of new streets and the widening of old ones have also had a favourable result on the public health. The streets are in great part lighted by electricity, and electric street tramways are in operation. There are practically no manufactures in Rome. Hats, gloves, neckties, false pearls, and trinkets are made, and there are cabinet-makers, and a few foundries on a small scale; but compared with other great cities the absence of factory chimneys is very notable. There are printing-offices, but the Italian book-trade is centred at Milan. The chief industry is the manufacture of small mosaics, small bronzes, of statuary, casts, and pictures, either original or copies of the works of the great masters. All the necessaries of life have to be imported from a distance, the Campagna which extends for many miles around Rome being uninhabitable on account of the malaria. It is an unenclosed and untilled waste, roamed over by herds of half-wild cattle. Corn and wine are brought from Tuscany, and from the fertile Terra di Lavoro near Naples. The prosperity of the city depends on the expenditure of the courts of the Quirinal and the Vatican, of the army of functionaries in the public offices, of the garrison, and of the foreign visitors who crowd the hotels during the winter months. The railways from all parts of Italy converge outside the city, which they enter near the Porta Maggiore on the Esquiline, and have a common terminus on the summit of the Quirinal close to the Baths of Diocletian. The omnibus service is good, and well-managed tramways traverse several of the broad new streets.

The history of Rome was for centuries the history of the civilised world; and even after it ceased to be the capital of the empire it was the centre of Christendom and the most interesting and influential city on the planet. Rome was the capital of a kingdom which gradually grew till the foundation of the republic in 509 B.C. The republic steadily extended, and after wars with Æquians, Volscians, Latins, Samnites, Sabines, Tarentines, &c., Rome was mistress of Italy by the middle of the 3d century B.C. Then came the wars with Carthaginians and Macedonians, with Jugurtha and Mithridates, and Rome becomes the mistress of southern Europe, northern Africa, and western Asia. Gaul was conquered by Julius Cæsar (51 B.C.), and next south Britain. The republic was overthrown, and Augustus, the first emperor, was at peace with all the world soon after the birth of Christ. The empire was extended to Germany and Dacia, in Parthia and Asia; but in the 3d century A.D. the northern nations—especially the Goths and kindred nations—began to do more than hold their own, and the empire contracted on the north. The seat of the empire was removed from Rome to Byzantium or Constantinople by Constantine in 330 A.D., and in 364 the empire was divided into an eastern and a western empire, Rome remaining capital of the western half. Erelong Rome was taken and retaken by the barbarians (410, 476), and, retaken again by Belisarius, was made dependent on Constantinople in 553, her glory being departed. But as capital of the popes, new glories were in store for her; Charlemagne and Otho of Germany were crowned emperors of the west at Rome, and the city became the independent capital of the increasing papal dominions or States of the Church, the Romagna, Bologna, and Perugia being conquered by Pope Julius II. in 1503. Rome remained the mother city of Christendom, and continued to flourish in spite of the temporary sojourn of the popes at Avignon and the short-lived republic of Rienzi (1347). Again in 1798 the French proclaimed Rome a republic, and in 1808 the city became part of the French kingdom of Italy; it was restored to the popes in 1814, who, save during the troubles of 1848-49, retained it as capital of the States of the Church, under French protection. But in 1860 the papal states revolted to Sardinia, and in 1870 Rome became part of the Italian kingdom and national capital.

See R. Burn, *Rome and the Campagna* (1870);

J. H. Parker, *Archæology of Rome* (1872–80); T. H. Dyer, *The City of Rome, its Vicissitudes and Monuments* (2d ed. 1883); F. Wey, *Rome* (trans. from Fr., new ed. 1886); R. Lanciani, *Ancient Rome in the Light of Recent Discoveries* (1888); with other works by Gell, Nibby, Hare, Professor Middleton, &c.; and the histories of the Roman state, or parts of it, by Mommsen, Duruy, Ihne, Merivale, Gibbon, Bury (1889), Hodgkin (1880–85), Gregorovius, Ranke, &c., besides the Church histories.

Rome, (1) capital of Floyd county, Georgia, on the Coosa River, 72 miles by rail NW. of Atlanta. Pop. 7300.—(2) A city of New York, on the Mohawk River, 109 miles by rail WNW. of Albany, and at the junction of the Erie and Black River canals. It has mills and manufactories of iron, brass, copper, and other goods; and here is Fort Stanwix. Pop. 15,550.

Romford, a market-town of Essex, on the Bourne or Rom, 12 miles ENE. of London. It has large cattle and corn markets, iron-foundries, extensive market-gardens, and a very large brewery of 'Romford ale.' The church of St Edward the Confessor was rebuilt in 1850. Romford is the capital of the Liberty of Havering-atte-Bower, once part of the lands of the Saxon kings. Pop. (1851) 3861; (1901) 13,656 See George Terry's *Memories of Old Romford* (1880).

Romney, New, a municipal borough and Cinque Port in the south of Kent, 8 miles SW. of Hythe. It ceased to be a port in the days of Edward, and is not now either on the seashore or on a navigable river. Pop. 1326. Old Romney, a small village, is 1½ mile further inland.

Romorantin, a town of France (dep. Loir-et-Cher), 45 miles by rail E. of Tours. Pop. 6720.

Romsdal, the valley in central Norway of the impetuous Rauma, which reaches the sea halfway between Bergen and Trondhjem. Its scenery is magnificent, the mountains culminating in the Trolltinder or Witch Needles (5880 feet).

Romsey, a municipal borough of Hampshire, on the Test, 8 miles NW. of Southampton. The fine cruciform abbey church, mainly Norman, was the church once of a Benedictine nunnery, founded about 910 by Edward the Elder. Sir William Petty was the son of a Romsey clothier; and Lord Palmerston, of whom there is a bronze statue (1868) in the market-place, lived close by at Broadlands. A corn exchange was built in 1865, a town-hall in 1866. Pop. (1851) 2080; (1901) 4365. See Littlehales' *Romsey Abbey* (1886).

Rona, an Inverness-shire island, between Skye and the mainland, 4 sq. m. in area, and 404 feet high. Pop. 161.

Ronaldshay, North and South, the most northerly and the most southerly of the Orkney Islands, 2¾ and 20½ sq. m. in area. South Ronaldshay attains 389 feet. Pop. 442 and 1560.

Roncesvalles (*Ron'se-val'les*; orig. *Rencesvals*, a Basque word), a hamlet on a small oval plain 25 miles NE. of Pampeluna, surrounded by Pyrenean ridges, where Roland and the rear of Charlemagne's army were cut off by the Basques.

Ronciglione (*Ron-cheel-yo'nay*), a town of Italy, 30 miles NNW. of Rome. Pop. 5434.

Ronda, a Moorish town of Spain, 43 miles W. of Malaga, on the gorge of the Guadiaro. One of two bridges is 255 feet from the water. Pop. 20,850.

Rondout', till 1872 a post-village of New York, on the Hudson River, now a part of Kingston.

Roquefort (*Rok-forr'*), a French village, dep. Aveyron, 44 miles N. by W. of Béziers, celebrated for its ewe-milk cheeses. Pop. 943.

Roraima (*Ro-rī'ma*), an isolated, table-topped sandstone mountain, near the west border of British Guiana. First sloping gradually upwards 5000 feet above sea-level (2500 above the plain), it next shoots up 2000 feet more in a perpendicular cliff, furrowed with waterfalls. It was scaled by Mr im Thurn in 1884.

Rorke's Drift, a station on the Tugela River, Zululand, South Africa, memorable for the heroic defence of Lieutenants Chard and Bromhead, with eighty men of the 24th Regiment against 4000 Zulu warriors the night after Isandula (q.v.).

Rosa, Monte. See Monte Rosa.

Rosario (*Rozâh'rio*), the third city of the Argentine Republic, with an excellent harbour and large commerce, is on the west bank of the Paraná, 190 miles by rail NW. of Buenos Ayres, 210 miles by river. Pop. 112,470.

Roscoff, a seaport and watering-place of the French dep. of Finistère, on the English Channel, 33 miles NE. of Brest, with a marine zoological station. Pop. 4900. Here Mary Queen of Scots landed in 1548, and Prince Charles Edward in 1746. It was long an emporium for smuggling into the south of England.

Roscommon, an inland county of Connaught, Ireland, bounded E. by the Shannon, is 62 miles long from N. to S., by 35 from E. to W. Area, 607,691 acres, of which barely one-fifth is under crops; more than one-half is permanent grass; one-sixth is waste. It belongs to the central plain of Ireland, but rises in the north into the Curlew (800 feet) and Braulieve (1377 feet) Mountains. Several lakes occur, as Allen, Boderg, and Ree, expansions of the Shannon, and Key, Gara, and Glinn in the north-west. The chief industry is the feeding, in the 'Plain of Boyle' and elsewhere, of sheep and cattle. The chief towns are Roscommon, Boyle, Castlerea, Elphin, and Strokestown. Pop. (1841) 254,551; (1861) 157,272; (1881) 132,490; (1901) 101,791—99,085 Roman Catholics. Roscommon returns two members. It possesses Celtic raths, remains of strong castles, and fine ecclesiastical ruins.

Roscommon, the county town, 96 miles W. by N. of Dublin, arose around a Dominican abbey, founded in 1257, and a castle built ten years later; the remains of both still exist. Pop. 1894.

Roscrea (*Ros-kray'*), a market-town of Tipperary, Ireland, 77 miles SW. of Dublin, is a very ancient town; here St Cronan built a church, and it had a celebrated school in the 7th century. Remains of a castle, a round tower (80 feet high), and ruins of two abbeys exist. Pop. 2325.

Rosehearty, an Aberdeenshire fishing-village, 4½ miles W. of Fraserburgh. Pop. 1189.

Rosemarkie. See Fortrose.

Rosendale, a village of New York, by rail 8 miles SSW. of Kingston, or 53 S. of Albany, has a great manufacture of hydraulic cement. Pop. 1850.

Rosetta (Arab. *Raschid*, after Haroun el Raschid; anc. *Bolbitine*), a town of Egypt, on the old Bolbitic arm of the Nile delta, 9 miles from the sea and 44 by rail NE. of Alexandria. During the Crusades it was a place of great strength; St Louis in 1249 made it the basis of his operations. Sultan Beybers two years later founded the present city farther inland. Pop. 16,666. A few miles to the north of the town was discovered the Rosetta Stone, which gave the first clue to the interpretation of the Hieroglyphics. At Rosetta too is an irrigation barrage in the Nile,

508 yards long, originally constructed in 1843–61, and rebuilt by Scott Moncrieff in 1886–90.

Rosherville, gardens near Gravesend (q.v.).

Roslin, a Midlothian village, near the wooded glen of the North Esk, 6½ miles S. of Edinburgh. Its castle, dating from the 14th century, was the seat of the St Clairs, Earls of Orkney from 1379 to 1471, and afterwards of Caithness, and hereditary grand-master masons of Scotland from 1455 to 1736. The exquisite 'chapel,' built about 1450, is really the choir of an intended collegiate church, and is only 70 feet long, 35 broad, and 42 high. Its beauty lies not in the outline, but in the profusion of stone-carving lavished on pinnacles, niches, vaulted roof, and clustered columns, and especially on the famous 'Prentice pillar.' The building, essentially Scottish, has often been wrongly ascribed to Spanish, at any rate to foreign, masons. Much damaged by an Edinburgh mob in 1688, it was restored by the third Earl of Rosslyn at a cost of £5000, and has served since 1862 as an Episcopal church. On Roslin Moor the Scots twice defeated the English on the 24th February 1303. Pop. 1130.

Rosneath. See DUMBARTONSHIRE.

Ross, a market-town in Herefordshire, on the Wye's left bank, 14 miles SSE. of Hereford. In the church (1316), whose 'heaven-directed spire' is 208 feet high, is buried John Kyrle, celebrated by Pope as the 'Man of Ross.' Pop. 3300.

Rossall College, a large public school on the Lancashire coast, 2½ miles SSW. of Fleetwood, was founded in 1844 for the sons of clergymen and others. See the *Jubilee Sketch* (1894).

Ross and Cromarty, a Highland county, the third largest in Scotland, extends from the German Ocean to the Atlantic, and is bounded N. by Sutherland, S. by Inverness-shire. In 1890–91 it was finally formed into a single county by the boundary commissioners, who also added to it the small Ferintosh (detached) district of Nairnshire, and a much smaller fragment from Inverness-shire. Its mainland portion measures 75 by 67 miles, and the total area is 2,084,900 acres, or 3260 sq. m., of which 103 are water and 736 belong to a dozen islands—the Lewis, Tanera, Ewe, &c. The east coast is indented by the Dornoch, Cromarty, and Moray Firths; the west coast by eight sea-lochs (Broom, Gruinard, Torridon, Carron, &c.). The chief of the innumerable streams are the Oykell, Alness, and Conon; the Falls of Glomach, on a head-water of the Elchaig, in the SW. are 370 feet high; and beautiful Loch Maree is the largest of nearly a hundred good-sized fresh-water lakes. Mam Sodhail (3862 feet), on the Inverness-shire border, is the highest of more than thirty summits exceeding 3200 feet above sea-level, others being Ben Dearg (3547), Benmore (3505), Ben Wyvis (3429), and Ben Attow (3383). The high grounds afford good pasture, and systematic sheep-farming dates from about 1764. It reached its zenith during 1860–70, when 400,000 sheep were grazed in the county. Less than 7 per cent. of the entire area is arable, and less than 70 sq. m. is occupied by woods and plantations. Whisky is distilled, and the salmon and sea fisheries are very valuable. Montrose was defeated at Invercharron (1650), and a small Jacobite force in Glenshiel (1718). Sir Thomas Urquhart, Lord Lovat, and Hugh Miller were natives. The chief places are Dingwall, Tain, Stornoway, Fortrose, Cromarty, Strathpeffer, and Invergordon; and the county returns one member. Pop. (1801) 56,318; (1851) 82,707; (1901) 76,135.

Rossbach, a village in Prussian Saxony, 22 miles W. by S. of Leipzig and 9 SW. of Merseburg. Here Frederick the Great defeated the French and Austrians on 5th November 1757.

Rosscar'bery, a Cork village, 12 miles E. of Skibbereen. Pop. 530.

Rossendale, a parliamentary division of NE. Lancashire.

Rossland, a centre of gold, silver, and copper mining in the very south of British Columbia, 6 miles from the U.S. frontier. Pop. 6500.

Rostock, in Mecklenburg-Schwerin, a busy Baltic port, stands on the Warnow, 7 miles from its mouth and 60 by rail NE. of Schwerin. It has busy fairs for wool, horses, and cattle; imports coal, wine, herrings, petroleum, groceries, timber, &c.; exports grain, wool, flax, and cattle; and has many industries. The university (1418; rebuilt 1867) has over 400 students. St Mary's (1398–1472) is a noble Gothic church; St Peter's has a steeple 414 feet high. The ducal palace (1702) and the 14th-century Gothic town-house deserve mention. Blücher was a native. Pop. (1875) 34,172; (1900) 54,735.

Rostoff, (1) an important manufacturing town of south Russia, at the head of the delta of the Don and on the railway from Moscow to the Caucasus. Pop. (1881) 44,500; (1897) 119,889.—(2) One of the oldest towns of Russia, 129 miles by rail NNE. of Moscow. Pop. 13,020.

Rostre'vor, a Down seaport and watering-place, 8¾ miles SE. of Newry. Pop. 806.

Rosyth, a tract of land extending over 3 miles on the north shore of the Firth of Forth, at St Margaret's Hope, opposite Queensferry and just inside the Forth Bridge, acquired by the government in 1903 for the purpose of forming an extensive naval base. The ruined 16th-century castle of Rosyth, a rock-island connected with the shore by a causeway, was said by tradition (baseless) to have been the birthplace of Oliver Cromwell's mother (named Steward).

Rothamsted Park, 4 miles NW. of St Albans, seat of Sir J. Bennet Lawes (1814–1900), and scene of his and Sir J. Gilbert's agricultural experiments.

Rothay. See GRASMERE.

Rothbury, a town of Northumberland, on the Coquet, 11 miles SW. of Alnwick. Pop. 1300.

Rothenburg (*Ro'ten-boorg*), a mediæval-looking town of Bavaria, on the Tauber, 36 miles W. by S. of Nuremberg. A historical play commemorates periodically an episode in the Thirty Years' War. Pop. 7930.

Rother, a river (1) of Derbyshire and Yorkshire, flowing 21 miles to the Don; (2) of Hants and Sussex, flowing 24 miles to the Arun; and (3) of Sussex and Kent, flowing 31 miles to the English Channel near Winchelsea.

Rotherham (*Roth'er-am; th* as in *this*), a busy manufacturing town in the West Riding of Yorkshire, on the right bank of the Don, here joined by the Rother, 5 miles ENE. of Sheffield by a railway opened in 1838. Its chief glory is the magnificent 14th-century cruciform church, Perpendicular in style, with crocketted spire and fine west front; in 1875 it was restored by Sir G. G. Scott at a cost of £9000. A handsome Gothic edifice, built for an Independent College in 1875 at a cost of £26,000, was bought at £8000 for the old grammar-school (1483) at which Bishop Sanderson was educated. There are also a mechanics' institute (1853); a free library (1881);

an infirmary (1870); a covered market (1879); public baths (1887); a park (1876) of 20 acres, 300 feet above the town; and the Clifton Park of 57 acres, opened by the Prince of Wales in 1891. The manufactures include stoves, grates, chemicals, pottery, glass, railway carriages, &c. Ebenezer Elliott was a native of Masborough, incorporated with the municipality in 1871. It was constituted a county borough in 1902. Pop. (1851) 6325; (1901) 54,349. See John Guest's huge *Historical Notices of Rotherham* (1879).

Rotherhithe (*th* as in *this*; but usually called *Redriff*), a London parish in Southwark (q.v.), on the Thames.

Rothes (*Roth'ez*), an Elginshire police-burgh (since 1884), near the Spey, 11 miles SSE. of Elgin. Near it are distilleries. Pop. 1625.

Rothesay (*Roth'say*; *th* as in *thick*), a favourite Scottish watering-place, the capital of Buteshire, is beautifully situated on the north-east shore of the island of Bute, 40 miles by water W. of Glasgow and 19 SSW. of Greenock. 'Sweet Rothesay Bay,' rimmed by hills 400 to 530 feet high, offers safe anchorage in any wind, and is spacious enough to contain the largest fleet. Its charming scenery, its bathing facilities, its sheltered position, and the extreme mildness of its climate have rendered Rothesay a resort alike of holiday-makers and of invalids. A score of the Clyde steamers touch regularly at Rothesay, whose commodious harbour was constructed (1822–84) at a cost of over £30,000. An esplanade was formed in 1870; and among the chief edifices are the county buildings (1832–67), public hall (1879), aquarium (1876), academy (1869), and Glenburn hydropathic (1843). The ruins of Rothesay Castle, founded about 1098, taken by Haco of Norway (1263), the death-place of Robert III. (1406), were repaired in 1871–77. Rothesay since 1398 has given the title of duke to the eldest son of the Scottish sovereign. Created a royal burgh in 1400, it returned a member from the Union till 1832. Pop. (1821) 4107; (1901) 9378. See books by J. Wilson (1848) and Thoms (1870).

Rothwell, (1) a Yorkshire town, 4 miles SE. of Leeds. Pop. 11,702.—(2) A town of Northamptonshire, 4 miles NW. of Kettering. Pop. 4193.

Rotomahana. See NEW ZEALAND.

Rotorua, a small lake of volcanic origin in the North Island of New Zealand, 20 miles NW. of Mount Tarawera and in the region of thermal springs, the Wonderland of New Zealand, where the government has established a sanatorium.

Rottenburg (*u* as *oo*), a town of Würtemberg, on the Neckar, 6 miles SW. of Tübingen, with a Catholic cathedral. Pop. 8000.

Rotterdam, the busiest port of Holland, stands on both sides of the Maas, 19 miles from its mouth, 16 by rail SE. of the Hague, and 45 SW. of Amsterdam. Its trade grew at an extraordinarily rapid rate after the separation of Holland from Belgium, and in the second half of the 19th century; the quays measure 15 miles, and there are spacious docks. Since 1872 seagoing vessels have ceased to approach Rotterdam by the old channel of Brill (Brielle); they have used instead the New Waterway—i.e. the Maas and the Scheur, the latter of which has been connected with the sea by a canal cut through the Point (Hoek) of Holland, which now has a depth never less than 22 feet at low tide, and big ships are able to reach the sea in two hours from Rotterdam. The imports consist principally of mineral ores and metals, grain (wheat, rye, oats, maize), coal, oil (petroleum chiefly), seeds, tallow and similar greasy substances, sugar, rice, tobacco, hides, indigo, &c.; whilst the more important exports are linen, flax, butter, cheese, cattle, and spirits (gin, &c.). There are iron and other metal works, shipbuilding, distilling, sugar-refining, and the manufacture of tobacco, chemicals, &c. The town is intersected by canals. On the south side of the river, opposite the city proper, are the iron-works, shipbuilding yards, and docks of the island of Fijenoord, connected with the other bank by two lofty bridges (one a railway bridge). In the city the more important buildings are the Gothic church of St Lawrence (15th century), with a very large organ, the tombs of Witt and other Dutch admirals, and a lofty tower (295 feet high); the Boymans Museum (1847), with a fine collection of paintings by Dutch masters; the yacht club-house, containing an ethnological collection; the town-house, exchange, and similar public buildings. The public institutions include an academy of art and science (nearly 1100 pupils), schools of music, navigation, and the technical arts, and an excellent zoological garden. Pop. (1830) 72,300; (1858) 104,724; (1903) 357,474. Rotterdam counts as her most illustrious sons Erasmus and the poet Tollens; James, Duke of Monmouth, Grinling Gibbons, and Mrs Molesworth were also born here. The place was captured by Francis of Brederode in 1488, lost to the Austrians in the following year, and occupied by the Spaniards in 1572.

Rotti (*Rottee*), a fertile Dutch island in the Indian Archipelago, SW. of Timor. It is 36 miles in length (655 sq. m.); pop. 80,000. The surface, though hilly, nowhere exceeds 800 feet in height.

Rottweil, a town of Würtemberg, on the Neckar, 68 miles SW. of Stuttgart. Pop. 6052.

Rotu'mah (*u* as *oo*), an island in the south Pacific, 300 miles NNW. of Fiji, to which it was annexed in 1880. Area, 14 sq. m.; pop. 2207, all Christians.

Roubaix (*Roo-bay'*), a town of N. France (dep. Nord), 6 miles by rail NE. of Lille. Here cloth, shawls, velvet, &c. are manufactured to the annual value of £16,000,000, thread, sugar, beer, spirits, machinery, &c. being also produced. Pop. (1810) 9000; (1876) 74,946; (1901) 123,195.

Rouen (*Roo-on'*; Lat. *Rotomagus*), formerly capital of Normandy, and now chief town of Seine-Inférieure, and a great manufacturing city, is situated on the Seine's right bank, 87 miles NW. of Paris. The ramparts have been converted into boulevards, and the modern streets are well and regularly built; but old Rouen still largely consists of ill-built picturesque streets and squares, with tall, narrow, quaintly carved, wood-framed and gabled houses. The Seine, over 300 yards broad, makes Rouen, although 80 miles from the sea, the fourth shipping port of France; and operations, in the way of deepening the river and building quays, are yearly adding to its capacity and importance, £750,000 having been expended on the port since 1831. A stone bridge and a suspension bridge lead to the Faubourg St Sever on the left bank. Rouen possesses several remarkably beautiful Gothic churches —in particular the cathedral (13th century onwards), St Ouen (14th–15th century; perhaps the best specimen of Gothic in existence), and St Maclou (florid style of the end of the 15th century). The archiepiscopal cathedral, begun by Philippe Auguste, has a very rich west façade, and two fine though unfinished west towers —the south one called the Tour de Beurre (1485–

1507), but is disfigured by a lofty cast-iron spire (487½ feet) erected upon the central tower in 1876. It contains in its twenty-five highly ornamented chapels numerous monuments of great interest, especially those of Rollo and of his son William Longsword. The heart of Richard Cœur de Lion, once buried there, is now preserved in the Museum of Antiquities. Among other noteworthy buildings in Rouen are the palais de justice (15th century); the hôtel-de-ville, with its public library of 150,000 volumes, and its picture-gallery; and the Hôtel Dieu. The principal branches of industry are manufactures of cotton, nankeens, dimity, lace, cotton-velvets, shawls, hosiery, mixed silk and wool fabrics, blankets, flannels, hats, cordage, cotton and linen yarns, shot, steel, lead, chemicals, paper, confectionery, &c. There are also shipbuilding yards and engineering works. Pop. (1872) 102,470; (1901) 110,717. The first home of the Norman dukes, Rouen was captured by Philippe Auguste (1204), was regained by England (1419–49), and in 1431 witnessed the burning of Joan of Arc, a statue of whom adorns La Place de la Pucelle. Rouen was the birthplace of Corneille, Fontenelle, Boieldieu, and Armand Carrel, and the death-place of Clarendon. It was occupied by the Germans in the war of 1870–71.

Rouergue (*Roo-erg'*), an old province of southern France, between Languedoc, Auvergne, and Guienne.

Rougemont Castle. See EXETER.

Roulers (*Roo-lay';* Flem. *Rousselaere*), a town of Belgium, 19 miles SSW. of Bruges, manufacturing cottons, lace, and chicory. Here the French defeated the Austrians in 1794. Pop. 23,250.

Rouma'nia, a kingdom in SE. Europe, lying mainly between the Carpathians, the Pruth, and the Danube (the Dobrudja being south of the Danube), and bordering on Hungary, Russia, Bulgaria, and Servia. It is crescent-shaped, its average length being 358 and its breadth 190 miles; area, 49,250 sq. m., and pop. (1900) 5,956,690, including 5½ millions of Orthodox Greek Christians, 266,650 Jews, and many gypsies. There are besides some 4,000,000 Roumanians outside the Roumanian kingdom—in Hungary (especially Transylvania), Bukowina, Bessarabia, and adjoining Russian provinces, Servia, and Bulgaria. Roumania is an irregular inclined plane, sloping down from the Carpathian Mountains (3000 to 9000 feet) to the northern bank of the Danube, and it is traversed by numerous watercourses (many of which are dry in summer). Roumania is divided into the two provinces of Wallachia and Moldavia, the first bordering on the Danube, the second on the Pruth, and formerly distinct principalities. The capital of Roumania is Bucharest in Wallachia, about 30 miles from the Danube; and the chief town of Moldavia is Jassy, near the Pruth. Other towns are the seaports of Galatz and Ibrail (or Braila) at the mouth of the Danube, Craiova (Krajova), Botoshani, Ploiesti (Plojeschti), Pitesti, and the ancient capital Curtea d'Ardges. The principal industries of Roumania are agriculture, salt-mining, and petroleum-making. Maize and cereals are largely exported, and amongst the fruits are gourds, plums, peaches, walnuts, apples, pears, and grapes. The manufacturing industries, which are greatly handicapped by the cheap productions of Germany and Austria, include flour and saw milling, match-making, and petroleum-distillation, tanning, boot and shoe making, and cement manufacture. The peasantry are mainly clothed in garments made by themselves of home-spun, woven, and dyed fabrics, and they possess much skill in the ornamentation of cloth, gauze, and muslin. Before 1864 the whole of the land was practically held by the boyards or inferior nobles, who were frequently absentees, or by the state. But when the government became democratic it was determined to restore one-third of it to its original owners at moderate prices fixed by the state. The result was that there exist over 406,000 holdings, averaging about 10 acres each. The government is a hereditary limited monarchy, and the constitution provides for a council of ministers, a senate, and a chamber of deputies. The revenue is over £9,000,000, and more than balances the expenditure; the debt, £54,350,000. The value of imports varies from £10,000,000 to £13,000,000, and of exports from £10,000,000 to £14,000,000. Nearly half of the exports (chiefly cereals and seed) goes to Britain; a third of the imports is from Germany.

The Roumanians are descended from the ancient inhabitants—probably Thracians or Dacians—of the country, modified by elements derived from the Roman, Gothic, Bulgarian, and Slavonic invaders. Dacia was a Roman colony from 101 A.D. till 274, when it became the prey of successive swarms of wandering tribes. Out of numerous small states, two, Wallachia and Moldavia, had become dominant, when they had to bow to the Turkish yoke, and became tributary to the Porte. They were governed by voivodes and hospodars nominated by the Porte, who were generally extortionate Fanariots, Greeks of Constantinople. Russian intervention during the 18th century somewhat improved the condition of the down-trodden principalities, which at times were wholly under Russian influence. In 1859 they elected the same prince Couza. He ruled till he was deposed for misgovernment in 1866, and was succeeded by Prince Charles of Hohenzollern. The Roumanians fought bravely on the Russian side in the Turkish war of 1877–78, and at the end obtained complete independence, though they had to give Russia Bessarabia in exchange for the Dobrudja. In 1881 the prince was recognised as a king. The Roumanian language is derived mainly from Latin, with Slavonic, Hungarian, and other elements. See Samuelson, *Roumania, Past and Present* (1882).

Roumelia, or RU'MILI ('Land of the Romans'—i.e. Byzantine Greeks), after the Turkish Conquest a name for Thrace and Macedonia, of which Eastern Roumelia is a portion; see BULGARIA.

Roundhay Park. See LEEDS.

Roundway Down, a hill 1½ mile N. of Devizes, in Wiltshire, the scene of Waller's defeat by the royalists under Lord Wilmot in July 1643.

Rousay, an Orkney island, 10 miles N. of Kirkwall. Area, 18½ sq. m.; pop. 627.

Roussillon (*Roos-see-yon'*), a former French province, surrounded by Languedoc, the Mediterranean, the Pyrenees, and the county of Foix, and now forming the dep. of Pyrénées-Orientales.

Roveredo (*Ro-ver-ay'do*), a town of the Austrian Tyrol, close to the Adige's left bank, 14 miles S. of Trent by rail. It has been since the 15th century the centre of the Tyrolese silk industry; it has also leather and tobacco factories. Pop. 10,200. Here the French defeated the Austrians, September 3–4, 1796. Rosmini was a native.

Rovigno (*Roveen'yo*), an Austrian seaport, on the west side of the peninsula of Istria, 40 miles S. by W. of Trieste. Pop. 10,500.

Rovigo (*Rovee'go*), a cathedral city of Italy, 27 miles by rail S. of Padua. Pop. 11,200.

Rovuma, a river of Africa, rises E. of Lake Nyassa, and flows 450 miles E. to the Indian Ocean N. of Cape Delgado, forming the boundary between German and Portuguese East Africa. It was ascended by Livingstone and Kirk in 1862.

Row (*Roo*), a village of Dumbartonshire, on the east shore of the Gare Loch, 2 miles NW. of Helensburgh by rail (1894). The saintly John M'Leod Campbell was minister from 1825 till his deposition for heresy in 1831. Pop. 954.

Rowardennan, a steamboat-pier on Loch Lomond, at the base of Ben Lomond.

Rowley Regis, a town of Staffordshire, 3 miles SE. of Dudley, within whose parliamentary limits it partly lies. There are collieries, iron-works, quarries, potteries, implement-works, and breweries. Pop. (1851) 14,249; (1901) 34,670.

Rowton Heath, a royalist defeat in the Great Rebellion, fought under the walls of Chester, September 24, 1645.

Roxburghshire, a Scottish Border county, bounded by Berwickshire, Northumberland and Cumberland, Dumfriesshire, Selkirkshire, and Midlothian. Its greatest length is 42 miles; its greatest breadth 30 miles; and its area 670 sq. m., or 428,494 acres. In the north the Tweed winds 25 miles eastward, receiving in this course Gala and Leader Waters and the Teviot, which last runs 37 miles north-eastward from above Hawick to Kelso, and itself receives the Ale, Slitrig, Rule, Jed, &c. Thus the whole county, often called Teviotdale, drains to the German Ocean, with the exception only of Liddesdale, or Castleton parish, in the extreme south, whose 106 sq. m. belong to the western basin of the Solway Firth. The Cheviots (q.v.) extend along the south-eastern boundary, their highest point here Auchopecairn (2382 feet); in the interior rise Ruberslaw (1392) and the triple Eildons (1385). Rather less than two-thirds of the entire area is in cultivation, and the raising of crops is of much less importance than the grazing of half a million sheep. The extinct burgh of Roxburgh, with a vanished castle, gave the county its name, but has been quite superseded by Kelso; and Jedburgh, the county town, is very much smaller than Hawick; other places are Melrose, Denholm, St Boswells, Yetholm, &c. Chief seats are Floors Castle, Mount Teviot, Minto House, and Abbotsford. The antiquities include hill-forts; long stretches of the Catrail and Watling Street; the castles or peel-towers of Hermitage, Branxholm, Harden, Fernichirst, Smailholm, &c.; and the noble monastic ruins of Melrose, Jedburgh, and Kelso. Besides many more worthies, four poets—James Thomson, Jean Elliot, Leyden, and Aird—were natives; but, although not his birthplace, Roxburghshire is pre-eminently the land of Scott. It witnessed many a fray, but no battle greater than Ancrum Moor (q.v.). The county returns one member. Pop. (1801) 33,721; (1861) 54,119; (1901) 48,904. See Jeffrey's *History of Roxburghshire* (4 vols. 1857–64).

Roxbury, formerly a separate city of Massachusetts, annexed in 1867 to Boston (q.v.).

Royal Canal, Leinster, from Liffey at Dublin to Shannon at Richmond Harbour, 96 miles long, was made (1789–1802) at a cost of £1,500,000.

Royal Leamington Spa. See LEAMINGTON.

Royan (*Rwah-yon'*), a French seaport and watering-place (dep. Charente-Inférieure), on the north side of the Gironde's estuary, 60 miles NW. of Bordeaux. Pop. 8300.

Royat (*Rwah-yah'*), a watering-place in the dep. of Puy de Dôme, 3 miles SW. of Clermont-Ferrand, has mineral springs. Pop. 1580.

Roy Bareilly. See RAI BARELI.

Royston, a market-town of Herts and Cambridge, 12½ miles ENE. of Hitchin. Pop. 3520.

Royston, a town of the West Riding of Yorkshire, 3 miles from Barnsley. Pop. 4500.

Royton, a town of Lancashire, 2 miles NNW. of Oldham, with cotton-factories. Pop. 15,000.

Rsheff, or RJEV, a river-port of Russia, on the Volga, 135 miles NW. of Moscow. Pop. 31,520.

Ruabon (*Roo-ah'bon*), a mining town of Denbigh, 4½ miles SSW. of Wrexham. Pop. 3500.

Ruapehu, the highest mountain (9068 feet) in the North Island of New Zealand (q.v.), a volcano which was in eruption in 1895; with Mount Tongariro it is now a National Park.

Ruatan', or RATTAN, an island in the Bay of Honduras; area, 106 sq. m.; pop. 2000.

Ru'bicon, a stream of Central Italy, falling into the Adriatic a little north of Ariminum, which formed the southern boundary of Cæsar's province, so that by crossing it in 49 B.C. he virtually declared war against the Republic. It was probably the modern Fiamicino or Rujone.

Rüdesheim (nearly *Ree'des-hime*), a town of Prussia, on the Rhine's right bank, opposite Bingen, at the foot of the Niederwald (q.v.), and 16 miles W. of Mainz. Here is grown the famous Rüdesheimer Rhine-wine. Pop. 4840.

Rudolf, LAKE, an equatorial sea in British East Africa, near the edge of the Kaffa or South Ethiopian highlands, is long and narrow, stretching 160 miles NE. and SW. by 20 broad, with an area of 3000 sq. m., at a height of 1300 feet above the sea. It is crossed by 4° N. lat. and 35° E. long. It has no visible outlet, and its waters are very brackish. It was discovered by Count Teleki in 1888. See his *Discovery of Lakes Rudolf and Stephanie* (Eng. trans. 1894).

Rudolstadt, capital of Schwarzburg-Rudolstadt in Germany, lies in a hill-girt valley on the Saale, 18 miles S. of Weimar. There are two royal castles, and factories of porcelain, chemicals, and wool. Pop. 12,570.

Rufiji (*Roo-fee-jee*), or LUFIJI, the chief river of German East Africa, which rising far in the interior enters the sea through a delta with shoals and bars opposite the island of Mafia.

Rugby, a town of Warwickshire, at the Swift's influx to the Avon, 83 miles NW. of London and 30 ESE. of Birmingham. It is an important railway junction, a great hunting centre, and the seat of a public school. Pop. (1851) 6317; (1901) 16,830. The grocer, Lawrence Sheriff, founded the school in 1567; but it first became of national reputation under Dr Arnold (1828–42), whose successors have included Archbishop Tait, Dean Goulburn, Bishop Temple, and Dr Jex-Blake. When the last-named resigned in 1887 he left behind him a school unrivalled in its appointments, including a new chapel (1872). Of illustrious Rugbeians may be named the poets Landor, Clough, and Matthew Arnold; Dean Stanley, Judge Hughes (the author of *Tom Brown's School-days*); Dean Vaughan, Lord Derby, Lord Cross, Mr Goschen, Sir R. Temple, Franck Bright and York Powell the historians, and Professor Sidgwick. See the *Rugby School Registers* (3 vols. 1881–

91); works by Dean Goulburn (1856), Bloxam and Payne Smith (1889), and Rimmer (1892).

Rugeley (*Roojʹley*), a market-town of Staffordshire, on the Trent, 10 miles ESE. of Stafford. It has good public buildings (1879), a grammar-school, ironworks, and neighbouring collieries. Pop. (1851) 3054; (1901) 4450.

Rügen (*g* hard), a Prussian island in the Baltic, a mile from the coast of Pomerania. Greatest length, 33 miles; greatest breadth, 25 miles; area, 374 sq. m.; pop. 50,000. Chief town, Bergen (pop. 3761), in the middle of the island.

Ruhr (*Roor*), a right-hand affluent of the Rhine at Ruhrort, flowing 144 miles westward.

Ruhrort (*Roor-ort*), a town of Rhenish Prussia, 26 miles by rail N. of Düsseldorf, is one of the busiest river-ports on the Rhine. In the vicinity are ironworks and coal-mines. Pop. 12,500.

Rullion Green. See Pentland Hills.

Rum, a mountainous island of Inverness-shire, 15 miles N. by W. of Ardnamurchan Point. It is 8½ miles long, 8 miles broad, and 42 sq. m. in area, only 300 acres being arable, and the rest deer-forest and moorland. The surface presents a mass of high sharp-peaked mountains, rising in Halival and Haiskeval to 2368 and 2659 feet. In 1826 the crofters, numbering fully 400, were, all but one family, cleared off to America, and Rum was converted into a single sheep-farm; but in 1845 it was sold (as again in 1888) for a deer-forest. Pop. (1851) 162; (1891) 53; (1901) 149.

Rumania. See Roumania.

Runcorn, a thriving market and manufacturing town and river-port of Cheshire, on the left bank of the tidal Mersey, 12 miles ESE. of Liverpool and 28 WSW. of Manchester. The river is crossed here by a railway viaduct, which, erected in 1864–69 at a cost of over £300,000, is 1500 feet long and 95 feet above high-water mark. An ancient place, where a castle was founded by the Princess Ethelfreda in 916, and a priory in 1133, it yet dates all its prosperity from the construction of the Bridgewater Canal (1762–72), which at Runcorn descends to the Mersey by a succession of locks. More canal-boats plied to and from Runcorn than from anywhere else in the kingdom even before the opening of the Manchester Ship-canal (1887–94); there are spacious docks, Runcorn having been made a head-port in 1847. The industries include shipbuilding, iron-founding, rope-making, the manufacture of chemicals, quarrying, &c. Hall Caine was born here. Pop. (1851) 8049; (1871) 12,443; (1901) 16,491.

Runnimede, a long stretch of green meadow, lying along the right bank of the Thames, 1 mile above Staines and 36 miles by river WSW. of London. Here, or on Charta Island, a little way off the shore, Magna Charta was signed by King John, June 15, 1215.

Runn of Cutch. See Cutch.

Rupert's Land, the name given, on the formation of the Hudson Bay Company (1670) by Prince Rupert and others, to a territory comprising all lands draining into Hudson Bay or Hudson Strait.

Ruppin, Neu (*Noy Roop-peen*), a town of Prussia, on a lake communicating with the Elbe, 48 miles by rail NW. of Berlin. Pop. 17,000.

Rurki (*Roor-kee*), a town in the United Prov. of India, 22 miles E. of Saharanpur. Pop. 15,953.

Rush, a seaport of Ireland, 16 miles by rail NE. of Dublin. Pop. 1075.

Rushden, a town in Northamptonshire, 15 miles NE. of Northampton. Pop. 13,000.

Rusholme, a southern suburb of Manchester.

Russe. See Rustchuk.

Russell, a New Zealand port, on the Bay of Islands, 147 miles NNW. of Auckland. Pop. 228.

Russia, an empire extending over eastern Europe, the whole of northern Asia, and a part of central Asia. Its limits are 38° 30′ and 78° N. lat. and 17° 19′ and 190° E. long. This area, which is more than twice as large as Europe, and embraces one-sixth of the land-surface of the globe, has a pop. estimated at near 130,000,000. (at the census of 1859 the total was only 74,000,000). The Russian empire consists of European Russia, less than one-fourth of the whole, but including nearly three-fourths of its population; Finland; Poland; Caucasia; Siberia; Turkestan; and the Transcaspian region. Khiva and Bokhara are vassal states. The Russian dominions in America (Alaska) were sold to the United States in 1867. The table shows the areas and populations of the various sections of the empire in 1897.

	Area in sq. m.	Pop.
The 50 governments of European Russia	1,902,092	94,215,415
The 10 Polish governments	49,157	9,455,943
Finland	144,255	2,592,778
European Russia	2,095,504	106,264,136
Caucasus	182,457	9,248,695
Central Asia	1,638,825	7,721,654
Siberia	4,833,496	5,727,090
Asiatic Russia	6,564,778	22,697,439
Russian Empire	8,660,282	128,961,575

The density of the population, 53 per sq. m. in the 50 governments, on the average varies from 189 in Moscow to 1 in Archangelsk. In the Polish governments it is 193 overhead; in Finland, 20; in Caucasus, 54; in central Asia, 6; in Siberia, only 1. The average for the empire is 15 per sq. m. The Baltic Sea, with the Gulfs of Bothnia, Finland, and Riga, is the chief sea of Russia; but it nowhere touches purely Russian territory, its coasts being peopled by Finns, Letts, Esthonians, and Germans. Nevertheless, four out of the five chief ports of Russia—St Petersburg, Reval, Libau, and Riga—are situated on the Baltic Sea, and except Libau, are frozen for from four to five months in the year. The Black Sea acquires more importance every year. Odessa is its great port; Nikolaieff is the naval arsenal; Sebastopol is a naval station; Batoum exports petroleum.—The Caspian Sea receives the chief Russian river—the Volga—connects Russia with its central Asian dominions and the Caucasus. Finland, Poland, Caucasus, Siberia, and Turkestan being dealt with under those respective headings, what follows relates only to European Russia. The leading feature in its physical structure is a broad, flat swelling about 700 miles wide, with an average height of 800 feet (highest points 1100), which crosses it from south-west to north-east and connects the elevated plains of middle Europe with the Urals. A belt of lowlands stretching from east Prussia to the White Sea fringes this central plateau on the north-west, separating it from the hilly tracts of Finland; while the plains of Bessarabia, Kherson, the Sea of Azov, and the lower Volga limit it on the south-east. The central plateau is diversified by three or four depressions. The Urals, which separate the lowlands of European Russia from those of Siberia, consist of a series of parallel

ridges running south-west to north-east, their chief summits reaching 4950–5100 feet high. The chief rivers of Russia take their origin along the north-western border of the plateau, and some of them flow NW., while the others, though describing great curves, trend SE. The Niemen, the Dwina, the Lovat (continued by the Volkhoff and the Neva), and the two chief streams that reach the White Sea, the Onega and the North Dwina, are in the first group; while the Dnieper, the Don, and the Volga belong to the second. The Dniester and the Pruth rise on foreign territory; the Vistula has its mouth in Prussia. By means of three lines of canals and canalised rivers, which connect the upper tributaries of the Volga with the streams that flow into lakes Onega and Ladoga, the outlet of the chief artery of Russia, the Volga, has been transferred from the Caspian to the Gulf of Finland, and St Petersburg is the chief port for the Volga basin. The upper Volga and the upper Kama are also connected by canals with the North Dwina, and the Dnieper with the Düna, the Niemen, and the Vistula. The rainfall all over Russia is small, and as part of it falls in snow, which is rapidly thawed in the spring, the rivers are flooded then and in early summer, and they grow shallow by the autumn. In winter navigation ceases.

All over European Russia, except in the Baltic Provinces, the south of the Crimea, and a narrow strip of land on the Black Sea, the climate is continental. A very cold winter, followed by a spring which sets in rapidly; a hot summer; an autumn cooler than spring; early frosts; and a small rainfall, chiefly during the summer and the autumn, are the main features. The winter is cold everywhere. All over Russia the average temperature of January is below the freezing-point, and it only varies between 22° F. in the west and 5° to 7° in the east. All the rivers are frozen over early in December, and they remain under ice for from 100 days in the south to 160 in the north. In summer the temperature is high all over Russia, and reaches 78° at Astrakhan. The flora of Russia marks four regions: (*a*) the Arctic *tundras* are chiefly covered with mosses, lichens, and shrubs. (*b*) The *forest-region*, which covers the whole of northern and middle Russia, is either forest-region proper or prairies dotted with forests. The forest-region again is either of coniferous (in the north) or deciduous trees. (*c*) The *Steppes* are immense plains covered with grass, and devoid of forests. (*d*) The flora of the Mediterranean region occupies a narrow strip along the southern coast of the Crimea. The fauna of European Russia is very much like that of middle Europe. Wolves and bears are common in the north. The reindeer is still met with in the north; the wild boar and the bison are each limited to one district; the elk, the lynx, the glutton, the beaver are now very scarce.

The various sections of the country differ much from one another. The Baltic provinces form one section, another is the low-lying Lake Region from the Gulf of Riga to the White Sea. The central plateau contains the most populous agricultural and industrial parts of European Russia. Its physical aspects vary, however, a good deal in the different parts. The Lithuanian provinces of Kovno, Vilna, and part of Grodno and Vitebsk, drained by the Niemen and the upper Dwina, are, on the whole, a very poor region. White Russia, watered by the upper Dnieper and its right-hand tributaries, comprises the governments of Moghileff, Minsk, and southern Vitebsk, as well as parts of Grodno, Vilna, and Smolensk, and is one of the poorest regions of Russia; about one-tenth of the total area is covered with marshes. Little Russia, or the Ukraine, comprising the governments of Tchernigoff, Kieff, Poltava, and part of Kharkoff, as well as Volhynia and Podolia on the spurs of the Carpathians, belongs to the richest and most populous parts of Russia. The soil is mostly a rich black earth, and assumes farther south the aspect of fine grassy steppes, or prairies, yielding rich crops of wheat. Kieff is one of the chief industrial centres of Russia, and woollen cloth mills are rapidly spreading in Podolia. Middle Russia comprises the provinces of Tver, Moscow, Vladimir, Smolensk, Orel, Tula, Kaluga, Kursk, Ryazan, Tamboff, Penza, part of Voronezh, southern Yaroslav, and Simbirsk, peopled by more than 25,000,000 Great Russians, the average density being over 100 inhabitants per sq. m. Except on its outskirts, this region presents everywhere the same aspects, wide undulating plains covered with cornfields and dotted with small deciduous forests. The soil is of very moderate fertility in the north, but very fertile in the black earth belt of the south. Farther north-east the country is more elevated, but less effectively drained; and vast forests stretch from the upper Volga to the Urals. The governments of Kostroma, Vologda, and Vyatka, together with those parts of Nijni-Novgorod and Kazan which lie on the left bank of the Volga, belong to this domain; and Perm (which includes the mining districts on the Asiatic slope of the Urals) and North Ufa are the chief centres for the iron industry. The Middle Volga governments of Simbirsk, Saratoff, and Samara, and the South Ural governments of South Ufa and Orenburg, belong to a great extent to the steppe-region of south Russia. The Steppe-region occupies a belt more than 200 miles wide along the littoral of the Black Sea and the Sea of Azov, and extends eastwards through the region of the lower Volga and Ural till it meets the steppes of central Asia. As far as the eye can reach there are gently undulating plains, clothed with rich grass, and destitute of trees; yet in the deep ravines grow willows, wild cherries, wild apricots, and so forth. The whole is coated with a thick layer of fertile 'black earth.' In the Crimea the soil is a clay impregnated with salt. The Caspian Steppes form a link between Europe and Asia.

The population of the empire embraces a great variety of nationalities; but the Russians, comprising the Velikorusses or Great Russians, the Malorusses or Little Russians, and the Byelorusses or White Russians, are the predominant race. They number 77,000,000—70,000,000 in European Russia. None of the three is a pure race. The Great Russians, who invaded a territory occupied by Finnish tribes, ended by Russianising them. The Little Russians assimilated Turkish tribes, as the White Russians did Lithuanians. The Great Russians inhabit middle Russia in a compact mass of over 35,000,000, and even in east and north Russia they constitute from two-thirds to three-fourths of the population. The Little Russians, nearly 15,000,000 in all, are settled in Little Russia, which contains also in the borderlands some 12 per cent. of Jews, and 6 per cent. of Poles. The White Russians, who number about 5,000,000, dwell in the west, but they are more mixed with Poles, Jews, and Little Russians. The Poles number 5,000,000 in Poland (q.v.), and 1,000,000 in the western governments of Russia. Some 120,000

other Slavs—Servians, Bulgarians, and Bohemians—exist in small colonies in Bessarabia and Kherson. The Letts and the Lithuanians number 2,600,000 in Russia and 400,000 in Poland. Armenians, Kurds, and Persians number 1,300,000, chiefly in Caucasia. The Caucasus (q.v.), inhabited by a great variety of races, has a pop. of 7,500,000. Jews are very numerous in the towns of west Russia (about 3,500,000) and Poland (1,300,000). Nearly three-fourths of the Russian Jews are artisans or factory-workers, while the 30,000 Jews in Bessarabia and Kherson are good agriculturists. The Finnish race includes the Finns and the Karelians (1,850,000 in Finland and 350,000 in European Russia); the Esthonians, the people of Livonia, and other Western Finns in the Baltic Provinces (about 1,000,000); the Lapps and the Samoyedes in the far north; and the Volga Finns and the Ugrians (1,750,000 in European Russia and 50,000 in Siberia). The Eastern Finns are being rapidly absorbed by the Russians; but the Western Finns warmly cherish their nationality. The Turko-Tartars—i.e. Tartars, Bashkirs, Kirghizes, &c.—are mere feeble remnants of the tribes who once conquered Russia. They are 3,500,000 in European Russia, 4,500,000 in central Asia, 1,500,000 in the Caucasus, and 350,000 (Tartars and Yakuts) in Siberia. The Mongol race is represented by 480,000 Kalmucks in Russia and central Asia, as well as by 250,000 Buriats in Siberia; while the Manchurian tribes (Tunguses, &c.) number 50,000 in Siberia (q.v.). Of west Europeans the Germans (about 1,000,000, of whom 500,000 are in Poland) are the most numerous. They have prosperous colonies in south Russia; and in the chief towns there are numbers of German artisans and merchants. The Swedes are 300,000 in Finland. There are, besides, nearly 900,000 Roumanians in south-west Russia, and about 1,000,000 Europeans of various nationalities scattered throughout the empire. The population is rapidly increasing. Great numbers of European Russians emigrate every year to the Asiatic dominions.

The great bulk of the Russians—excepting a few White Russians professing the Union—belong to the Græco-Russian Church, officially styled the Orthodox-Catholic Church, or to one of its numberless sects of dissenters (*raskol*). The Poles and most of the Lithuanians are Roman Catholics (11,500,000); while the Finns, the Esthonians, and other Western Finns, the Swedes, and the Germans are Protestants (about 6,200,000). Islam claims all the Turco-Tartars, Bashkirs, and Kirghizes. Buddhism has the Kalmucks and the Buriats. Shamanism is the religion of most of the natives of Siberia, as well as of the nominally Christian Mordvins, Votyaks, Tchuvashes, and some Kirghizes. The Voguls, the Samoyedes, and other inhabitants of the far north are fetich worshippers. The Græco-Russian, Roman Catholic, Lutheran, Moslem, Jewish, and Buddhist clergy are maintained or protected by the state. The making of proselytes from the Greek Church is severely punished. To the numerous sects of dissenters, or *raskolniks*, one-third of the so-called Orthodox Russians belong. The Russian dissenters may be classed under three divisions, all equally numerous: the 'Popovtsy' (who have priests), the 'Bezpopovtsy' (who have none), and the 'Dukhovnyie Khristiane' (spiritualist Christians). The 'Stundist' evangelical movement has spread rapidly in Little Russia.

The political organisation of Russia is a very heterogeneous structure. It has at bottom a great deal of self-government. Till 1905 the empire was an absolute and hereditary monarchy, the final decision in all legislative, executive, and judicial questions resting with the emperor; though a state council discussed measures elaborated by the separate ministries. The imperial authority has been wont to be represented by an army of officials, whose powers are very extensive. In 1905 a constitution and some measure of responsible government was promised. The Duma, a democratic parliament of rather vague powers, met for the first time in 1906, and was soon at feud with the bureaucracy. The several states and territories are ruled each by a governor or governor-general. Finland (q.v.) is substantially a separate state. Four-fifths of the population are 'peasants.' Next come the burghers and the 'merchants' (9 per cent. in European Russia), the clergy (less than 1 per cent.), the nobility (1·3 per cent.), the military (6·1), and foreigners (0·3). The peasants, including the liberated serfs, are grouped in village communes (107,943 in European Russia and Poland); and the assembly of all the householders of the commune, the *mir*, enjoys a certain degree of self-government. The land being held in common throughout Great Russia and Siberia, it is the *mir* that periodically distributes the land into allotments. The administration of the economic affairs of the district and the province was in 1866 committed to the district and provincial assemblies or *zemstvos*. Since 1874 military service has been rendered obligatory upon all able citizens between twenty-one and forty-three. But of the actual total (860,000) liable for conscription every year little more than one-third (260,000) are selected for four years' service with the colours; the remainder are inscribed either in the reserve or the militia. In peace the army numbers nearly 1,000,000 men, scattered all over the empire; the war footing is reckoned at 4,500,000, with 580,000 horses and 5100 guns. The navy was almost totally destroyed in the Japanese war of 1904–5. There are in the empire about 84,500 elementary schools, with 4½ million pupils (1,231,256 were girls); nearly 1500 middle schools (classical gymnasiums, *Realschulen*, &c.), with 350,000 pupils; and 31 higher institutions, of which nine are universities, with 20,000 male and 600 female students. The language is pure Slavonic, and the rich and varied literature has of late become known in western Europe, from Gogol and Pushkin to Turgenief and Tolstoi. The finances of Russia are in a precarious state, though the state revenue increased from £58,700,000 in 1877 to £200,000,000 in 1904; the debt in 1904 was £750,000,000.

Of European Russia, nearly one-fifth is unproductive and two-fifths are under forests. The remainder is partly meadow or pasture-ground and partly arable land. Two-fifths of the registered area belongs to the crown, one-third is held by the peasants' communes (representing 25,000,000 men), and one-fourth is held by 481,400 private proprietors (most of it by the nobility). Agriculture is the chief occupation of the people of Russia; only in central Russia (Moscow, Vladimir, Nijni) does industry take the lead. The conditions of agriculture are very different in different parts of the country. A line drawn from Kieff to Nijni-Novgorod and Vyatka, will divide the country into two parts, of which the south-eastern has a surplus of wheat and rye and exports them, while the other has to import both. Bad years recur, as in India, at

intervals of from ten to twelve years, sometimes followed by severe famine (as in 1891) in many provinces. Flax and hemp are extensively cultivated in the west, the sugar-beet is grown in the south and south-west, and tobacco is produced in the south. The vine is widely cultivated on the Black Sea littoral and in Caucasia. Cotton is widely planted in Turkestan. The empire is very rich in all kinds of minerals. Gold is obtained in Siberia and the Ural Mountains. Silver and lead are obtained in Siberia, the Kirghiz Steppes, the Caucasus, and Finland; platinum in the Urals. Iron ores are found in profusion both in the Asiatic dominions and in European Russia. Zinc is mined in Poland, tin in Finland, and cobalt and manganese ore in Caucasia. Salt is obtained from salt-lakes. Russia has excellent coal-basins, especially in the Don region. The rich oil-wells of Baku supply Russia with petroleum and steam-fuel. In 1903 the annual production of the 17,000 manufactories of the empire, which employ 1,711,750 workmen, was valued at £130,000,000, without reckoning the mining industry and the industries which pay excise duties (tobacco, sugar, spirits, beer, petroleum and matches). The chief industrial centres are Moscow and the surrounding governments, St Petersburg, and Poland. The woollen trade is taking firm root in the south. The production of alcohol (chiefly *vodka*, the national spirit) averages 80 to 90 million gallons of alcohol every year. There are over 280 sugar-mills and nearly 400 tallow-factories in Russia. The domestic industries, which are carried on by the peasants of central Russia along with agriculture, are of much greater importance in Russia than in western Europe. Some 7,500,000 peasants are engaged in these domestic trades, whose yearly produce amounts to £180,000,000. The exports to foreign countries consist principally of corn and flour (55 per cent. of the total exports), various articles of food (butter, eggs, &c.), flax, timber, linseed, raw wool, naphtha, and illuminating oils, and reach an annual value of £70,000,000 to £94,000,000. The imports (about £60,000,000) consist chiefly of raw cotton (£7,000,000 to £10,000,000), tea, raw metals, machinery, raw wool, colours, iron and steel goods, coal, coffee, wine and fruit; the manufactured goods imported may amount to £16,000,000. The exports to Great Britain, which were £26,315,000 in 1888, were £22,000,000 in 1903; the imports, £4,810,000 in the former year, were £11,200,000 in the latter. The ports of Russia are entered every year by about 12,000 vessels of 11½ million tons, of which only 1100 to 1700 (chiefly belonging to Finns or Greeks) sail under the Russian flag. The importance of the Russian rivers for traffic has already been mentioned. About 1860 Russia had less than 1000 miles of railways; but in 1905 she had a network measuring 36,500 miles, out of which 5000 miles are in Siberia and 2000 in the Transcaspian region. Nine-tenths of the cost has been defrayed by the state by means of loans. The Siberian railway to Vladivostok was completed in September 1904 by the opening of the Baikal section; and the Orenburg-Tashkend line was finished in 1905.

The Russian monarchy is traced to the Varangian or Northman Rurik. Vladimir and his people were baptised at Kieff in 988. In the 13th century befell the terrible Mongol invasion; from 1240 to 1480 the Russian princes paid tribute to the Mongol-Tartar Khans. Ivan the Great (1462–1505) expelled the Mongols, and made Moscow the capital of an important state, extending to the White Sea. Ivan the Terrible (1533–84) extended his dominions to the Black Sea and well into Siberia. Peter the Great (1689–1725) planted Russia firmly on the Baltic. Under Catharine II. (1762–96) great acquisitions were made at the expense of Poland, Turkey, Persia, and Sweden; next century Russia, besides annexing the Caucasus, made vast extensions of her territory in central Asia and eastern Siberia; so that now she nearly touches British India, marches with China, and has a naval station at Vladivostok on the Sea of Japan. But the too great energy of the 'forward party' in the Far East provoked Japanese suspicions; the practical annexation of Manchuria and intrigues in Corea led to the Japanese war of 1904–5, in which the fortress of Port Arthur fell, and Russian armies were repeatedly defeated in great battles and forced gradually to retreat. Peace was made in 1905, only after violent agitation had begun at home for a constitution and greater personal freedom, attended by strikes, riots, mutinies, revolutionary risings, and massacres of the Jews.

See works on Russia by Sir D. M. Wallace (1877; new ed. 1905), Sutherland Edwards (1879), Geddie (1881), Morfill (1882), A. J. C. Hare (1888), Stepniak (from the Nihilist point of view, 1885–88), Tikhomirov (1887), Norman (1902), Skrine (1903), and Kropotkine (1905). For history, see the Russian historians Karamzin, Soloviev, Kostomarov, Bestuzhef-Riumin, &c.; Rambaud, *History of Russia* (1878; Eng. trans. 1879; 2d ed. 1887); the shorter history by Morfill (1890); and Nisbet Bain, *The First Romanoffs* (1905).

Rustchuk (*u* as *oo*), or RUSSE (the old form revived in 1892), a town of Bulgaria, on the Danube's south bank, opposite Giurgevo, 14 miles by rail NW. of Varna (on the Black Sea) and 40 S. by W. of Bucharest. It was captured by the Russians in 1810 and 1877, and played a prominent part in the Russo-Turkish wars of 1773–90 and 1853–54; and, until its fortifications were dismantled after 1877, possessed considerable strategic importance. Pop. (1900) 32,660.

Rutherglen (*u* as in *cut*, *th* as in *this*; popularly *Ruglen*), a town in Lanarkshire, on the Clyde, 3 miles SE. of Glasgow, with whose eastern extremity it is connected by a bridge, built in 1890–91 at a cost of £29,000. Its principal building is a handsome town-hall (1862). Rutherglen was the seat of a royal castle, which was captured by Edward Bruce about 1313, burned by Moray in 1568, and finally demolished in the 18th century. At Rutherglen, in 1679, the Covenanters published a 'Declaration'—the prelude to Drumclog and Bothwell Bridge. A royal burgh since 1126, it unites with Kilmarnock, &c. to return one member to parliament. Pop. (1831) 4741; (1861) 8062; (1901) 17,220. See Ure's *History of Rutherglen* (1793).

Ruthin (*Roothin*), a town of Denbighshire, on the Clwyd, 8 miles SSE. of Denbigh by rail. The 13th-century castle which gave it name (Cym. *rhyd-din*, 'red fortress'), surrendered in 1646 to the Roundheads, and was afterwards dismantled, part of its site being now occupied by a castellated mansion. A grammar-school (1594) was reconstituted in 1881; and there are also an interesting collegiate church, a county hall, a corn exchange, &c. Chartered by Henry VII. in 1507, Ruthin unites with Denbigh, &c. to return one member. Pop. (1851) 3373; (1901) 2643. See Newcome's *Castle and Town of Ruthin* (2d ed. 1836).

Ruthven Castle. See HUNTINGTOWER.

Ruthwell (*th* as in *this*; locally *Rĭ'well*), a Dumfriesshire coast parish, 9 miles ESE. of Dumfries. Its famous sandstone cross, 17¾ feet high, bears carvings in front and behind of the Crucifixion, Annunciation, &c., with Latin inscriptions, and on the sides of scroll-work, runic verses from 'The Dream of the Holy Rood.' Dating possibly from about 680 A.D., the cross was cast down and broken in 1642 as a monument of idolatry; but in 1802 was re-erected in the manse garden by the Rev. Henry Duncan, minister of Ruthwell, and founder of savings' banks; and in 1887 was removed to an apse adjoining the church.

Rutlam, a native state in the Western Malwa agency, Central India. Area, 729 sq. m.; pop. 89,160. The capital, Rutlam, is a great opium mart, and has a college; pop. 31,000.

Rutland, the smallest county in England, bounded by Leicester, Lincoln, and Northampton shires. It measures 18 by 15 miles, and has an area of 150 sq. m. or 95,805 acres. The Guash or Wash, flowing to the Welland (which traces the south-east boundary), divides it into two portions —the northern a somewhat elevated tableland, while the southern consists of a number of valleys running east and west, and separated by low hills. Half the whole area is permanent pasture, and woods occupy some 3000 acres. Towns are Oakham and Uppingham, and there are fifty-one parishes. Rutland gives the title of duke to the family of Manners. Its representation was reduced to one in 1885. Pop. (1801) 16,380; (1861) 21,861; (1901) 19,709.

Rutland, capital of Rutland county, Vermont, on Otter Creek, close to the Green Mountains, 67 miles by rail SSE. of Burlington. The chief industry is the quarrying and working of marble; the place has also foundries and railroad shops. From 1784 to 1804 it was one of the capitals of Vermont. Pop. (1880) 7502; (1900) 11,499.

Rütli, or **Grütli**, a meadow on the west side of the southern arm of Lake Lucerne; here the men of Uri, Schwyz, and Unterwalden took the oath (1307) to drive out the Austrians. It is national property, having been purchased with the pence of Swiss school children, and is adorned with a monument (1860) to Schiller, and with another (1884) in commemoration of the oath.

Ruvo in Apulia (anc. *Rubi*), a cathedral city of S. Italy, 22 miles W. of Bari. Pop. 27,728.

Ruwenzo'ri, a mountain in the centre of Africa, just north of the Equator, between Lakes Albert Nyanza and Albert Edward Nyanza. It was discovered by Baker in 1871, and visited by Stanley in 1888; and its summit (19,000 feet) is covered with perpetual snow.

Ruysselede (*Roissehlay'deh*), a Belgian town, 14 miles SE. of Bruges, has a large reformatory for boys (1849). Pop. 6793.

Ryan, Loch, a Wigtownshire arm of the sea, extending 8 miles SSE. to Stranraer from the Firth of Clyde, with a breadth of from 1½ to almost 3 miles.

Rybinsk (*Ree-binsk'*), a town of Russia, on the Volga's right bank, 48 miles NW. of Yaroslav. It has a very large trade in forwarding to the capital by canal the goods brought hither by large vessels up the Volga. Boat-building, rope-making, brewing, and distilling are industries. Pop. 25,220, increased to 125,000 in summer.

Rydal Mount, Westmorland, 1½ mile NNW. of Ambleside, was Wordsworth's thirty-seven years' residence, and his death-place.

Ryde, a flourishing and fashionable watering-place on the north-east coast of the Isle of Wight, 4½ miles SSW. of Portsmouth, from which it is separated by the roadstead of Spithead. It consists of Upper and Lower Ryde, the former occupying the site of an ancient village, *La Rye* or *La Riche*, destroyed by the French in 1377, and the latter of quite modern construction. Fielding in 1753 described Ryde as 'a pleasant village, separated at low-water from the sea by an impassable gulf of mud;' but now there are excellent sands, and the appearance of the town with its streets and villas interspersed with trees is pleasing and picturesque. The longer of the two piers (768 feet) was constructed in 1813–61; of the buildings may be noticed the town-hall (1831); All Saints' Church (1870), by Scott, with a spire 173 feet high; St Mary's Roman Catholic Church (1846), by Hansom; and the Royal Victoria Yacht Club-house (1847). Ryde was made a municipal borough in 1868. Pop. (1851) 7147; (1881) 11,461; (1901) 11,043.

Rye, a decayed seaport of Sussex, 11 miles NE. of Hastings, and 2 miles inland now owing to the retirement of the sea. It stands on an eminence bounded east by the Rother, south and west by the Tillingham, and presents a quaint, old-world aspect. On a rock overlooking the confluence of the streams is the 12th-century Ypres Tower (now a police station); the church, mainly Norman and Early English in style, and one of the largest in the kingdom, was restored in 1883. Then there are the old Land Gate, a former Carmelite chapel, and a grammar-school (1638). The *Novus Portus* of Ptolemy, Rye was granted by the Confessor to Fécamp Abbey, and by Henry III. was made a Cinque Port. It became a Huguenot asylum after 1562 and 1685 (Thackeray's *Denis Duval* is laid here); and it returned two members till 1832, and then one till 1885. Fletcher the dramatist was a native. Pop. 3900. See Holloway's *History of Rye* (1847).

Rye House, an old Hertfordshire mansion, 5½ miles SE. of Hertford, where it was proposed by some of the Whigs to waylay and assassinate Charles II. (1683).

Ryswick, a village 2 miles S. of the Hague, where in 1697 a great treaty of peace was signed between France, England, the Netherlands, Spain, and Germany.

Ryton, a Durham town, on the Tyne, 6 miles W. of Newcastle. Pop. 8460.

Rzheff. See Rsheff.

Saale (*Sâh-leh*), a navigable river of Germany, rises in the Fichtelgebirge (Bavaria), and flows 226 miles northward through Thuringia and Prussian Saxony to the Elbe above Magdeburg.

Saalfeld (*Sâhl'felt*), a town of Saxe-Meiningen, on the Saale, 31 miles SSW. of Jena. Pop. 11,700.

Saarbrück (*Sâhr-brük*), or Saarbrücken, a town of Rhenish Prussia, on the Saar, 40 miles SE. of Trèves, is the centre of a coalfield, and manufactures iron, glass, tobacco, chemicals, &c. Pop. 23,250. Here, on 2d August 1870, in the first engagement of the Franco-German war, the Germans retreated.

Saardam. See Zaandam.

Saargemünd (*Sahr-ge-münt'*; Fr. *Sarregue-*

mines), a town of Lorraine, 41 miles E. of Metz, making pottery, silk, and velvet. Pop. 14,700.

Saarlouis (*Sahr-loo-ee'*), a fortified town of Rhenish Prussia, on the Saar, 31 miles S. of Trèves. Fortified by Vauban, it was in 1815 given from France to Prussia by the Congress of Vienna. Here Ney was born. Pop. 7788.

Saaz (*Sâhtz*), a town of Bohemia, on the Eger, 66 miles by rail NW. of Prague. Pop. 16,200.

Saba (*Sâh'ba*), a Dutch West Indian island (Leewards), 40 miles NW. of St Kitts; a volcanic cone, 1500 feet high. Area, 5 sq. m.; pop. 2420.

Sabadell', a town of Spain, 14 miles by railway NW. of Barcelona, the 'Manchester of Catalonia,' manufacturing woollens and cottons. Pop. 23,100.

Sabine (*Sa-been'*), a river of Texas and Louisiana, flowing 500 miles SE. and S. until through Sabine Lake (18 miles long by 9 wide) it empties into the Gulf of Mexico.

Sable Island, a low-lying sandy island in the Atlantic, in 44° N. lat. and 60° W. long., 85 miles E. of Nova Scotia (and not near Cape Sable, at the SE. corner of Nova Scotia, where there is also a Sable Island). On this dangerous 'Ocean Graveyard,' the Canadian government has established six life-saving stations, with life-boats, rockets, &c., and a staff of men. In 1802 Sable Island was 40 miles long; in 1890 it was reduced to 20 miles; in 1900 over 80,000 trees were planted to check the shifting of the sands.

Sables D'Olonne (*Sâhbl-d'O-lon'*), Les, a French seaport and watering-place (dep. Vendée), on the Atlantic, 50 miles S. by W. of Nantes, with salt-making, shipbuilding, and fishing. Pop. 11,900.

Sabri'na Land, a stretch of coast-land discovered in the Antarctic Ocean (1839) by Balleny; it is crossed by 120° E. long. and the Antarctic Circle.—*Sabrina* is the Latin form of Severn.

Sachsen. See Saxony, Saxon States.

Sacketts Harbor, a summer-resort (in 1812 an important naval station) of New York, on a bay of Lake Ontario, at the mouth of Black River, 12 miles by rail W. of Watertown. Pop. 1260.

Saco (*Saw'ko*), a port of Maine, 16 miles by rail WSW. of Portland, on the Saco River, here crossed by a bridge to Biddeford, with falls of 50 feet supplying water-power for cotton and shoe factories, sawmills, machine-shops, &c. Pop. 6175.—The *Saco River* rises in the White Mountains of New Hampshire, and runs 170 miles SE. through Maine to the Atlantic.

Sacramento, the largest river of California, rises in the NE. part of the state, its head-stream, Pitt River, draining Goose Lake, and flows 500 miles SW., S., and SSW. to Suisun Bay, through which its waters pass into San Pablo Bay and so to the Pacific. It is navigable for small vessels to Red Bluff, nearly 250 miles. Near its mouth it receives the San Joaquin.

Sacramento, capital of California, is on the east bank of the Sacramento River, at the mouth of American River, 90 miles by boat and rail NE. of San Francisco. The principal public buildings are the state capitol (cost $2,000,000), county court-house (formerly capitol) and hospital, post-office, a Roman Catholic cathedral, the Crocker Art Gallery, and Masonic and Oddfellows' halls. Here are flour and planing mills, carriage, box, and broom factories, foundries, potteries, spice-mills, canneries, and the shops of the Southern Pacific Railroad. Inundations led to the building of a levee in 1862. Sacramento was settled in 1839; but it was not laid out till 1848, after the discovery of gold. In 1854 it became state capital. Pop. (1880) 21,420; (1900) 29,280.

Saddleback, or Blencath'ara, a Cumberland mountain (2847 feet), 4¼ miles NE. of Keswick.

Sad'owa. See Königgrätz.

Safed, a town of Palestine, 6 miles NW. of the Lake of Tiberias, famous as a stronghold of the crusaders and of the Knights Templars, lost after much fighting in 1266. It is still one of the four holy cities of the Jews, and has a pop. of 25,000, most of whom are Jews.

Saffi, or Asfi, a seaport of Morocco, stands on a little bay on the Mediterranean coast, 120 miles WNW. of the city of Morocco. Pop. 9000.

Saffron-Walden, a municipal borough of Essex, 15 miles S. of Cambridge, 27 NNW. of Chelmsford, and 45 by a branch-line (1865) NNE. of London. The saffron crocus was formerly cultivated here. The parish church (Perpendicular) has a spire 108 feet high, and brasses and monuments—one to Lord Chancellor Audley (1488–1544). There are also remains of a Norman castle, a corn exchange (1848), a town-hall (1879), a cattle-market (1834), and a grammar-school, founded in 1423. Audley End, 1½ mile SW., the seat of Lord Braybrooke, was built in 1603 by Thomas Howard, Earl of Suffolk, and is still a magnificent mansion, though partly demolished since 1701. Pop. (1851) 5911; (1901) 5896. See works by Lord Braybrooke (1836) and John Player (1845).

Sagaing, a decayed town of Burma, once the capital, lies on the Irawadi, opposite Ava.

Sagan, a town of Prussian Silesia, on the Bober, 33 miles by rail W. by S. of Glogau, manufacturing cottons and woollens, beer, &c. Pop. 15,010.

Sagar, or Saugor, a well-built town in the Central Provinces of India, in a hilly tract, on a feeder of the Jumna, with barracks, magazine, jail (1846), and park (1862). Pop. 44,674.

Sagar, a low, swampy, sacred island (area, 225 sq. m.), at the mouth of the Hooghly, with a lighthouse (1808) and telegraph station.

Saghalien, or Sakhalin (*Sa-ha-leen'*; but usu. *Sagay'lien*), is a long (670 miles) and narrow (20 to 150 miles) island, running N. and S., off the east coast of the Maritime Province of Siberia. Owing to the vicinity of the misty chilly Sea of Okhotsk, to the ice-floes off the east coast, and to the dense forests on the mountains (5000 feet), the rainfall is heavy and the climate is raw and cold. The streams and the adjoining seas teem with fish. Petroleum and naphtha exist, and coal (over 2,000,000 tons in 1890) is mined. Area, 29,550 sq. m.; pop. in 1905, 29,000—Russians (many of them convicts), Gilyaks, and Ainos. In 1875 the Japanese were compelled to cede the southern part to Russia (in exchange for some of the Kuriles), and the whole island became a great Russian convict settlement. But in 1905, after the Russo-Japanese war, the Japanese resumed possession of the southern half.

Saginaw', the third city of Michigan, and capital of Saginaw county, is built on an elevated plateau on the Saginaw River, 108 miles by rail NNW. of Detroit. It manufactures flour, salt, lumber, barrels, sashes, doors, and blinds, &c., and exports lumber and salt. There was a great fire in May 1893. Pop. (1880) 29,541; (1900) 42,345.—Saginaw Bay, an arm of Lake Huron, is 60 miles long by 30 wide, and has several fine harbours. The river Saginaw (80 miles) falls into it.

Saguenay (*Sa-gay-nay'*), a large river of Canada, falling into the St Lawrence estuary on the north

side, 115 miles below Quebec. It drains Lake St John, and flows almost straight 100 miles ESE. In its upper part, amid a wilderness of hills, it has numerous cataracts; but in the lower course, from the village of Chicoutimi down, it flows between precipitous cliffs, often 500 to 1500 feet high, and is in many places 2 or 3 miles broad, while the depth varies from 17 to 170, and even, near the mouth, to 500 fathoms. The largest vessels can ascend to near Chicoutimi; and great numbers of tourists visit the river.

Saguntum. See MURVIEDRO.

Sahara (usually *Sa-hay'ra*, properly *Sah'a-ra;* Arab. *Sáh'ra*), the vast desert region of North Africa, stretching from the Atlantic to the Nile, and from the southern confines of Morocco, Algeria, Tunis, and Tripoli southwards to near the Niger and Lake Chad. The Libyan Desert, lying between Egypt, the central Soudan, and Tripoli, is a separate tract. The surface, instead of being uniform and depressed below sea-level, is highly diversified, and attains in one place an altitude of fully 8000 feet. From Cape Blanco in the west, the Erg, a vast semicircle of sand-dunes (50 to 300 miles wide and 70 to 300 feet high), stretches right round the northern side of the Sahara to Fezzan. In the centre the country rises into the lofty plateau of Ahaggar (4000 feet), with veritable mountains 6500 feet high, and actually covered with snow for three months in the year. There are mountain-ranges in the east reaching 8000 feet. The mountainous parts embrace many deep valleys, most of them seamed with the dry beds of ancient rivers, which yield abundance of water, if not on the surface, then a short distance below it, and are inhabited, and grazed by cattle, sheep, and camels. Another characteristic type of Saharan landscape is a low plateau strewn with rough blocks of granite and other rocks, and perfectly barren. These elevated stone-fields, called 'hammada,' alternate with tracts of bare flat sand, with broad marshes, where water has stood and evaporated, leaving salt behind it, and with extensive tracts of small, polished, smoothly-rounded stones. In very many parts of the Sahara, especially in the valleys of the mountainous parts, in the recesses or bays at the foot of the hills, alongside the watercourses, and in the hollows of the sand-dunes, there are oases—habitable, cultivable, watered spots. Lines of oases mark the great caravan-routes between the Soudan states and the Mediterranean.

A large portion of the Sahara, though not the whole, was undoubtedly under water at one time; and a process of desiccation has been going on throughout the whole region from the earliest historic time; the Romans had colonies or military posts a long way to the south. The sand is simply the Saharan rocks (granite, gneiss, mica-schists, and cretaceous rocks) crumbled to dust by the alternations of heat and cold. The range of temperature is exceedingly great: often the thermometer falls from more than 100° F. during the day to just below freezing-point at night. Rain does fall in certain districts at intervals of two to five years. After a fall of rain it is not unusual to see the river-beds in the mountainous regions filled with foaming torrents. Owing to the extreme dryness of the air, the Sahara is very healthy. The plant-life is very rich in the oases, the date-palm, oranges, lemons, peaches, figs, pomegranates, &c., being grown, with cereals, rice, durrha, and millet. In the desert regions are found tamarisks, prickly acacias and similar thorny shrubs and trees, salsolaceæ, and coarse grasses. The animals include, besides the camel, horse, ox, sheep, and goat, the giraffe, antelopes, wild cattle, the wild ass, desert fox, jackal, hare, lion, ostrich, desert lark, crow, viper, python, locusts, flies. The inhabitants, estimated at between 1,400,000 and 2,500,000, consist of Moors, Tuareg, Tibbu, Negroes, Arabs, and Jews. The chief products are dates and salt, also horses, soda, and saltpetre. A very active trade is carried on by caravans, between the central Soudan and Niger countries and the Mediterranean states, the ivory, ostrich-feathers, gums, spices, musk, hides, gold-dust, indigo, cotton, palm-oil, shea-butter, kola-nuts, ground-nuts, silver, dates, salt, and alum of the interior lands being exchanged for the manufactured wares (textiles, weapons, gunpowder, &c.) of European countries. The French desire to get this trade into their own hands, and have proposed to construct a light trans-Saharan railway from the coast to the shores of Lake Chad and the Niger. They have done much to realise the ambitious idea of uniting their possessions on the Senegal and on the Niger with Algeria and Tunis—a union theoretically accomplished by the agreement of 1890 between Great Britain and France, by which the whole of the Sahara, except the west coast (which is claimed by Morocco and Spain and Great Britain) and the extreme east (beyond a line drawn from Murzuk in Fezzan to Lake Chad), was acknowledged to be within the French 'sphere of influence.' There have been schemes for flooding the low-lying 'shotts' south of Tunis, and much has been done towards improving certain areas by boring artesian wells and so irrigating the country around. By a series of conventions between Britain and France (1893–99), one of which recognised the right of France to all territory west of the Nile basin, practically the whole of the Sahara is now accounted French; and the area of the French Sahara is about 2,000,000 sq. m. See German works by Barth (1858), Nachtigal (1879–89), Rohlfs (1874), Zittel (1884), and Lenz (1884); French works by Rolland, Cat, Bissuel, Vuillot, Toutée, Schirmer, Bonnefon, and Foureau (1891–1902); and Somerville's *Sands of Sahara* (Phila. 1901).

Saharanpur', a town of the United Provinces of India, 125 miles by rail N. of Delhi, is the station for the sanatorium of Masuri (Mussoorie). It has an old Rohilla fort, a new mosque, St Thomas' Church (1858), and botanical gardens (1817). Pop. 71,000.

Saida. See SIDON.

Saigon (*Sä-gon'*), capital of French Cochin-China, stands on the river Saigon, a deltaic mouth of the Mekong, 60 miles from the sea. The French town has grown up since 1861, with its fine streets, squares, and boulevards. It has a magnificent governor's palace, a cathedral (1877), two higher colleges, an arsenal, a floating-dock and a dry-dock, and a botanical and zoological garden. Its population, consisting principally of Chinese, Annamese, and French, amounts to close on 50,000, while the business suburb of Cholon, 4 miles SW., has 125,000 inhabitants, more than a third of them Chinese. It exports rice, fish, salt, cotton, wood, beans, and hides.

Saikio. See KYOTO.

Saima, LAKE. See FINLAND.

St Abbs, a seaside resort and fishing-village in Berwickshire, 2½ miles SE. of St Abb's Head (and formerly called Coldingham Shore),

St Abb's Head, a rocky promontory (310 feet) of Berwickshire, 4 miles NNW. of Eyemouth. Here is a lighthouse (1861).

St Affrique (*Sant Affreek'*), a town of the French dep. of Aveyron, 56 miles NW. of Montpellier. Pop. 5163.

St Agnes, a town of Cornwall, on the Bristol Channel, 9 miles NW. of Truro. Pop. of parish, 4249. See also SCILLY ISLANDS.

St Albans, a city of Hertfordshire, 20 miles NNW. of London, on the top and northern slope of an eminence washed by the Ver, one of the chief feeders of the Colne, across which stood Verulamium. That important Roman station is perhaps identical with the fortress of Cassivellaunus, destroyed in 54 B.C. by Cæsar, and was taken by Boadicea in 61 A.D. In honour of the protomartyr Alban, said to have been beheaded here about 303, Offa, king of Mercia, in 793 founded a great Benedictine abbey, which from Pope Adrian IV. (born, Nicolas Breakspear, at Bedmond, 3 miles SW.) obtained precedence over all other abbeys in England. Rebuilt after 1077 with flat Roman tiles from Verulam, and dedicated in 1115 in the presence of Henry I., the abbey church, in spite of successive alterations (Early English, Decorated, Perpendicular), is still 'the vastest and sternest' of early Norman structures, its exterior length (548 feet) being second only to Winchester's, whilst the transepts measure 189 feet across, and the massive central tower is 144 feet high. It was made the cathedral of a new diocese in 1877, and in 1871–85 was very thoroughly restored. Special features are the substructure of the shrine of St Alban (its 2000 shattered fragments pieced together), the tombs of Duke Humphrey of Gloucester and 'Sir John Mandeville,' the superb presbytery reredos, and Abbot Ramryge's chantry. Of the forty abbots down to the Dissolution in 1539 the greatest was Cardinal Wolsey; and among the monks were Matthew Paris, Roger Wendover, Rishanger, and the other compilers of the *Chronica Monasterii S. Albani*, which, like the *Treatise* of Dame Juliana Berners, was printed here at Abbot Wallingford's press. The abbey gatehouse was in 1869 converted from a jail to the purposes of King Edward VI.'s grammar-school, which till then had occupied the Lady Chapel. In St Michael's Church is Lord Bacon's monument; the 15th-century clock-tower was restored in 1864; and a drinking-fountain marks the site of an Eleanor's cross, demolished in 1702. There are almshouses founded by the famous Duchess of Marlborough, a town-hall (1832), a corn exchange (1857), and a free library (1880). The industries include straw-plaiting, brewing, boot and brush making, and silk-manufacture. St Albans, disfranchised for bribery in 1852, was incorporated by Edward VI. in 1553, and had its municipal boundary extended in 1879. It was the scene of two battles in the Wars of the Roses—the first, on 22d May 1455, a victory for the Yorkists; the second, on 17th February 1461, for the Lancastrians. Pop. (1851) 7000; (1901) 16,019. See works by Newcome (1793), Williams (1822), Comyns Carr (1877), James Neale (1878), and Ashdown (1894).

St Alban's Head. See DORSETSHIRE.

St Amand (*Sant Amon'd'*), a town of France (dep. Cher), on the Cher, 25 miles SSE. of Bourges, with ironworks and potteries. Pop. 7897.

St Amand-les-Eaux (*Sant Amon'd'-leh-Zo*), a town of France, dep. Nord, 8 miles NW. of Valenciennes, with hot sulphur-springs and a ruined abbey. Pop. 13,340.

St Andrews, a city of Fife, stands on a rocky plateau at the edge of St Andrews Bay, 42 miles NNE. of Edinburgh. The monkish legend, long discredited, assigned its ecclesiastical origin to St Regulus or Rule, who, warned in a dream, brought certain bones of St Andrew from Patras in the 4th century, and was wrecked at Muckros, afterwards called Kilrimont, now St Andrews. There is, however, reason for believing not only that those relics were brought in the 8th century, but that, before the end of the 6th, Cainnech or Kenneth, the patron saint of Kilkenny, had founded a monastery at Rig-Monadh, the Royal Mount, and that thus arose the name of Kilrimont. Early in the 10th century it seemingly became the seat of the 'Ardepscop Albain,' the high bishop of the Scots—archbishop from 1471–72. The Augustinian Priory, founded in 1144, was the richest and greatest of all the religious houses of Scotland. The Cathedral, founded in or about 1160 in presence of Malcolm IV., and consecrated in 1318 in presence of Robert the Bruce, was stripped of its images and ornaments in 1559, and afterwards fell into ruin. The extreme length inside is 355 feet. The Bishop's Palace or Castle, first built in 1200, was frequently demolished and rebuilt, and is now a ruin. George Wishart was confined in its 'bottle-dungeon,' and Cardinal Beaton slain within its massive walls. None of the ruins is less imposing or more interesting than the foundations on the Kirkhill—the site of the Celtic church. St Rule's Tower, 108 feet high, is Romanesque, probably of the 10th century. The schools of St Andrews were noted in 1120; but the University, the first in Scotland, dates only from 1411. St Salvator's College was founded in 1455, St Leonard's in 1512, and St Mary's in 1537. The two first were united in 1747. The average attendance of students is under 300. The library contains over 100,000 volumes, and there is a good museum. The parish church of St Leonard's is roofless, and the congregation worships in the beautiful chapel of St Salvator's. The Madras College (1832) was endowed by Dr Andrew Bell. There is also a large girls' school (St Leonard's). The town was made a free burgh between 1144 and 1153; the St Andrews Burghs, returning one member, are St Andrews, the two Anstruthers, Crail, Cupar, Kilrenny, and Pittenweem. The manufacture of golf-clubs and balls is a thriving industry, St Andrews, with its fine links, being the Mecca of golfers. Pop. (1801) 3263; (1901) 7621. See works by Martine (1787–97), Grierson (1807), Lyon (1843), Rogers (1849), Anderson (1878), Andrew Lang (1894), and Hay Fleming (1894).

St Annes on the Sea, a watering-place of N. Lancashire, 4½ miles S. of Blackpool. Pop. 6840.

St Asaph, a little cathedral city of Flintshire, North Wales, on an eminence between the rivers Elwy and Clwyd, 6 miles SSE. of Rhyl. The cathedral, 182 feet long, is the smallest in the kingdom, and, rebuilt after 1284, is a plain, cruciform, red sandstone structure, mainly Decorated in style, with a massive central tower 93 feet high, fine oak stalls, and a tablet to Mrs Hemans, who lived here 1809–28. It was restored by Scott in 1867–75. St Kentigern is said to have founded about 560 a bishopric at Llanelwy, renamed St Asaph after his favourite disciple. Among sixty-five bishops since 1143 have been Reginald Pecock; Isaac Barrow the elder; Lloyd, one of the Seven Bishops; and Horsley. St Asaph

has a grammar-school, founded about 1600, and rebuilt in 1882. It is one of the eight Flint parliamentary boroughs. Pop. 1858. See works by Browne Willis (1719), Freeman (1850), R. J. King (1873), and D. R. Thomas (1888).

St Augustine, an ancient Spanish town on the east coast of Florida, now the capital of St John's county, stands on Matanzas Sound, 2 miles from the Atlantic and 37 by rail SSE. of Jacksonville. It was founded in 1565, and is the oldest town in the United States. Its mild and equable climate renders it a favourite winter-resort for invalids. It has a Roman Catholic cathedral (rebuilt after the fire of 1887), a Peabody Institute, and huge and really handsome hotels. Pop. 4742, increased to 10,000 in winter.

St Austell, a town of Cornwall, 14 miles NE. of Truro and 1½ NW. of the head of St Austell Bay. Its woollen and iron manufactures are of less importance than the china-clay, tin, and copper worked in the vicinity. The interesting church (13th to 16th century) was restored in 1870. Pop. 3340.

St Bartholomew, or St Barthélemy, a French West Indian island, 199 miles E. of Porto Rico. Area, 8 sq. m.; pop. 3000. The treeless surface rises to 1003 feet; the climate is very dry. French in 1648–1784, and Swedish till 1877, the island was bought back by France for £16,000.

St Bees, a Cumberland watering-place, 4½ miles S. of Whitehaven by rail and 3 SE. of St Bees Head (300 feet). A nunnery founded here about 650 A.D. by an Irish princess, St Begha, appears to have been destroyed by the Danes, and to have been reconstituted as a Benedictine priory in the reign of Henry I. St Bees Theological College, established in 1816 by Dr Law, Bishop of Chester, was closed in 1896; a grammar-school, founded by Archbishop Grindall in 1587, was reconstituted in 1881. Pop. of parish, 1041.

St Bernard, two mountain-passes in the Alps. (1) Great St Bernard (8120 feet) is on the road between Aosta in Piedmont and Martigny in Valais. Almost on its crest stands the Augustinian hospice founded in 962 by Bernard de Menthon for the benefit of pilgrims journeying to Rome. It has sleeping-accommodation for eighty travellers, and can shelter 300.—(2) Little St Bernard, SW. of the above in the Graian Alps, connects the valley of Aosta with that of Tarantaise in Savoy. By this pass Hannibal is believed to have led his forces into Italy. It too has a hospice, 7143 feet above the sea.

St Blazey, a town of Cornwall, 4 miles ENE. of St Austell. Pop. of parish, 2705.

St Boswells, or Lessudden, a Roxburghshire village, near the Tweed's right bank, 4 miles SE. of Melrose. Pop. 424.

St Brieuc (*San⁹ Bree-uk'*), a town of Brittany, capital of the dep. of Côtes du Nord, on the Gouet, 2 miles from its mouth in the English Channel, and 93 E. of Brest. It has a port, Le Légué, at the river's mouth; a cathedral, dating from the 13th century; the ruined Tour de Cesson (1395, blown up 1598); and a lyceum, with a library of 27,000 volumes. Pop. 16,741.

St Catherine's, a city of Ontario, on the Welland Canal, 5 miles S. of Port Dalhousie on Lake Ontario. It manufactures machinery, and has mineral springs. Pop. 9970.

St Chamond (*San⁹ Sha-mon⁹*), a town of France, dep. Loire, 7 miles NE. of St Étienne by rail, manufactures ribbons, silks, and iron, and has coal-pits. Pop. 15,250.

St Charles, capital of St Charles county, Missouri, on the high north bank of the Missouri River, 23 miles by rail (44 by river) NW. of St Louis. It has flour-mills, a railroad-car factory, and large bridge-building works. Pop. 8000.

St Christopher, popularly St Kitts, one of the Leeward group of the West India Islands, belonging to Great Britain, lies 45 miles NW. of Guadeloupe. It is long (23 miles) and narrow (5 miles), and is traversed by a chain of rugged mountains (Mount Misery, 4100 feet); area, 68 sq. m. The capital is Basse-terre (q.v.). Principal products are sugar, molasses, rum, salt, coffee, cocoa, tobacco, and cattle. Administratively St Kitts is united with Nevis (q.v.) and the little island of Anguilla. Pop. (1903) 30,250. This island was discovered in 1493 by Columbus, and named from a resemblance of its outline to statues of his patron saint. Colonised by French and British in 1625, it became English in 1713.

St Clair, a navigable river of North America, in the line of the Great Lakes, and carrying into Lake St Clair the waters of Lake Huron. It is over 40 miles long, and ½ mile broad. In 1891 a railway tunnel under its bed was completed between Port Huron, Michigan, and Sarnia, Ontario, 20 feet in diameter, and 6026 (including excavated approaches, 11,553) feet long. Lake St Clair is 26 miles long and 25 wide, has an area of 410 sq. m., and from its south-west end discharges into Lake Erie through the Detroit.

St Clair, a borough of Pennsylvania, 5 miles N. of Pottsville, with anthracite mines. Pop. 6950.

St Claude, a town in the French dep. of Jura, 30 miles SE. of Lons-le-Saunier. The monastery here dates from 430 A.D. Pop. 8729.

St Clears, a river-port of Carmarthenshire, at the head of the Taf estuary, 8 miles WSW. of Carmarthen. Pop. of parish, 937.

St Cloud (*San⁹ Kloo*), a town of France, dep. Seine-et-Oise, on an eminence near the Seine, 10 miles W. of Paris. Henry III. was assassinated here in 1589 by the fanatical monk Jacques Clément. St Cloud was long famous for its magnificent château, built by Louis XIV.'s brother, the Duke of Orleans, which Napoleon made his favourite residence. It was destroyed, and its magnificent park (in which stands the Sèvres porcelain-factory) injured, during the siege of Paris, in 1870. Pop. 5660.

St Columb Major, a Cornish town, on the Trent, 14 miles NNE. of Truro. Pop. 2612.

St Croix (*Sent Kroi*), an American river, called also the Passamaquoddy and the Schoodic, which, flowing out of Grand Lake, on the E. border of Maine, runs SE. 75 miles to Passamaquoddy Bay, along the U.S. boundary. See Santa Cruz.

St Cyr (*San⁹ Seer*), a French village, dep. Seine-et-Oise, 2 miles W. of Versailles. The institution for poor girls of good birth, founded by Louis XIV., at the suggestion of Madame de Maintenon, who died and was buried here, was suppressed at the Revolution; and in 1806 the buildings were converted by Napoleon into a great military school. Pop. 3613.

St Davids, a 'city' of Pembrokeshire, South Wales, in the westernmost corner of the principality, on the rivulet Alan, within 1½ mile of St Brides Bay and 16 miles WNW. of Haverfordwest station. The ancient *Menevia*, it is now a

mere village; but in the middle ages its cathedral, with the shrine of its founder, St David, the patron saint of Wales, attracted many pilgrims, among them the Conqueror, Henry II., and Edward I. and Queen Eleanor. Rebuilt between 1180 and 1522, that cathedral still is mainly Transition Norman in character, a cruciform pile, measuring 298 feet by 120 across the transepts, with a central tower 116 feet high. Special features are the reddish-hued stone, the richly ornamented nave with rich oak roof, the rood screen (*c.* 1338), the base of St David's shrine, the tomb of Edmund Tudor, Henry VII.'s father, and the eastern triplet. The west front was rebuilt by Nash in 1793; and the whole was restored by Scott in 1862–78. North of the cathedral is the ruined college of St Mary (1377), with a slender tower 70 feet high; and across the Alan are the stately remains of Bishop Gower's palace (1342), 'altogether unsurpassed by any existing edifice of the kind.' A restored cross, the shattered Close wall, and the imposing Tower Gate deserve notice, and also St Davids Head, rising 100 feet above the sea. Pop. of parish, 1816. See works by Browne Willis (1717), Manby (1801), Bishop Jones and E. A. Freeman (1856), Sir G. G. Scott (1869), and Rev. W. L. Bevan (1888).

St Denis (*San[g] De-nee'*), a town in the French dep. of Seine, 4 miles N. of Paris, within the line of forts forming the outer defences of the city. It manufactures calicoes, flour, chemicals, machinery, white-lead, &c., and has a notable fair. The chapel raised above the tomb of St Denis, the patron saint of France, was replaced in the 7th century by an abbey, built by Dagobert I., who was buried in its church, which thereafter became the mausoleum of the kings of France. The existing abbey church was begun in 1137, and skilfully restored by Viollet-le-Duc from 1848 onwards, though it suffered again in the German bombardment of 1871. The most magnificent of the royal tombs are those of Louis XII. and his queen, Anne of Brittany, of Francis I. and Claude, and of Henry II. and Catharine de' Medici. During the Revolution, in 1793, the royal tombs were sacrilegiously rifled and demolished. Napoleon converted the abbey into a school for the daughters of officers of the legion of honour. Pop. (1872) 31,850; (1901) 58,871.

St Denis, the capital of Réunion (q.v.).

St-Dié (*San[g]-Dee-ay'*), a French town, dep. Vosges, stands on the Meurthe, 50 miles by rail SE. of Nancy. It has a Romanesque-Gothic cathedral, seminary, and museum, and manufactures cotton, hosiery, paper, machinery, and iron goods. Pop. 19,500.

St Dizier (*San[g] Deezeeay'*), a French town (dep. Haute-Marne), 38 miles by rail SE. of Châlons, is on the Marne, which is navigable hence. It has iron forges and foundries, boat-building yards, and cotton-factories. Pop. 13,520.

St Domingo. See Hayti, San Domingo.

Sainte Anne, the name of two rivers in Quebec Province, tributaries of the St Lawrence, of which one has celebrated falls near its mouth, 22 miles below Quebec, where stands the village of Ste Anne de Beaupré, a celebrated place of pilgrimage for healing.

Sainte Croix. See Santa Cruz.

St Elias, Mount, a great volcanic mountain on the Alaskan side of the Canadian frontier, 18,020 feet high. It stands in a wild, inaccessible region, and is clothed almost from base to summit with eternal snow. There are huge glaciers and impassable precipices and yawning chasms; but in 1886 a party reached a height of 7200 feet on the mount. Long reckoned the highest mountain in North America, it is exceeded by Mount Logan, inside the Canadian line (19,539 feet), and by Mount McKinley in Alaska (20,464 feet).

Ste Marie. See Madagascar.

Sainte Marie-Aux-Mines. See Markirch.

Saintes (*San[gt]*), an old town of France, dep. Charente-Inférieure, on the Charente's left bank, 28 miles by rail SE. of Rochefort, manufactures iron and copper goods, machinery and leather. *Mediolanum* was the capital of the Santones, whence the name. Its interesting Roman remains include a triumphal arch and the ruins of an amphitheatre. It was a bishop's seat down to 1790; the cathedral still stands. Palissy lived at Saintes for fifty years. The old province was called Saintonge. Pop. 15,595.

St Étienne (*San[gt] Ay-te-enn'*), one of the most important industrial towns in France, stands (dep. Loire) on a tributary of the Loire, 36 miles by rail SW. of Lyons and 312 SSE. of Paris. Built in the second largest coalfield of France, it looks thoroughly grimy. The industries are in iron and steel and in ribbons, and have all steadily increased. Its hardware workshops turn out steel and iron plates, gun-armour, iron masts, large castings for machinery, firearms, locks, cutlery, files, nails, tools, ribbons, hats, pottery, &c. The government small-arms factory (1764) has since the Revolution supplied nearly all the muskets and rifles and revolvers for the army. Some 40,000 persons, mostly hand-workers in their own homes, are engaged in the town and its vicinity in making ribbons, laces, fringes, &c. Some of the ribbon-looms are (since 1893) driven by electricity. Pop. (1800) 16,000; (1851) 53,741; (1876) 126,019; (1901) 139,350. The coal-mines began to be worked in the 14th century, but only on an extensive scale in the end of the 18th. The town was twice captured by the Huguenots, in 1563 and 1570. The first railways in France were built from St Étienne (1828–31).

St Eustatius, a Dutch West Indian island, 10 miles NW. of St Kitts. Area, 8 sq. m.; pop. 1633.

Saintfield, a Down market-town, 11 miles SE. of Belfast. Pop. 557.

St Fillans, a Perthshire village, on the Earn, 13 miles W. by N. of Crieff.

St Flour (*San[g] Floor*), a town in the French dep. of Cantal, on a steep basaltic plateau (3000 feet) 50 miles S. of Clermont-Ferrand, has a Gothic cathedral (1375–1466), and manufactures pottery, cloth, &c. Pop. 4775.

St Gall, a Swiss canton, with the Lake of Constance on the N. It is for the most part mountainous, rising to 10,660 feet in Ringelspitz, and to 8216 in Säntis. The Rhine flows along the eastern border. Area, 779 sq. m.; pop. (1900) 250,285, mainly Roman Catholic and German-speaking.—St Gall, the capital, stands on the Steinach, 2196 feet above sea-level (the highest *town* in Europe), 53 miles by rail E. of Zurich, and 9 from Rorschach on the Lake of Constance. The buildings of its famous Benedictine monastery are now used as government offices and schools, and for housing the monastic library, founded in 830, of 41,700 volumes and 1800 MSS. Other buildings are the old abbey church, made a cathedral in 1846; the Protestant church of St Lawrence; the town library, founded in 1536,

and containing 60,400 volumes and 500 MSS.; and the museum. The city carries on a large trade in embroidered textiles (cotton, muslin, &c.), and in agricultural products. Pop. about 35,000. The original nucleus of the place was the cell of St Gall (c. 550–645), an Irish follower of St Columban, who settled here in 614. Around this soon grew up a Benedictine monastery, made by Charles Martel an abbey, which gradually became a masterpiece of mediæval architecture and a home of the arts. At the French Revolution the abbey was secularised (1798), and its revenues sequestrated in 1805.

St George's. See BERMUDAS, GRENADA.

St George's Channel. See IRELAND.

St-Germain-en-Laye (*San*^{g}*-Zherman*^{g}*-on*^{g}*-Lay*), a town of France, dep. Seine-et-Oise, stands on an eminence above the Seine, with a royal forest (10,000 acres) behind it, 13 miles W. of Paris. Above the river runs the famous terrace (2625 yards long by 115 feet wide), made in 1672. The historic associations cluster round the old royal château which, until Louis XIV. removed the court to Versailles, was the favourite residence of the kings of France. Here were born Henry II., Charles IX., Louis XIII., and Louis XIV.; here died Louis XIII.; and here James II. of England lived from 1689 to his death in 1701. Turned into barracks, then into a military prison, it was made by Napoleon III. a museum of Gallo-Roman antiquities. Pop. 14,076.—*St Germain-des-Prés*, named like the other from St Germanus, was a famous Benedictine monastery; its church (1001–1163) is the oldest in Paris.

St Germans, formerly the seat of the ancient diocese of Cornwall, now a small village on a branch of the river Lynher, 9½ miles W. by N. of Plymouth. Its fine parish church has an excellent Norman west front. Pop. of parish, 2384.

St Gervais-les-Bains (*San*^{g}*-Zhervay-leh-Ban*^{g}), a watering-place in the French dep. of Haute-Savoie, 42 miles SE. of Geneva, was overwhelmed by an ice and water avalanche in 1892.

St Gilles (*San*^{g} *Zheel*), a town of France, dep. Gard, 12 miles SSE. of Nîmes. The west front of its abbey church (1116) is a masterpiece of Romanesque. Pope Clement IV. was born here. Pop. 5094.

St Goar (*Sankt Go-âhr'*), a village on the Rhine, 14 miles SE. of Coblenz by rail; pop. 1453. On the other side of the Rhine is St Goarshausen.

St Gothard (*Got'tard;* Ger. *Gotthard*), an Alpine mountain-knot, 9850 feet high, in the Swiss cantons of Uri, Grisons, Ticino, and Valais. It is the source of the Rhine, Rhone, Ticino, and Reuss, thus sending the water from its melted snows to the German Ocean, the Mediterranean, and the Adriatic. On its shoulder it bears the celebrated Alpine pass (6936 feet) from the Lake of Lucerne in Switzerland to the Lago Maggiore in Italy. In 1820–24 the road was widened to 18 feet and smoothed for carriages. Near the summit of the pass stand two hotels and a hospice, the latter for poor wayfarers, of whom some 12,000 used to travel this way every year. Since 1882, however, a railway has climbed up the lower slopes of the St Gothard, and then burrowed through it in a tunnel (1872–80), which extends from Göschenen (at a height of 3639 feet) in Uri to Airolo (3757 feet) in Ticino, measures 9¼ miles in length, is 26 feet wide and 21 high, and cost £2,270,000.

St Helena (generally called *St Helēna*, not *St Helĕna*), a lonely island in the Atlantic, 1200 miles from the west coast of Africa, 1695 from Capetown, and 4477 from Southampton, measures 10 miles by 8, and has an area of 47 sq. m. It is part of an old volcano, and reaches 2823 feet in High Hill. Its shores face the ocean as perpendicular cliffs 600 to 2000 feet high. Pop. (1871) 6444; (1903) 3500, exclusive of garrison. Till the cutting of the Suez Canal St Helena was a port of call for vessels bound to and from India by the Cape, and the inhabitants did a large trade in provisioning these vessels. Since 1890, too, the British government has been withdrawing the garrison; though, on the other hand, Jamestown, the capital (pop. 2500), on the north-west coast, has been made a second-class imperial coaling station, and carefully fortified. St Helena was discovered by the Portuguese in 1502, and taken possession of by the British East India Company in 1651. It has a governor and an executive council of five. The island was Napoleon Bonaparte's prison from 1815 to his death in 1821. His home was the farmhouse of Longwood, 3 miles inland from Jamestown; and near there he was first buried. There is an Anglican bishop of St Helena. See works by Brooke (1808–24) and Melliss (1875).

St Helens, (1) a town of Lancashire, on the Sankey brook, flowing to the Mersey, 12 miles ENE. of Liverpool and 21 W. by S. of Manchester. Thanks to its railway and canal facilities, and to the immediate neighbourhood of coal, it has grown within recent years from quite a small village to an important industrial centre, and now is the great seat of the manufacture of crown, plate, and sheet glass, and also possesses extensive alkali, copper-smelting, and iron works. It became a municipal borough in 1868; a parliamentary borough, returning one member, in 1885; and a county borough in 1888. The town-hall, with library, was opened in 1876. Pop. (1851) 14,866; (1871) 45,134; (1901) 84,410.—(2) A small town in the Isle of Wight, 4 miles SE. of Ryde. Pop. (1851) 1948; (1901) 4652.

St Helier (Fr. *San*^{g}*t Eleeay*), the capital of Jersey, is situated on the south shore of the island, and the east side of St Aubin Bay. It is defended by Elizabeth Castle (1551–86), on a rocky island off the shore, approached by a causeway at low-water; and by Fort Regent, on the south-east side of the town, built in 1806–15. Victoria College dates from 1852, the public library from 1736. The harbour has outer and inner basins. Pop. (1851) 29,153; (1871) 30,756; (1901) 28,750.

St Henri, a town of Canada, practically a suburb of Montreal. Pop. (1901) 21,192.

St Hyacinthe, capital of a county in Quebec, at the intersection of four railways, 35 miles ENE. of Montreal, with manufactures, a Catholic college, and monasteries. Pop. 10,000.

St Ives, (1) a fishing-town of Cornwall, beautifully situated on the west shore of St Ives Bay, 8 miles NNE. of Penzance. It has a branch-line (1865); a harbour, with a pier by Smeaton (1770) and a breakwater (1864); a 15th-century granite church, with an ancient cross; and a town-hall (1832); whilst on a hill, 545 feet high, is a pyramid (1782). St Ives is the chief seat of the pilchard-fishery, and from its mild climate and good bathing is a favourite resort. It is said to take name from St Ia, an Irish princess, martyred here in 450 A.D. Incorporated by Charles I. in 1639, it returned two members till 1832, and then one till 1885. Pop. (1861) 7027; (1901) 6699. See works by Lach-Szyrma (1878) and J. H. Matthews (1892).—(2) A picturesque old monastic town of

Huntingdonshire, on the left bank of the Ouse, 5 miles E. of Huntingdon. Almost destroyed by fire (1689), and inundated by the river (1823), it bears a curious likeness to Stratford-on-Avon, and has a 15th-century parish church, a corn exchange (1864), and a six-arch stone bridge of singular beauty, built by the abbots of Ramsey, with an old chapel or lighthouse in the middle. Cromwell lived at Slepe Hall, now built over, in 1631–36, and Theodore Watts was born here. This place is said to be named after Ivo, a Persian bishop, who died here about 590, and it became in 1017 the seat of a Benedictine priory. A large weekly cattle-market was chartered in 1290, and the town was incorporated in 1874. Pop. (1851) 3522; (1901) 2910.

St-Jean-D'Angély (*San^g-Zhon^g-D'On^{g}zhaylee'*), a small town of France, dep. of Charente-Inférieure, 15 miles NNE. of Saintes. Pop. 6900.

St Jean de Luz (*San^g-Zhong-deh-Lüz*), a French watering-place (once a famous port) of dep. Basses Pyrénées, at the mouth of the Nivelle, 7 miles from the Spanish frontier. Pop. 4280.

St Jérome, a river-port of Quebec, on the North River, 33 miles NW. of Montreal. Pop. 4000.

St John, the largest river of New Brunswick, rises in Maine, flows 450 miles NE. and SE. (the last 225 within British territory), and falls into the Bay of Fundy by an estuary 5 miles wide. Part of its course separates Maine from Canada.

St John, commercial capital and largest city of New Brunswick, stands on the left bank of the estuary of the St John, 277 miles by rail NW. of Halifax and 481 from Montreal. The harbour is good, and accessible to the largest vessels at all seasons. Shipbuilding and the timber-trade are the chief industries, together with fishing and the West India trade; the manufactures include engines and locomotives, machinery and farming implements, nails, axes, leather, boots and shoes, paper, cotton and woollen goods, clothing, furniture, carriages, soap, &c. On June 21, 1877, a fire destroyed the greater part of the town; but a new St John speedily arose, with wide, clean streets, and handsome buildings—custom-house, post-office, city building, lunatic asylum, hospital, and Roman Catholic cathedral. Adjoining St John, and practically forming with it one city, is the town of Portland. Pop. (1881) 26,127; (1901) 40,711.

St John. See ANTIGUA.

St John's, (1) the capital of Newfoundland, stands on the extreme east coast of the island, on Avalon Peninsula, 1076 miles ENE. of Montreal and 1730 W. by S. of Cork in Ireland. It is thus the nearest port in America to Europe; and it possesses a small but excellent harbour, which is well fortified. Railways run to Harbour Grace (84 miles) and Placentia (25 miles). The city has a number of oil-refineries (fish and seal), and also tanneries, shoe-factories, cabinet-works, &c. It was largely destroyed by fire in July 1892. Pop. (1901) 29,594.—(2) Chief town of St John county, Quebec, on the left bank of the river Richelieu, opposite the town of St Athanase, and 27 miles by rail SE. of Montreal. It contains a lunatic asylum, barracks, potteries, foundries, sawmills, &c. Pop. 4314.—(3) St John's, or San Juan, capital of Porto Rico, stands on a small island connected by bridges with a peninsula on the north coast. Pop. 34,000.

St Johnstoun. See PERTH.

St Joseph, a city of Missouri, capital of Buchanan county, on the Missouri River's left bank, 110 miles (by rail 68) above Kansas City. Eight lines of railway centre here, and the river is crossed by an iron railway and foot bridge (1873) of five spans, one a pivot-draw span of 365 feet. St Joseph has large pork-packing establishments and manufactures of stoves, guns, carriages, clothing, furniture, &c. Laid out in 1843, and incorporated as a city in 1851, it was much of it destroyed by fire on 25th September 1893. Pop. (1870) 29,565; (1890) 52,324; (1900) 102,979.

St Just (*Joost*), a Cornish town, 7 miles W. of Penzance, with tin and copper mines. Borlase was a native. Pop. of parish, 6119.

St Keyne, a Cornish parish, 2 miles S. of Liskeard, with a well that gives the mastery to the bridegroom or bride who first drinks of it after their marriage. See Southey's poem.

St Kilda, a lonely island in the Atlantic, belonging to Harris in Inverness-shire, and 40 miles W. of North Uist. With an extreme length and breadth of 3¼ and 1¼ miles, it is only 1·9 sq. m. in area; has lofty precipitous cliffs almost everywhere, except at the south-eastern landing-place; and attains a maximum altitude of 1220 feet. The climate is mild; and the soil is black loam, with very fine pasture, but only some 40 arable acres. The live-stock includes nearly a thousand sheep (which graze also on four neighbouring islets), and about forty Highland cattle; but a principal source of wealth is the sea-birds—fulmar petrels, solan geese, puffins, &c.—which supply feathers, oil, and meat. Its native name is Hirta (Gael. *h-Iar-tir*, 'the western land'); and the name St Kilda is probably of Columban origin. Events in its 'history' have been the reduction of the population by smallpox to four adults and twenty-six children (1724); the imprisonment of Lady Grange here by her husband (1734–42); the emigration of thirty-six islanders to Australia (1850); the drowning of six (1864); and the establishment of a regular school (1884). Pop. (1851, the maximum) 110; (1901) 77. See works by Dean Munro of the Isles (1585), Martin (1698–1703), Kenneth Macaulay (1764), L. MacLean (1838), J. Sands (1877), G. Seton (1878), and R. Connell (1887).

St Kilda, a coast suburb of Melbourne (q.v.), on the east side of Hobson's Bay.

St Kitts. See ST CHRISTOPHER.

St Lawrence, a great river of North America, which, issuing from Lake Ontario, flows north-east 750 miles—part of the way forming the boundary between Canada and the United States—and falls into the Gulf of St Lawrence by a broad estuary. But in its widest acceptation the name includes the whole system of the Great Lakes and their connecting streams, with a total length from source to mouth of 2200 miles, and a drainage basin of 300,000 sq. m. The area of water-surface in the five lakes alone is 94,650 sq. m., and the system constitutes by far the largest body of fresh water in the world. This mighty artery of North-east America rises, under the name of the St Louis, on the spacious plateau which sends forth also the Mississippi towards the Gulf of Mexico, and the Red River of the North towards Hudson Bay. Lake Superior (602 feet above sea-level), the next link in the chain, finds its way to Lake Huron through St Mary's River, whose rapids have a fall of 20½ feet. Below Lake Huron, which receives Lake Michigan from the south, St Clair River, Lake St Clair, Detroit River, and Lake Erie maintain pretty nearly the same level (there is a fall of some 8 feet, however, in Detroit River) till the river

Niagara descends 326 feet to Lake Ontario, which is itself still 247 feet above the sea-level. The St Lawrence proper, with a number of lake-like expansions (such as the Lake of the Thousand Isles, of St Francis, St Peter, &c.), presents the character first of a river, and then of an estuary, down to the gulf. Prior to 1858 only vessels drawing not more than 11 feet of water could pass up above Quebec; but since then a channel has been made in the shallow parts of the river, 300 feet wide, and so deepened that practically the largest ocean-steamers can now pass up to Montreal. Between Lake Ontario and Montreal there are several rapids, which, however, may be all avoided by means of canals. Immediately above the island of Montreal the St Lawrence is joined by its principal auxiliary, the Ottawa (800 miles), from the north-west; and a little more than half-way between this confluence and Three Rivers, the highest point of tidal influence, the Richelieu from the south brings in the tribute of Lake Champlain. Other principal tributaries are the St Maurice (400 miles), the Saguenay (100), and the Batiscan (50). Steamers may now by help of the canals convey their cargo from Liverpool to Duluth at the far end of Lake Superior without breaking bulk. The width of the St Lawrence varies from less than 1 to 4 miles; the estuary at its mouth is above 100 miles across. During winter the river is frozen over and navigation closed.

The Gulf of St Lawrence, an inlet of the North Atlantic, washes Newfoundland, Quebec, New Brunswick, and Nova Scotia. It has three communications with the ocean—the Strait of Belleisle, between Newfoundland and Labrador; the Gut of Canso, between the island of Cape Breton and Nova Scotia; and a far wider passage than either, with the island of St Paul in the middle, between Cape Breton and Newfoundland. It narrows, at the west end of Anticosti, into the estuary of the St Lawrence River. Besides Anticosti, St Paul's, and Prince Edward's, this arm of the sea contains many other islands, rendered dangerous to shipping by the fogs and the uncertain currents. Both Gulf and River are celebrated for their fisheries.

St Leonards-on-Sea (*St Len'nards*). See Hastings.

St Lô, a town of Normandy, dep. Manche, is built on a rocky elevation on the right bank of the Vire, 60 miles by rail SE. of Cherbourg. A St Lô, Bishop of Coutances, built a church here in the 6th century. Noteworthy are the beautiful churches of Sainte-Croix, founded in 805, and Notre Dame (15th c.). Cloth, ribbons, wool, and laces are manufactured. The astronomer Leverrier was born here. Pop. 9190.

St Louis, fourth city of the United States in size, commercial metropolis of the Mississippi valley, and principal city of the Missouri state, is on the west bank of the Mississippi River, 21 miles S. of the mouth of the Missouri, and by rail 1108 WSW. of New York, 2434 E. of San Francisco, and 696 N. of New Orleans. In 1764, Laclède, a fur-trader, established a trading-post here, which he named in honour of Louis IX. of France; in 1803 it passed from France to the United States. Pop. (1840) 16,469; (1850) 74,439; (1870) 310,864; (1900) 575,238. St Louis is built upon three gently sloping terraces, the summit of the third being 200 feet above and 4 miles W. of the river. Beyond this point for miles the country is almost perfectly level. The city has a river frontage of 19 miles; its greatest width is 7 miles. The streets in the old part of the city are narrow, but all those west of Third Street, three blocks from the river, are broad and straight. The twenty-five parks of St Louis contain 2270 acres—the largest Forest Park. The principal public buildings are the Four Courts, court-house, city hospital, insane asylum, and women's hospital, the custom-house and post-office, which cost over $5,000,000, the Merchants' Exchange, Exposition Building, the Crow Museum of Fine Arts, and the new city hall at Washington Park. The Mercantile Library Building (150,000 vols.) is a handsome structure, and so too is the new Public School Library Building (170,000). The Washington and St Louis universities, and the Christian Brothers and Concordia colleges are advanced educational institutions. Eighteen railroads enter the Union Depôt (1874–92) of St Louis. The Mississippi at St Louis is spanned by two bridges—the Eads (1874, cost $6,536,730) of three spans, the central being 520 feet, and the two side spans 502 feet each; and the Merchants' Railway Bridge (1890) of steel, 2420 feet long, including approaches. Besides a vast trade in grain and cotton, packed meats, live-stock, timber, wool, furs, St Louis has manufactures of tobacco, beer, boots and shoes, hardware, stoves, cars, biscuits ('crackers'), &c. See Billon, *Annals of St Louis in its Early Days* (1887).

St Louis (*San^g Looee'*), capital of the French colony of Senegal in West Africa, on a small low island near the mouth of the Senegal River. Bridges connect it with N'dar Toute, a watering-place, on the right bank, and with Bouetville on the left bank. The river is blocked by a bar; and ocean steamers land goods and passengers at Dakar, on Cape Verde, 100 miles SW., and thence they are conveyed by rail to Bouetville. The place has a trade (gums, earthnuts, &c.) worth £1,000,000 a year. There are a cathedral, governor's palace, &c. Pop. 20,000. See also Mauritius.

St Lucia, the largest of the Windward Islands, in the West Indies, 42 miles long and 15 to 20 wide, with an area of 245 sq. m. Population, 55,000, of whom 2000 are whites. The exports include sugar, cocoa, logwood, &c. Much of the island is high and rocky land, covered with forest, and it contains deposits of sulphur. The island, discovered in 1502, was colonised by the French in 1563; and before 1803, when it definitively became English, it six times changed hands between France and England. The capital is Castries (pop. 8500).

St Lucia Bay, a lagoon at the mouth of the Umfulosi River in Zululand. Cape St Lucia is a promontory to the S. of the channel.

St Malo (*San^g Ma-lō'*), a seaport of Brittany, dep. Ille-et-Vilaine, on the Rance estuary, 51 miles NNW. of Rennes. The old town clusters all over a rocky islet that is surrounded with walls and connected with the mainland by a narrow causeway. Forts and batteries crown several rocks lying off the town, and the defences are completed by an old castle. The harbour is safe, but difficult of approach; the tides sometimes rise 50 feet, and storms dash over the top of the battlements. About the end of the 17th century the people of this town reaped large fortunes by privateering in the English Channel, and the port was the headquarters of the French East India Company. St Malo exports potatoes, buck-wheat, barley, butter, eggs, and fruit, and imports coal, timber, pitch, and iron. There are a quondam cathedral and a museum. St Malo was the birthplace of Chateaubriand, Maupertuis,

Lamennais, Lamettrie, and the sailors Duguay-Trouin, Cartier, and Labourdonnais. Dinard (q.v.) is across a small stream; St Servan (q.v.) across the Rance estuary. Pop. 9460.

St Margaret's Hope. See FORTH.

St Martin, one of the Lesser Antilles, West Indies, divided since 1648 between France and Holland, exports salt, sugar, cotton, tobacco, maize, &c. Area, 37 sq. m.; pop. 2000.

St Martin's. See SCILLY ISLANDS.

St Mary Church, a suburb of Torquay, and now incorporated with it, overlooking Babbicombe Bay. Pop. (1891) 6849.

St Mary's. See SCILLY ISLANDS.

St Mary's Loch. See YARROW.

St Mary's River, the strait between Lakes Huron and Superior, with rapids falling 20½ feet.

St Mawes, a village of Cornwall, on an offshoot of Falmouth Harbour, 3 miles E. of Falmouth. From 1562 to 1832 it returned two members.

St Michael's, or SÃO MIGUEL, the largest and most important of the Azores (q.v.).

St Michael's Mount, a conical and isolated granite rock in Mount's Bay, Cornwall, 3 miles E. of Penzance. It communicates with the shore by a causeway 560 yards long, which, however, is covered with water eight hours out of the twelve, and sometimes is impassable for two or three days together. The Mount is 195 feet high, is 5 furlongs in circumference, and is crowned by an old and picturesque castle—now used as a manorial residence—surmounted by a tower, on one angle of which there is a projecting stone lantern, popularly called 'St Michael's Chair.' At the base of the north or landward side of the Mount is a fishing-village. The 'guarded mount' is said to have received its name from an apparition of St Michael to some hermits; and Edward the Confessor founded upon it a Benedictine priory, which in 1088 was annexed to the abbey of Mont St Michel in Normandy. After the Dissolution it became the residence of five families in turn, until it was sold in 1660 to its present proprietors, the St Aubyns. For a demolition of the notion that the mount within Cornish-speaking times has been converted from a wooded promontory to an island, see Max-Müller's *Chips*, vol. iii.

St Michel (*Mon^{g} San^{g} Mee-shell'*), MONT, an extraordinary rocky islet of the Norman dep. of Manche, in the Bay of St Michel, 18 miles WSW. of Avranches. It is a solitary cone of granite, a thousand yards in circumference and 242 feet high. It rises sheer out of a level expanse of sand, and is a most striking feature in the landscape. Till 1880–81 it was only accessible by crossing the sands at low-water, there being a firm track across them, with quicksands to right and left; but a good road was then formed along a causeway a mile in length. A Druid stronghold once, the islet, as the scene of an apparition of St Michael in 708, became the seat of a great Benedictine monastery, which, 'half church of God, half fortress,' has memories of Henry I., II., and V. of England, resisting the last successfully in two sieges. The Revolution transformed this celebrated place of pilgrimage into a prison, and such it remained until 1863; in 1874 it was declared a 'monument historique,' and large sums have been spent on its restoration by Viollet-le-Duc and his successor. The buildings include the church (*c.* 1140–1521), with Norman nave and Flamboyant choir; the exquisite cloisters (1228); the Halle des Chevaliers, where Louis XI. in 1469 founded the order of St Michael; and 'La Merveille,' the monastery proper, so called from its huge north wall of the 13th century, 246 feet long and 108 high. Beneath is a village (pop. 250).

St Monans, a fishing-village of Fife, 2¾ miles WSW. of Anstruther, with an antique church. Pop. 1894.

St Moritz, a favourite watering-place in the upper Engadine (q.v.), with chalybeate, sulphurous and other mineral waters, and a pop. of 1580.

St Nazaire (*San^{g} Na-zair'*), a seaport of France, dep. Loire-Inférieure, is situated on the north side of the estuary of the Loire, 40 miles by rail W. by N. of Nantes. Between 1831 and 1887 £1,450,000 was spent on harbour improvements, extensive docks (82 acres) having been built for large vessels unable to get up the Loire to Nantes (q.v.). Pop. (1851) 2400; (1901) 34,695.

St Neots, a market-town of Hunts, on the Ouse, 8 miles SSW. of Huntingdon. It takes name from Alfred the Great's eldest brother, whose relics were translated from the Cornish parish of St Neot (now Liskeard) to a Benedictine monastery founded at Eynesbury, close by, in 974; and it has a fine parish church, with a tower 156 feet high, a corn exchange (1863), and manufactures of iron, paper, &c. Pop. (1851) 2949; (1901) 3880. See Gorham's *History of Eynesbury and St Neots* (2 vols. 1824).

St Nicolas, a town of Belgium, 12 miles by rail W. by S. of Antwerp. It has a large flax-market, and manufactures cotton and woollen stuffs, lace, needles, bricks, and pottery. Pop. 32,000.

St Ninians, a village 1 mile S. of Stirling, manufacturing nails, screw-bolts, woollens, and leather.

St Omer (*San^{g}t Omayr'*), a fortified town of France, dep. Pas-de-Calais, stands in a marshy site, on the Aa, 26 miles SE. of Calais by rail. It has a Gothic cathedral (13th–15th century), an arsenal, museum, and library. A college for the education of English and Irish Catholics was opened at St Omer in 1592. It was closed during the Revolution, but still exists as a seminary. Alban Butler was a president, and O'Connell a student. The manufactures include tobacco-pipes, tulle, cambric, cloth, and muslin. Pop. 17,750.

Saintonge (*San^{g}ton^{g}zh*), a former French maritime province (capital, Saintes), now forming mainly the dep. of Charente-Inférieure.

St Paul, the capital of the state of Minnesota, on the Mississippi, near the mouth of the Minnesota River. It is the outgrowth of a hamlet of voyageurs, chiefly Canadian, employed in the fur trade, and in selling whisky to the soldiers at Fort Snelling. The first log-huts were erected here in 1840, and in 1841 a small Catholic log-chapel dedicated to St Paul. In 1849 the city was made the capital of Minnesota territory. Upon the lower plateau of limestone rock are the capitol, post-office, court-house, and large stores; the best private residences are on the upper plateau, overlooking the Mississippi. The Summit Avenue is noted for its width and the costliness of the houses. There are several colleges, not under the control of the city or state: Macalester College (1853), Hamline Methodist University (1854), and St Thomas Roman Catholic College. The water-works furnish a daily supply of eight million gallons. All parts of the city are reached by electric street-railways. The free City Library contains 70,000 volumes. St Paul is the centre of the wholesale grocery and dry-goods

business in Minnesota. Pop. (1860) 10,701; (1880) 41,473; (1900) 163,065.

St Paul, a volcanic islet, 2 miles long and 860 feet high, in the Indian Ocean, midway between Africa and Australia, in 38° 42′ S. lat. and 77° 32′ E. long. It is comparatively bare, in contrast to the densely vegetated island of New Amsterdam, 50 miles to the north, like which it was annexed by France in 1892.—St Paul's Rocks, a group of small islets 1° N. of the equator and 540 miles from the South American coast.

St Paul de Loanda. See LOANDA.

St Peter Port, the town of Guernsey (q.v.).

St Petersburg, capital of the Russian empire, stands at the head of the Gulf of Finland, and at the mouth of the Neva, in 59° 56′ N. lat. and 39° 19′ E. long. The flat and low marshy ground upon which the city is built only recently emerged from the sea; the mighty Neva, which flows 36 miles from Lake Ladoga, subdivides into many branches, thus forming some 100 islands. When a strong wind blows from the sea its level rises, and the poorer streets are flooded; when the overflow exceeds 10 feet (as in 1891) nearly the whole city is inundated. The country is so marshy and barren that the government of St Petersburg (area, 20,760 sq. m.; pop., without the capital, 850,000) has only 40 inhabitants per sq. m. In 1702 Peter the Great captured the Swedish forts on the Neva, laid the foundations of his capital on one of the islands of the delta, and dreamed to make of it a new Amsterdam. The Neva, connected by canals with the upper Volga, became the outlet of the immense basin of the chief river of Russia and its numberless tributaries; and assisted by four main lines of railway St Petersburg has for more than 150 years been the chief port of Russia for the export of raw produce and the import of manufactured goods. Foreign trade and the centralisation of government have made St Petersburg a populous city with more than a million inhabitants and covering 42 sq. m., on the banks of the Neva and the islands formed by its branches. The Great Neva (400 to 700 yards wide within the city) is a beautiful river of deep and pure water. But the channel across the bar at its mouth is narrow and sinuous, so that Cronstadt, on an island 16 miles W. of St Petersburg, remains both the fortress and the port of the capital; though since 1885 a ship-canal, 22 feet deep, admits ships to St Petersburg, and two-thirds of the foreign vessels unload within the city. The main body of the city stands on the mainland, on the left bank of the Neva; and a beautiful granite quay, with a long series of palaces and mansions, stretches for 2½ miles. Only two permanent bridges cross the Neva; two bridges of boats are removed in autumn and spring. The island Vasilievsky, between the Great and Little Nevas, contains the Stock Exchange, the Academy of Sciences, the University, the Philological Institute, the Academy of Arts, and various schools and colleges. On the Peterburgskiy Island, between the Little Neva and the Great Nevka, stands the old fortress and prison of St Peter and St Paul, facing the Winter Palace, and containing the Mint and the cathedral wherein the members of the imperial family are buried, also the arsenal. Numerous islands, separated from each other by the small branches into which both Nevkas subdivide, and connected together by a great number of wooden bridges, are covered with beautiful parks and summer-houses. The main part of St Petersburg has for its centre the Old Admiralty; its lofty gilded spire and the gilded dome of St Isaac's Cathedral are among the first sights caught on approaching St Petersburg by sea. Three streets radiate from it, the first of them the famous Nevskiy Prospect. The street architecture, with its huge brick houses covered with stucco and mostly painted gray, is rigid and military in aspect. A spacious square, planted with trees, encloses the Old Admiralty on three sides. To the east of it rise the magnificent mass of the Winter Palace, the Hermitage Gallery of Art, and the semicircular buildings of the general staff. In the Petrovskiy Square is the well-known statue of Peter I. on an immense block of Finland granite. The richly decorated cathedral of St Isaac of Dalmatia, erected by Nicholas I., is an almost cubic building (330 feet long, 290 broad, and 310 high), surmounted by one large and lofty and four small gilded domes. In Nevskiy Prospect are the Kazan cathedral, the public library, the square of Catharine II., and the Anitchkoff Palace.

The climate is less severe than might be expected, but it is unhealthy and very changeable. The average temperatures are 15·4° F. in January, 64° in July, and 38·6° for the year; the Neva is frozen for an average of 147 days in the year. A short but hot summer is followed by a damp autumn and very changeable winter, severe frosts being followed by rainy days in the midst of winter, and returning in April and May after the first warm days of the spring. The population has rapidly increased during the 19th century, and attained, with the suburbs, 1,500,000 in 1905, as against 918,016 in 1881. But it decreases very much during the summer, because the crowds of peasants who come to work in the factories in winter, return to their villages in summer. The sanitary arrangements being very imperfect, typhoid fever and European cholera are endemic. The mortality, 31 to 39 per thousand before 1885, is now 24. There are 17,000 Finnish citizens, 45,000 of German race (mostly from the Baltic provinces), and 22,500 Poles.

The total production of its factories (cottons, various textiles, metals, leather, sugar, guns, porcelain goods, &c.) is nearly £29,000,000. Yearly 20,000 boats and rafts, laden with corn, hemp, flax, linseed, leather, fuel-wood, and building materials (3,000,000 tons), reach St Petersburg by the Neva; and 1,300,000 tons of goods, including 500,000 tons of corn, come in by rail, chiefly from the upper Volga. The export of corn from St Petersburg alone is one-fifth of the total export from Russia; besides hemp, flax, linseed, leather, crude petroleum, &c., the total value of the exports being from £8,000,000 to £10,000,000; the imports, chiefly of coal, machinery, groceries, and manufactured goods, reach about the same value. The port is visited yearly by about 1800 ships.

The number and variety of scientific, literary, educational, artistic, and technical institutions concentrated in the capital, render life at St Petersburg attractive. The St Petersburg University, and the numerous academies, medical, technological, engineering, naval, military, &c., as well as the Ladies' University, number thousands of students, both male and female. The Academy of Sciences and the Academy of Arts are well known; there is an excellent conservatoire of music. The public libraries are numerous. Besides the Imperial Public Library (1,200,000 volumes and 40,000 MSS.), there are the libraries of the Academy of Sciences, the University, the Council of State, as well as those of the scientific societies. There are besides rich museums of art in the Hermitage (Flemish,

Russian, and early Italian schools well represented, and priceless collections of Greek and Scythian antiquities), in the Academy of Arts; and there are important museums. The Russian publishing trade is concentrated at St Petersburg.

St Pierre was the largest town, though not the capital, of Martinique (q.v.), in the West Indies, with a good harbour, cathedral, college, and botanical garden. It was the birthplace of Josephine, consort of Napoleon I. It was utterly destroyed on 8th May 1902 by an eruption of Mont Pelée, when its 30,000 inhabitants perished in 'a whirlwind of fire,' followed by lava, ashes, and dense sulphurous fumes.

St Pierre. See RÉUNION, and MIQUELON.

St Pol de Léon (*San² Pol deh Lay-on²'*), a decayed town in the Breton dep. of Finistère, near the English Channel, 13 miles NNW. of Morlaix. It has a 13th-century cathedral, and a church with a beautiful spire 263 feet high. Pop. 7260.

St Quentin (*San² Kon²tan²*), a town in the French dep. of Aisne, on the Somme, 95 miles NE. of Paris and 33 S. of Cambrai. The church of St Quentin is a fine Gothic structure, dating from the 12th to the 15th century. The town-hall (15th–16th c.) is also a fine specimen of Gothic. The town is a centre of cotton industries which give employment to 130,000 hands in the making of calicoes, tulle, cretonnes, jaconets, muslin, merino, cambric, and gauze. Embroidery is largely prepared, and machinery, hats, paper, sugar, soap, and beer are manufactured. Pop. (1856) 26,887; (1901) 47,851. The Spaniards and an English contingent inflicted a crushing defeat upon the French in 1557. Shortly afterwards the town, after a brilliant defence by Coligny, capitulated to the Spanish army. In 1871 the Germans routed the army of Faidherbe here.

St Radigunds Abbey, Kent, a ruin (1191) 3 miles W. of Dover.

St Raphael, a winter-resort on the French Riviera, 2½ miles SE. of Fréjus by rail. Pop. 4740.

St Ronan's Well. See INNERLEITHEN.

St Servan (*San² Ser-von²*), a seaport and watering-place of France, dep. Ille-et-Vilaine, stands on the east side of the estuary of the Rance, just above St Malo, from which it is separated by a creek a mile wide. It has a floating-dock, and carries on shipbuilding. Close by are the ruins of the cathedral of Aleth (6th to 12th century). St Servan was the birthplace of the order of 'Little Sisters of the Poor.' Pop. 10,179.

St Thomas, a volcanic island of Africa belonging to Portugal, lies in the Gulf of Guinea 170 miles W. of the mouth of the river Gaboon. Its southern extremity almost touches the equator. Measuring 32 miles by 21, it has an area of 360 sq. m.; pop. nearly 40,000, including 4000 whites. Although it rises to 6000 feet, it is very unhealthy. Coffee, cocoa, pepper, cinnamon, maize, indigo, &c. are the products. Chief town, St Thomas (pop. 3000), on the NE. coast, the seat of a bishop. The island was discovered in 1470, and colonised in 1493 by the Portuguese, to whom it reverted after a Dutch occupation from 1641 to 1844. See Crouch, *Glimpses of Feverland* (1889).

St Thomas, one of the Virgin Islands in the West Indies, belongs to Denmark, and lies 36 miles E. of Puerto Rico. Area, 33 sq. m.; pop. 14,389 (nearly 600 Jews). English is the language of the educated classes. The surface is hilly (1555 feet) and the soil poor. The port is Charlotte Amalie or St Thomas (pop. 12,000).

St Thomas, a town of Ontario, 9 miles N. of Port Stanley on Lake Erie. Pop. 11,500.

St Trond, a manufacturing town of Belgian Limburg, 12 miles WNW. of Tongres.

St Ubes. See SETUBAL.

St Valery, two French watering-places on the English Channel, one (Valery-en-Caux) 17 miles WSW. of Dieppe, the other (Valery-sur-Somme) 30 miles NE. of Dieppe, each with about 3500 inhabitants.

St Vincent, one of the British islands in the West Indies, Windward Group, 105 miles W. of Barbadoes. Area, 132 sq. m.; pop. (1881) 40,548; (1903) 48,250, of whom 3000 were whites. The island is traversed by a chain of volcanic mountains, which rise in the volcano called the Souffrière (destructive eruptions in 1812 and 1902; see ST PIERRE) to 3000 feet. Sugar, rum, cocoa, spices, and arrowroot are the principal products. The chief town is Kingstown (pop. 5200).

St Vincent, CAPE, a promontory forming the SW. corner of Portugal. Off here, in 1693, Rooke was defeated by the French; in 1780 Rodney destroyed here several Spanish ships; in 1797 Jervis's great victory of Cape St Vincent resulted in the total defeat of the Spaniards; and in 1833 the fleet of Queen Maria, commanded by Sir Charles Napier, defeated that of Dom Miguel.

Sais (*Say-iss* or *Sah-eess*), an ancient Egyptian city, on the Canopic branch of the Nile.

Sakai (*Sa-kī*), a town of Japan, in the SW. of Honshu, 7 miles S. of Osaka. Pop. 49,990.

Sakhalin. See SAGHALIEN.

Sakkar. See SUKKUR.

Sakkara (*Sak-kah'ra*), a village 10 miles S. of Cairo, near the ruins of Memphis, and famous for its eleven Pyramids (q.v.).

Salamanca, a city of Spain, stands on and between four low hills beside the river Tormes, 110 miles NW. of Madrid. Its university, founded in 1243, was till the close of the 17th c. one of the most celebrated in Europe. In the 16th c. it had from 6000 to 8000 students; now there are only 400. The university buildings date chiefly from the 15th century, and are Gothic in style. The library, founded in 1254, contains 70,500 vols. and 870 MSS. The city is still surrounded with walls, pierced by ten gates, and preserves very much of its mediæval appearance. The river is crossed by a bridge of twenty-seven arches, in part of Roman construction. The great square is one of the largest in Spain; it is surrounded by an arcade, and has on one side the municipal buildings. The city possesses two cathedrals; the old cathedral, late Romanesque in style, dating from the 12th century; the new cathedral (1513–1734), a florid Gothic pile. Amongst the remaining noteworthy buildings are the Jesuit College (1614); the Old College, now the governor's palace; the convents of the Dominicans and the Augustinians. In the middle ages Salamanca was famous for its leather-work; at the present day it manufactures a little cloth, linen, leather, and pottery. Pop. (1900) 25,700. The town was captured by Hannibal in 222 B.C.; and the Moors were expelled in 1055. During the Peninsular war it was taken by the French (1812), and in the vicinity Wellington defeated Marmont, 22d July 1812.—The *province* has an area of 4940 sq. m. and a pop. of 320,770.

Sal'amis (now *Koluri*), a mountainous Greek island, off the coast of Attica, and forming with it the Bay of Eleusis. Area, 35 sq. m.; pop. 6500.

The chief town is the port of Koluri, on the west coast, itself with over 3500 inhabitants. In ancient times the towns of Old and New Salamis lay, the former on the south, the latter on the north-east coast. Salamis was an independent state till about 620 B.C., when it fell, first to Megara, next to Athens. Its name is ever memorable from the great naval victory of the Greeks over Xerxes' vast Persian fleet, fought (480 B.C.) a few days after the battle of Thermopylæ, in the narrow strait between the east coast of Salamis and the west coast of Attica.

Salangor. See SELANGOR.

Salcombe, a South Devon town, on the W. side of Salcombe Haven, 4 miles S. of Kingsbridge. Its climate is reputed to be the warmest in England. Froude is buried here. Pop. 1720.

Saldanha Bay. See CAPE COLONY.

Sale, a town of Cheshire, 5 miles SSW. of Manchester. Pop. 12,100.

Salem, a town of S. India, 120 miles by rail SW. of Madras, with cotton manufactures. Pop. 70,650.

Salem, (1) a city and port of entry on a peninsula in Massachusetts Bay, 16 miles by rail N. by E. of Boston. It has a good harbour, which formerly carried on a large foreign trade; now only a coast trade in ice and coal remains. The East India Marine Society's collections are now united with those of the Peabody Academy of Science, the Essex Institute, and the Salem Athenæum, the last two housed in Plummer Hall. The manufactures include cottons, jute, leather, shoes, iron castings, lead pipes, &c. Salem was settled in 1626. In the great witchcraft delusion of 1692 nineteen persons were hanged and one pressed to death. Hawthorne and Prescott were born here. Pop. (1880) 27,563; (1900) 35,956. —(2) Capital of Salem county, New Jersey, on Salem Creek, 3½ miles from its entrance into the Delaware and 36 miles by rail SSW. of Camden. It has manufactories of glass, flour, oil-cloth, carriages, besides a foundry, planing-mills, and fruit-canneries. Pop. 5812.—(3) Capital of Oregon since 1860, on the east bank of the Willamette River, 52 miles by rail S. by W. of Portland and 720 N. of San Francisco. Here are the state capitol, prison, insane asylum, the Willamette University (Methodist Episcopal, 1851), &c. Pop. 4515.

Salemi (*Salay'mee*), a town in the west of Sicily, 39 miles SW. of Palermo. Pop. 11,512.

Salerno (anc. *Salernum*), a city of Italy, on the Gulf of Salerno, 33 miles by rail SE. of Naples. A hill behind the town is crowned by an old Norman castle. The beautiful cathedral of St Matthew was erected by the Normans (1076-84). The city was celebrated for its university (founded in 1150, closed in 1817), and for its school of medicine, long the first in Europe, which decayed in the 14th century. In the neighbourhood are the ruins of Pæstum (q.v.). Originally a Roman colony (194 B.C.), Salerno was made his capital by Robert Guiscard, and sacked by the Emperor Henry VI. Pop. 22,328.

Salette, LA, an Alpine village of France, dep. Isère, 28 miles SSE. of Grenoble. In 1846 the Virgin was alleged to have appeared to two peasant children on a spot where in 1852–61 a pilgrimage church was built at an elevation of 5920 feet. The apparition was discredited by Pope Leo XIII. in 1879. Pop. 607.

Saleyer (*Sal'er*), a group of islands lying off the south-west extremity of Celebes, in the East Indies (total area, 404 sq. m.; pop. 80,000), whose chiefs pay tribute to Holland. Principal exports, cotton, trepang, cocoa-nuts, tortoiseshell, salt, and tobacco. The people, Malays, are Mohammedans.

Salford, though a separate municipal and county borough, with a pop. in 1905 of 225,000, is virtually a western division of Manchester (q.v.), from which it is separated by the Irwell.

Sali'na, a town of Kansas, 186 miles W. by S. of Kansas City. Pop. 6080.

Salins (anc. *Salinæ*), a town of the French dep. of Jura, 22 miles S. by W. of Besançon, has valuable salt-springs. Pop. 5392.

Salisbury is a cathedral city, the capital of Wiltshire, and a parliamentary and municipal borough, which stands in a valley near the confluence of the rivers Avon, Bourne, Wily, and Nadder, 84 miles WSW. of London. Old Sarum (*Sorbiodunum*), from Roman times a castle and a place of much importance, now consists of a bare conical entrenched hill about a mile N. of the present city. In 1075 Bishop Herman removed the bishopric of the united sees of Ramsbury and Sherborne to Old Sarum, and began a cathedral (whose foundations are still to be traced in very dry seasons), which was finished by his successor, St Osmund, who compiled the *Use of Sarum*. It was in the form of a cross, 270 feet long by 70 feet wide, with a transept of 150 feet. Old Sarum returned two members to parliament until the passing of the Reform Bill, although there had for years been no inhabitants. The removal from Old Sarum to New Sarum or Salisbury took place in 1220, when the foundations of the new cathedral were laid. The Lady Chapel was consecrated in 1225, and the whole building in 1260. A double cross in plan, it is a perfect example of pure Early English style. The spire (*c.* 1330) is the highest in England (400 feet); it leans 27½ inches towards the south. The cathedral suffered from a disastrous 'restoration' at the hands of James Wyatt (1782–91), when two 15th-century chapels and two porches were destroyed, much painted glass removed, the tombs rearranged, and a lofty isolated campanile pulled down. Much of the damage then done has been repaired in the restoration begun in 1863. The library (*c.* 1450) contains about 5000 volumes and many valuable MSS. The outside measurements of the cathedral are: length 473 feet, width 111 feet; the height of the nave and choir inside is 81 feet. The cathedral stands apart from any other building in the midst of a beautiful Close of about half a square mile in extent, encircled by a wall, within which stand the Bishop's Palace (an irregular building begun by Bishop Richard Poore, *c.* 1220), the deanery and canons' houses, and many other picturesque buildings. Other notable buildings are the council-house, where the assizes are held; the county hall; the infirmary; the 'Hall of John Hall' and Audley House, now the church-house of the diocese, two fine examples of 15th-century domestic architecture; the old George Inn (now a shop), where Pepys stayed; St Nicholas' Hospital; the market-house; the poultry-cross; and the Blackmore Museum, which contains one of the finest collections of prehistoric antiquities in England. The plan of the city is very regular. Water originally ran through most of the streets, but the streams were covered over after the visitation of the cholera in 1849. The spacious market-place is planted with trees, and contains statues of Lord Herbert of Lea (Sidney Herbert) and Professor Fawcett, who was a native of the city. Here the Duke of Buckingham was beheaded in 1483 when

Salisbury was the headquarters of Richard III. The city chiefly depends upon its agricultural trade, the former manufactures of cutlery and woollens being extinct. Salisbury returns one member. Pop. (1851) 11,657; (1881) 14,792; (1901) 17,117. See works by Hatcher, Britton (1814), Price (1753), Dodsworth (1814), and Jones (1879, &c.).—Salisbury Plain, an undulating tract of chalky down, affords splendid pasture for sheep. There are many ancient mounds and barrows, and in the midst stands Stonehenge (q.v.).

Salisbury, capital of Southern Rhodesia (q.v.), about 225 miles NE. of Bulawayo, with which, as with Beira, it has railway connection. It has government offices, municipality, churches, banks, schools, &c. White pop. about 500.

Salisbury, (1) in North Carolina, 44 miles NNE. of Charlotte, has a coloured college and normal school, and the national cemetery with over 12,000 graves. Pop. 6300.—(2) In Maryland, 32 miles ENE. from Chrisfield, has canning factories and manufactures. Pop. 4300.

Sallee, Salé, or Sla, a seaport of Morocco, on the Atlantic, at the mouth of the Bu-Ragreb, on the north side of the river, opposite Rabat (q.v.). It was for centuries notorious as a haunt of pirates, the 'Sallee Rovers.' Pop. 10,000.

Salomon Islands. See Solomon Islands.

Salona, a ruined city of Dalmatia, at the head of a gulf of the Adriatic, 3 miles NE. of Spalato.

Saloni'ca, or Saloniki (Turk. *Selanik*), the second commercial city of European Turkey, stands at the head of the Gulf of Salonica, 820 miles SSE. of Vienna by rail (1889), *viâ* Belgrade, Usküb, and Nisch. It climbs up the rocky heights that stretch back from the shore, and is overlooked by a citadel; the white walls are 5 miles in circumference, and houses and mosques are embowered in trees of dark foliage. The mosques were, most of them, Christian churches. St Sophia, modelled after its namesake at Constantinople, built in Justinian's reign, and a mosque since 1589, is shaped like a Greek cross, and surmounted by a dome covered with mosaics. It was injured in the great fire of September 3–4, 1890, which did £800,000 of damage to the town. St George, dating from Constantine, is circular; its dome too is covered with fine mosaics. St Demetrius (7th century) is decorated internally with slabs of different coloured marble. The Old Mosque was anciently a temple of Venus. Here is the propylæum of the hippodrome in which Theodosius in 390 ordered the massacre of 7000 citizens. One of two fine handsome Roman arches was taken down in 1867; the other still stands, but in a ruinous condition. The commerce is increasing, especially since the opening of the railway to Servia. The imports consist chiefly of metal wares, textiles, coffee, petroleum, salt, sugar, rice, and soap; the exports of corn, cotton, opium, wool, tobacco, skins, silk, cocoons, &c. The industries include the manufacture of cotton, flour, soap, bricks, leather, silk, and carpets. Population, 100,000, of whom nearly 50,000 are Jews of Spanish descent, 35,000 Turks, and 15,000 Greeks. Salonica is the ancient *Thessalonica*, to whose Christian community St Paul addressed two epistles. Here Cicero dwelt for a time. Thessalonica was built by Cassander about 315 B.C. on the site of the older Therme, and was called after his wife, sister of Alexander the Great. It soon became the principal harbour of Macedonia. Under the Byzantine emperors it successfully withstood the Goths and the Slavs, but was captured by Moslems from Africa in 904, and by the Normans of south Italy in 1185. From the Venetians the Turks took it in 1430.

Salop. See Shropshire.

Salsette (Portu. pron. *Sal-set'tay*), an island lying N. of Bombay, with which it is connected by a bridge and a causeway. It is diversified by mountain and hill, studded with the ruins of Portuguese churches, convents, and villas, and rich in rice-fields and cocoa-nut groves. Area, 241 sq. m.; pop. 118,000; chief town, Thana (q.v.). Nearly 100 caves and cave-temples excavated in the face of a single hill at Kánhari or Keneri, 5 miles W. of Thana; they contain colossal carvings. There are other caves at Montpezir, Kanduti, Amboli, &c. Salsette was occupied by the Portuguese early in the 16th century, and was captured by the British in 1774.

Salta, a northern province of Argentina, touching Chili and Bolivia; area, 49,510 sq. m.; pop. 200,000.—Salta, the capital, on the Rio Arias, 535 miles by rail N. by W. of Córdoba, was founded in 1582, is the seat of an archbishop. Pop. 20,000.

Saltaire, a model village of Yorkshire, on the Aire, 3 miles NW. of Bradford, founded and built by Sir Titus Salt, who opened his worsted and alpaca factory here in 1853. This factory covers 12 acres, and is six stories high. The place possesses a church of Byzantine architecture, hospital, school, a park of 14 acres, workmen's club and institute which cost £30,000, technical schools (1887), &c. Pop. about 5000.

Saltash, a picturesque municipal borough and seaport of Cornwall, on the west side of the Tamar estuary, and 4½ miles NW. of Plymouth by a railway that crosses the Tamar by Brunel's iron Royal Albert Viaduct (1857–59), 2240 feet long and 240 high (the roadway 102 feet above high-water mark), constructed at a cost of £230,000. The church of St Nicholas dates from 1225. The town was disfranchised in 1832. Pop. 3500.

Saltburn, a picturesque Yorkshire watering-place, built on lofty cliffs facing the sea, 4 miles SE. of Redcar, dates from the opening of the railway in 1861. Pop. 2580.

Saltcoats, a watering-place of Ayrshire, on the Firth of Clyde, 1 mile ESE. of Ardrossan and 30 miles SW. of Glasgow. It was a seat of salt manufacture from 1686 to 1827. Pop. 8120.

Saltfleet, a Lincolnshire coast-village, 9½ miles ENE. of Louth.

Saltillo (*Salteel'yo*), capital of the Mexican state of Coahuila, by rail 237 miles SW. of Laredo, in Texas, and 603 N. by W. of Mexico city. Pop. 25,000. Near it is Buena Vista (q.v.).

Salt Lake City, the chief town and ecclesiastical capital of the state of Utah, is on the river Jordan, 11 miles from Great Salt Lake (q.v.), and 4265 feet above the level of the sea. By rail it is 36 miles S. of Ogden, on the Union Pacific Railroad (833 miles from San Francisco and 1031 from Omaha). It was settled by the Mormons in 1847, and incorporated in 1851; has an area of 12 sq. m., with corporate limits embracing 50 sq. m.; and its shaded streets, 137 feet wide, many of them freshened by streams of running water from the neighbouring mountains, are traversed by tram-cars (1872), and lit by gas (1873) and the electric light (1877). The public buildings include the Mormon temple (1853–93; cost over $2,500,000), with walls built of blocks of dressed granite, 20 feet thick at the basement, and tapering to 6 feet thick at the top; the Tabernacle, an immense elliptical building, with a dome-shaped

('dish-cover') roof resting on sandstone pillars, and seated for 9000; the new assembly hall, of rough-hewn granite; the endowment-house, &c. Other religious bodies also are represented, and there are Roman Catholic, Episcopalian, Presbyterian, Congregationalist, and Methodist churches: St Mark's Cathedral is a handsome building. Other noteworthy edifices are those of the museum, the Mining Institute, St Mary's Hospital, the university of Deseret (1850; buildings finished 1887), and the theatres and opera-house. Manufactures are bricks, paper, timber, blinds, window-glass, &c. Pop. (1870) 12,854; (1900) 53,531. See works by Burton (1861) and Bancroft (1889), and Stanford's *Central America* (1902).

Saltley, a NE. suburb of Birmingham.

Saltney, a Flintshire village on the Dee, 2 miles SW. of Chester, with docks and ironworks. Pop. of township, 2675.

Salto (*Sahl'to*), capital of a NW. dep. of Uruguay (area, 4863 sq. m.; pop. 43,567), stands near the head of navigation on the Uruguay River, 86 miles by rail N. of Paysandù. Pop. 15,000.

Saltram, on the Catwater, 4 miles ENE. of Plymouth, seat of the Earl of Morley.

Salt Range, a barren mountain-system, 3200 to 5000 feet high, in the Punjab, India, consists of two E. and W. chains enclosing a lofty tableland rich in rock-salt.

Saluzzo (*Saloot'zo*), an Italian city near the Alps, 42 miles by rail S. by W. of Turin. It has a cathedral (1480), with the tombs of the marquises of Saluzzo, their old castle (now a prison), and the ruined abbey of Staffarda (1131–1737). Silvio Pellico was born here. Pop. 9716.

Salvador', the smallest but by far the most thickly populated of the Central American Republics, consists of a strip of territory stretching between Honduras and the Pacific. It is 140 miles in length by about 60 in average breadth, and has an area estimated at 7225 sq. m., with a pop. (1901) of 1,006,848. Except for a narrow seaboard of low alluvial plains, Salvador consists of a plateau, some 2000 feet above the sea, furrowed by river valleys and broken by numerous volcanic cones, and bounded on the N. by the Central American Cordillera. Of the volcanoes (4900 to 6900 ft.), many are extinct; earthquakes are frequent (see SAN SALVADOR). The Lempa (140 miles) receives the surplus waters of the Laguna de Cuija, and the San Miguel drains the south-east portion of the republic. The climate is equable, very healthy in the interior, and even along the coast less unwholesome than on the Atlantic side of Central America. The land is well watered, and the soil exceedingly fertile. The principal products are coffee, indigo, and balsam (on the Balsam Coast); also tobacco, sugar, maize, rice, beans, india-rubber, vanilla, and ornamental woods. Gold and silver are mined, and coal and iron worked. The exports (mainly coffee and indigo) range in value from 8 to 12 million dollars per annum; the imports from 4 to 7 millions. Of the imports (cotton goods the principal item) 35 per cent. is from Great Britain and 25 per cent. from the United States. The population consists mostly of (Aztec) Indians and mixed races: the whites number 20,000. The Indians almost all speak Spanish and profess the Roman Catholic religion. The government is carried on by a president, four ministers, and a congress of seventy deputies. The revenue, varying from 5 to 8 million dollars, shows a slight excess over the expenditure; the internal debt is returned at $10,000,000, and the external debt is about £750,000. There is an army of 4000 men and 18,000 militia. Railways connect Acajutla (the chief port) with Santa Ana and Ateos, and nearly to the capital, San Salvador (q.v.). Salvador, originally called *Cuscatlan*, was conquered by Alvarado in 1525–26. In 1821 it threw off the Spanish yoke, and from 1823 to 1839 it belonged to the Central American confederacy. Since 1853 it has been an independent republic disturbed by frequent *pronunciamientos*. See books on Central America by Bates (1879) and Squier (1868).

Salvatierra, a town of Mexico, 197 miles by rail NW. of Mexico city, with cotton-factories. Pop. 23,962.

Salween, a river of Asia that flows south through the Shan country, then between Siam and British Burma, to the Gulf of Martaban a little below Maulmain. It is navigable for about 80 miles. The course of the Salween (also spelt *Salwen*, *Salwin*, and *Saloüain*) is known only as high as 25° N. lat. It is uncertain whether the Lukiang of the Chinese (Tibetan Giama Nu-Chu), which has a course of some 700 miles through Tibet, is the upper part of the Salween or the upper part of the Irawadi (q.v.).

Salzbrunn (*Sahltz'broon*), a group of three villages in Prussian Silesia, 40 miles by rail SW. of Breslau. Their eight mineral springs attract nearly 4000 visitors in the season. The alkalo-saline water is largely exported. Pop. 6459.

Salzburg (*Sahltz'boorg*), a crown-land of Austria, bounded W. by Bavaria and the Tyrol, S. by Carinthia, and E. by Styria. Area, 2762 sq. m.; pop. (1880) 163,570; (1900) 192,762. It lies on the northern face of the eastern Alps, and is a mountainous region, attaining 12,000 feet in the Hohe Tauern. The river Salzach (190 miles), a tributary of the Inn, flows E. and then N. through one of the most picturesque of Alpine valleys. Salt is obtained, especially at Hallein (q.v.). Salzburg became Austrian in 1805.

SALZBURG, the capital, occupies a charming situation on the Salzach, by rail 195 miles W. by S. of Vienna and 80 miles E. by S. of Munich, where the river passes between two wooded rocks (1716 and 2133 feet); one of which, the Mönchsberg (Monk's Hill), is crowned by the old citadel, dating partly from Roman times. The river divides the city into two parts; on the west is the old city, with many dark, winding streets, getting access to the valley and plain on the north through a gallery (440 feet long, 39 feet high, and 23 feet wide), hewn (1767) in the solid rock of the Mönchsberg. This portion of the city contains the fine cathedral, with a white marble façade, and built (1614–34) in imitation of St Peter's at Rome; the Romanesque abbey church of St Peter (1127); the palace of the Grand-duke of Tuscany, in the Italian style (1592–1725); the Benedictine monastery, with a valuable library of 65,000 vols. and 900 MSS.; and the archbishop's palace. On the opposite bank lies the modern town, with Italian-looking, flat-roofed houses; here the most prominent buildings are Castle Mirabell (1607); the Capuchin monastery (1599), and St Sebastian's Church (1512), with the monument of Paracelsus. The city possesses also a theological faculty, all that remains of the former university (1623–1810); a public library (1617) of 82,000 vols. and 1400 MSS.; a museum of Celtic and Roman antiquities, &c.; a bronze monument (1842) to Mozart, a native; a new park on the east bank; the government buildings (1588); the town-house (1407), &c. Industry

is confined chiefly to the manufacture of musical instruments, marble ornaments, &c. Pop. 33,100. On the site of the Roman *Juvavum*, which was ruined by the Goths and Huns, Salzburg in the 6th c. was made the seat of a monastery. Its archbishops, who dated from 798, were princes of the empire, generally noted for severity; and in 1732, after five years' bitter persecution, 30,000 Protestants left their homes (as illustrated in Goethe's *Hermann und Dorothea*) and on the invitation of Frederick-William I. settled in Prussia.

Salzkammergut (*Sahltzkammergoot'*), called the *Austrian Switzerland*, one of the most picturesque districts of Europe, lies wedged between Salzburg on the W. and Styria on the E. Area, about 230 sq. m.; pop. 17,500. The scenery combines in rare beauty the features of valley, mountain, and lake. The highest peak is the Dachstein (9830 feet); of its lakes the most famous are Hallstatt, Traun or Gmunden, Atter, St Wolfgang, Aber, Mond, and Zell. It derives its name of 'Salt-exchequer Property' from its salt springs and mines, which yield some 33,000 tons of salt annually. The chief seats of the salt-works are Ischl, Hallstatt, and Ebensee.

Salzwedel (*Sahltzvay'del*), a town of Prussian Saxony, 72 miles by rail NW. of Magdeburg. Pop. 9883.

Samara (*Samah'ra*), a town of European Russia, on the Volga's left bank, at the influx of the Samara, 656 miles ESE. of Moscow by rail. It carries on a large river-trade, and has also tanneries, tobacco-factories, soap-boiling-works, and tile-works. Consumptive patients resort to the Koumiss (fermented mares' milk) establishments here. The population increased from 35,000 (1870) to 93,000 (1905).—The *government* has an area of 58,300 sq. m.; pop. 2,765,000 (100,000 Germans in agricultural colonies).

Samarang (*Samah'rang*), a seaport on the north of Java, 255 miles E. of Batavia, is the principal port of Middle Java, and is connected with Jokjokarta and Surabaya by railway. Pop. 84,250.

Samarcand', a city of western Turkestan, on the Transcaspian railway, 4 miles S. of the Zeraf-shan river, and amongst the western spurs of the Tian-Shan Mountains, 130 miles E. by S. of Bokhara and 150 N. by E. of Balkh. It is the ancient *Marcanda*, the capital of Sogdiana, which was destroyed by Alexander the Great. It was captured in 712 A.D. by the Arabs, and has ever since been a sacred city in the eyes of the Moslems, especially after Timur made it his capital in the 14th century. It had, however, suffered terribly from Genghis Khan, who took it (1219) and destroyed three-fourths of its 500,000 inhabitants. In Timur's time it had a pop. of 150,000. The Ulug-beg College, the tombs of Timur and his wives, and two other colleges, the Tilla-Kari and Shir-dar, both dating from the beginning of the 17th century, are magnificent structures. In the 15th century Samarcand was renowned as a school of astronomy and mathematics. In 1868 it was taken from Bokhara by the Russians, who have built a citadel on a steep hill 4 miles in circuit, and have laid out a handsome new town to the west of it. On the other side of the citadel is the old city, walled, with dark and narrow streets, and dirty houses. Pop. 55,000.

Samaria, the capital of the northern kingdom of Israel, after Israel (the Ten Tribes) and Judah became two independent states. It was founded by Omri, on the long flat summit of an isolated hill (1450 feet), about 5 miles NW. of Shechem, and near the middle of Palestine. About 721 B.C. it fell before the three years' persistency of the Assyrian monarchs, Shalmaneser and Sargon, who carried away nearly all the Hebrew inhabitants of Samaria and Israel captive into Babylonia, sending in their place Assyrian colonists. The new settlers adopted many of the religious practices and beliefs of the remnant of the Israelites amongst whom they dwelt. When the Jews returned from the Captivity and set about the rebuilding of the temple, the Samaritans desired to share in the work; but the Jews rejected their assistance, and the Samaritans built (409 B.C.) on Mount Gerizim beyond Shechem a sanctuary to Jehovah as a rival to the temple at Jerusalem. This converted them into bitter enemies, so that henceforward the 'Jews had no dealings with the Samaritans.' The Samaritans adhered to the revised Pentateuch of Ezra as their sole religious code-book. At the present day there still survive 150 of them, collected at Nablus, the ancient Shechem. The Samaritan language is an archaic Hebrew-Aramaic dialect; and in it are written a very ancient version of the Pentateuch, certain chronicles, hymns, and books of religious devotion. Samaria was taken by Alexander the Great, and colonised by Macedonians and Hellenised. Twice it was besieged and taken—by Ptolemy I. (312 B.C.), and by Demetrius Poliorcetes (*c.* 296). The Jewish captain John Hyrcanus laid siege to it (*c.* 110 B.C.), and at the end of a year destroyed it utterly. Nevertheless the Samaritans joined the Jews in offering fierce resistance to the Romans, who again destroyed the city. Herod refounded it under the name of Sebaste; and on its site, now called Sebastiya, there still exist parts of a colonnade of the age of Herod, remains of a temple to Augustus, and an old crusading church (now a mosque) built over the tomb of John the Baptist. The tombs of six or eight (Omri, Ahab, Jehu, &c.) of the kings of Israel and those of the prophets Obadiah and Elisha were also at Samaria.

Sambhal, a town in the United Provinces of India, 23 miles SW. of Moradabad. Pop. 40,000.

Sambor, a town in Austrian Galicia, on the Dniester, 41 miles SW. of Lemberg. Pop. 17,050.

Sambre (*Son^{g}br*), a river rising in the French dep. of Aisne, and flowing 112 miles NE., until at Namur in Belgium it joins the Meuse or Maas from the left. Many prehistoric remains have been discovered in caves in the Sambre valley.

Samland, a district of East Prussia, between the Frisch and Kurisch Haffs. Its western coast is known as the Amber (*Bernstein*) coast.

Samo'a. The Samoa or Navigators' Islands are a group of islands in the Western Pacific, crossed by 170° W. and 14° S., between 400 and 500 miles NE. of Fiji. The group consists of nine islands, besides rocks and islets. All, except Rose Island, are volcanic, and are for the most part surrounded with coral-reefs. They are very mountainous, well wooded, and of very fertile soil. Four islands alone are of any size, Savaii, Upolu, Tutuila, and Manua (the latter really consisting of three small islands). Savaii, the westernmost and largest, is about 40 miles in length by 20 in breadth, and has an estimated area of 700 sq. m., and one peak which rises to near 5000 feet. Upolu, about 8 miles SE. of Savaii, has an area of between 550 and 600 sq. m.; on its northern side is the bay and harbour of Apia, the centre of all political and commercial life in the Samoan group. Thirty-six miles SE. of Upolu is Tutuila, possessing a well-sheltered harbour in Pango Pango. The climate of Samoa

is very moist and variable; the pleasantest time of the year is from May to November; during the rest of the year heavy gales and rains are frequent, and occasionally disastrous hurricanes occur—like that in which H.M.S. *Calliope* was safely guided out to sea, all the other ships being stranded. Copra, the dried kernel of the cocoa-nut, is the chief article of export; cotton, coffee, tobacco, and cane-sugar being also grown. Fruit is plentiful, and bananas and citrons are exported to New Zealand and Australia. There are rich pastures, upon which imported live-stock thrive. The islands were visited by Bougainville in 1768, and from him they received the name of Îles des Navigateurs, as a tribute to the skill of the native boatmen. After 1889 Great Britain, Germany, and the United States recognised the independence of the Samoan government, making provision for a supreme court and the regulation of taxation and land-claims. By a further agreement between Britain, Germany, and the United States (1899–1900), Upolu and Savaii were assigned absolutely to Germany, and the other islands to the United States. The Samoans belong to the brown Polynesian race, and are a well-formed and prepossessing race, decreasing in numbers, the population being about 39,000, of whom 32,600 are in the German islands. The exports from the German islands of the group were in 1903, £69,250, and the imports £134,050. From the United States islands the exports were £8819, and the imports £32,426. The trade is mostly in the hands of German, British, and American firms. See works by Turner (1884), Churchward (1887), Phillips (1890), and R. L. Stevenson (1892), who from 1889 made Upolu his home, and is buried on the summit of Vailima Mountain there. *Sam'oa* is the native pronunciation.

Samogitia, a district in the Russian government of Kovno, inhabited by pure Lithuanians.

Samos, an island in the Ægean, close to the coast of Asia Minor, 45 miles SSW. of Smyrna; length is 30 miles, mean breadth 8, area 180 sq. m. The highest peak, Mount Kerki (anc. *Cerceteus*), reaches 4725 feet. Between Samos and the mainland is the narrow channel of Mycale, where in 479 B.C. the Persians were totally defeated by the Greeks. Between Samos and Nicaria (anc. *Icaria*) on the west is the Great Boghaz, 3 to 8 miles broad. Samos is well watered and very fertile; its principal product is wine, with olive-oil, carob beans, raisins, and hides. The chief industry is tanning. The capital of the island is Vathy (pop. 6000), on the north coast. The site of the ancient city of Samos is occupied by Tigani. The island was in Greek times celebrated for its red glossy pottery. Pop. of island (1900) 54,850, all Greeks. A portion (from 84 B.C.) of the Roman province of Asia, and then a Byzantine possession, Samos was conquered by the Turks. When the war of independence broke out in 1821 no Greeks were more ardent patriots than the Samians; and deep was their disappointment when, at the close of the struggle, European policy assigned them to their former masters. They are, however, governed (since 1833) by a Greek, the Prince of Samos, and by a native council, paying tribute to the Porte.

Samos'ata (mod. *Samisat*), the capital till 73 A.D. of the Syrian kingdom of Commagene, on the Euphrates, 130 miles NNE. of Aleppo. It was the birthplace of Lucian.

Samothrace (*Samothray'see*), or SAMOTHRAKI, an island of the Ægean Sea, 40 miles NW. of the Dardanelles. It rises to 5248 feet in Mount Saoce (Phengari), which occupies nearly the whole of its surface (68 sq. m.). Bare and repellent, the island possesses no harbour and only one village, Chora, of 2000 inhabitants. Anciently it was celebrated for the worship of the Cabeiri, mysterious divinities whose temples were excavated in 1873–75 by Professor Couze. Parts of the cyclopean walls of the ancient city still remain. In 1457 it was conquered by the Turks, who then, and again in 1821, nearly exterminated the population.

Samsö, a Danish island in the entrance to the Great Belt, between Zealand and Jutland. Area, 42 sq. m.; pop. 6600.

Samsun, a seaport, with growing trade, on the Black Sea coast of Asiatic Turkey, 90 miles SE. of Sinope. Pop. 15,000.

Sanaa', the former capital of the Imáms of Yemen, 200 miles N. by W. of Aden, stands in a valley 4000 feet above the sea. Pop. 50,000.

San Antonio, capital of Bexar county, Texas, on the San Antonio River, 210 miles by rail W. of Houston. It has a Roman Catholic cathedral and seminary, an arsenal and government building, court-house, flour-mills, breweries, tanneries, &c. In Fort Alamo, across the river, Mexicans slaughtered the U.S. garrison of 188 men in 1836. Pop. (1880) 20,550; (1900) 53,331.

San Carlos, a town of Venezuela, 125 miles SW. of Carácas. Pop. 10,741.

San Cataldo, a town of Sicily, 10 miles W. of Caltanisetta. Pop. 18,000.

Sanchi (*San'tchee*), a village in Bhopal state, on a rocky hill 5½ miles SW. of Bhilsa, is remarkable for its great Buddhist tope, dating from 250 B.C., with remains of ten smaller topes.

San Cristóbal, (1) a town of Chiapas state, Mexico. Pop. 16,000.—(2) A town of Venezuela, in the states of Los Andes. Pop. 5000.

Sancti Spiritus. See SANTO ESPIRITU.

Sanda, an Argyllshire islet, 10 miles S. by E. of Campbeltown, 381 acres in area, and 405 feet high, with a lighthouse (1850). Pop. 19.

Sandakan, the capital, founded about 1880, of the territory of the British North Borneo Company. Pop. over 7000.

Sandal Magna, a small town in the West Riding of Yorkshire, 2 miles SE. of Wakefield. Near it are the remains of the old castle of the Earls of Warren, ruined during the great Civil War. Pop. 6900.

Sandalwood Island, or SUMBA, one of the Sunda group in the Dutch East Indies. Area, 4385 sq. m.; pop. 200,000.

Sanday, an Orkney island, 2¼ miles N. of Stronsay. Area, 26 sq. m.; height, 173 feet; pop. 1729.

Sandbach, a market-town of Cheshire, near the right bank of the Wheelock, 5 miles NE. of Crewe. It has a good parish church, public rooms (1859), a grammar-school (1594), and manufactures of boots and shoes, fustian, iron, &c. Pop. 5750.

Sandbank and Ardnadam, an Argyllshire watering-place, on the S. shore of the Holy Loch, 2¾ miles NNW. of Dunoon. Pop. 1018.

Sandec, a town of Galicia, 45 miles SE. of Cracow, mostly burnt down in 1890. Pop. 15,750.

Sandefjord (*j* as *y*), a watering-place, 86 miles by rail SSW. of Christiania. Pop. 5307.

Sandgate, a small watering-place on the south coast of Kent, within the parliamentary limits of Hythe, from which it is, however, nearly 3 miles E. by rail. Sandgate Castle dates from 1539;

near by is Shorncliffe Camp. Two hundred houses were wrecked here by a land subsidence on 4th March 1893. Pop. 2050.

Sandhurst. See BENDIGO.

Sandhurst Military College, Berkshire, 5 miles SSE. of Wokingham and 33 WSW. of London, dates from 1799, was transferred from Great Marlow in 1812, and remodelled in 1858; it gives military training to some 200 cadets.

San Diego (*De-ay'go*), the principal port of southern California, and capital of San Diego county, 124 miles by rail SSE. of Los Angeles. The beautiful bay, 6 miles long, forms an excellent harbour, and the port is a very busy one. Pop. 17,700.

San (or **Santo**) **Domingo**, capital of the Dominican Republic, stands on the south coast of Hayti. It was founded by Columbus in 1494. The principal buildings are the Gothic cathedral (1514–40), where the ashes of Columbus rested from 1536 till 1796, a college, hospital, arsenal, and government buildings. Pop. 25,000.

San'doway, a district in the south of Arakan in Burma, named after its chief town (pop. 2000), 15 miles from the mouth of a small river of the same name, and 150 miles NW. of Rangoon.

Sandown, a watering-place on the south-east coast of the Isle of Wight, 6 miles by rail S. of Ryde. Pop. 5000.

Sandown Castle. See DEAL.

Sandown Park, a race-course (130 acres) in Surrey, near Esher, 15 miles SW. of London.

San'dringham, a Norfolk estate, 3 miles from the sea and 7½ miles NNE. of Lynn. Comprising over 7000 acres, it was purchased in 1862 by the Prince of Wales for £220,000. The then existing mansion was demolished, and the present hall, built in 1869–71, a red-brick Elizabethan country-house, standing in a pleasant park of 200 acres; special features are the iron 'Norwich gates,' the dairy, and the splendid cottages. A fire on 1st November 1891 did damage to the amount of over £10,000. Sandringham was the scene of the six-weeks' illness of the Prince of Wales (Nov.–Dec. 1871), and of the death of his eldest son, the Duke of Clarence (14th January 1892). See Mrs Herbert Jones, *Sandringham, Past and Present* (2d ed. 1888).

Sandus'ky, a port of Ohio, capital of Erie county, on the south shore of Sandusky Bay, an arm of Lake Erie, 56 miles by water (by rail 65) W. of Cleveland. The bay, 15 miles long and 5 wide, forms an excellent harbour. The city has machine-shops, railway-car factories, manufactories of cutlery and edge-tools, wheels, and especially of carved and turned woodwork. Pop. 22,000.

Sandwich (*Sand'witch* or *-wij*), a decayed seaport of Kent, on the right bank of the Stour, 12 miles E. of Canterbury and 68 (by rail 84) ESE. of London. It now stands 2 miles from the sea, or 4 if one follows the windings of the river; but in the 11th century, when Edward the Confessor made it one of the Cinque Ports, it was the 'most famous of all the English harbours.' It was the place of landing or embarkation of St Wilfrid, Canute, Becket, Cœur-de-Lion, &c.; under Edward IV. had 95 ships and 1500 mariners; but has never recovered the silting up of its harbour in the 16th century, in spite of the settlement at it of Protestant refugees (c. 1561), and of some harbour improvements since 1847. To-day its chief fame is as headquarters of golf. The old walls have been converted into a pleasant promenade, but it retains the Fisher Gate and Barbican, and offers a good deal of interest in its two churches and hospitals, guildhall (1579), grammar-school (1564), a house that lodged Queen Elizabeth, and other quaint old buildings. Richborough, 1½ mile N., was the Roman *Rutupiæ*, the predecessor of Sandwich, like which it declined as the sea receded from its port. A great fortress, 460 feet square, it still has a wealth of Roman remains—walls, towers, the base of a pharos, and an amphitheatre. Sandwich was made a borough by Edward III., and with Deal and Walmer returned two members, but was finally disfranchised in 1885. Pop. (1851) 2966; (1901) 3170. See works by Boys (1792), Smith (1830), Bell (1831), and Montagu Burrows (1888).

Sandwich Islands. See HAWAII.

Sandy Hook, a narrow sandy peninsula of New Jersey, between the Atlantic and Sandy Hook Bay, 16 miles S. of New York. It is 6 miles long, and extends northward towards New York Lower Bay. On it are a lighthouse, with a new and most powerful electric light (1893–94), a fort, and a life-saving station.

Sandyknowe. See SMAILHOLM.

Sandy Point. See PATAGONIA.

San Felipe (*Faylee'pay*), (1) capital of the Chilian province of Aconcagua, 60 miles ENE. of Valparaiso. Pop. 12,000.—(2) A town of Lara state in Venezuela, 140 miles W. by S. of Carácas. Pop. 7000. See also JATIVA.

San Fernando, a Spanish town, near the head of a bay, 9 miles SSE. of Cadiz. Pop. 29,920.

San Francisco, the largest city of the Pacific coast, and commercial emporium of California, is situated in 37° 47′ 22″ N. lat. and 122° 25′ 40·76″ W. long., 2434 miles W. of St Louis by rail, and 3542 of New York. The city occupies the end of a peninsula or tongue of land, having the ocean on one side and the Bay of San Francisco on the other. The site is uneven; from two heights (294 and 360 feet) the land inclines gently towards the bay. The entrance to this landlocked bay is through the Golden Gate, 5 miles long and 1 mile wide, with a depth of 100 feet, but only 30 feet on the bar at the entrance. The Bay of San Francisco extends to the S. about 40 miles, varying in width from 6 to 12 miles. Northwards, this bay connects by a strait with San Pablo Bay (10 miles long), which again is connected with Suisun Bay (8 miles long). The Sacramento and San Joaquin rivers debouch near the head of Suisun Bay. Nearly in front of the city are three important islands—Alcatraz (fortified), Angel Island (fortified), and Yerba Buena or Goat Island. Most of the pioneer wooden business structures have disappeared; many large and costly buildings have been erected; and marble, granite, and terra-cotta are coming into extensive use, with interior frames of iron and steel. There are several theatres and opera-houses, a sub-treasury, mint, custom-house, stock exchange, city hall (cost over $4,000,000), and other structures of less note. The Palace Hotel cost upwards of three million dollars, and accommodates 1200 guests. There are about a dozen public squares; the Golden Gate Park covers an area of 1050 acres. The new Roman Catholic cathedral, the Unitarian church, Grace Church, and the First Congregational Church are notable religious edifices. The state university is at Berkeley, and the Leland Stanford University at Palo Alto (33 miles SE. by rail). The higher institutions of the city include the law, medical, and dental departments of the

university, the Cooper Medical College, the Hahnemann Medical College, the School of Mechanic Arts (founded by a bequest from James Lick of $540,000), and the Academy of Sciences. The city has also a free library with near 150,000 vols.; other large collections are the Mercantile Library and the Mechanics' Library, the Oddfellows' Library, and the Law Library. The most conspicuous building is the City Hall (begun 1875; finished 1900), with a dome 332 feet high, and costing over $6,000,000. Most of the streets are laid out in rectangular form, and with little reference to the conformation of the surface. The cable tramway was invented in San Francisco, and there are still some 80 miles of cable-roads, besides about 180 miles of electric tramways. The water-supply is brought from points about 20 miles distant from the city.

San Francisco is the western terminus of the great continental railroads and of many short lines, and has steamer communication with the ports of the world. A stone dry-dock admits vessels of 6000 tons, and there are smaller docks for coasting craft. San Francisco is one of the most important grain ports in the United States; and gold and silver, wine, fruit, and wool are exported (largely in British bottoms). There are large sugar-refineries, foundries, shipyards, cordage-works, wood-factories, woollen-mills, and many others. The mission of San Francisco was founded by the Mexicans in 1776, but the present city sprang from the village of Yerba Buena, 3 miles E., founded in 1835, which became American in 1846. In 1848, the year of the Californian gold discovery, the pop. was 500; (1850) 25,000; (1870) 149,473; (1900) 342,782, including about 14,000 Chinese (mainly in the curious 'Chinese quarter,' with its own joss-houses, theatres, and opium-dens). A terrible earthquake (April 18, 1906), and the resultant fires, destroyed the greater part of San Francisco and many neighbouring towns, and a large part of the state suffered at the same time. See CALIFORNIA, and works there cited.

San Francisco del Rincon, a town of Mexico, 40 miles W. of Guanajuato. Pop. 12,000.

San Fratello, a town of Sicily, 53 miles WSW. of Messina. Pop. 9554.

Sangerhausen (*Sang-er-how'zen*), an old town of Prussian Saxony, on the SE. of the Harz Mountains, 22 miles E. of Nordhausen, with manufactures of machinery, iron, copper, and beet-root sugar. Pop. 12,188.

San Germano (*Jermâh'no*), or CASSINO, a town of Italy, 3 miles E. of the celebrated monastery of Monte Cassino (q.v.) and 69 miles NW. of Naples. It is built from the ruins of the ancient Volscian *Casinum*. Pop. 6380.

San Gimignano (*Jiminyâh'no*), a town of Italy, 25 miles S. by W. of Florence. Pop. 3591.

San Giovanni a Teduccio (*Jovan'nee ah Tay-doot'sio*), a SE. suburb of Naples. Pop. 14,397.

San Giovanni in Fiore (*Fyo'ray*), a town of South Italy, 25 miles E. of Cosenza. Pop. 10,500.

San Giovanni Rotondo, a town of South Italy, 27 miles NE. of Foggia. Pop. 8312.

Sangir Islands (*Sangeer'; g* hard), a group of fifty mountainous volcanic islands, lying between the Philippines and Celebes. Area, 323 sq. m.; pop. 115,000. The largest, Great Sangir, is 28 miles long by 9 broad; the eruption of the volcano Abu here in 1856 cost 6000 lives. The people are Malays, ruled by chiefs under Dutch suzerainty.

Sang-koi. See TONQUIN.

San Joaquin' (*San Wah-keen'*), a river of California, rises in the Sierra Nevada, and runs 400 miles SW. and NNW. to Suisun Bay, near the mouth of the Sacramento River.

San José, capital of Santa Clara county, California, on the Guadalupe River, 8 miles from the Bay and 50 by rail SE. of the city of San Francisco. Besides a fine court-house and a city hall, it contains the state normal school and a Roman Catholic college for girls; and the University of the Pacific (Methodist Episcopal; 1852) and the Roman Catholic Santa Clara College are both at Santa Clara, close by. Lick Avenue extends from San José to the Lick Observatory. The city has wide streets and three parks, is noted for its gardens and fruit, and has foundries, fruit-canneries, woollen and flour mills, a furniture-factory, &c. Much wine is made in the neighbourhood. Pop. (1880) 12,567; (1900) 21,500.

San José (*San Ho-zay'*), the capital since 1823 of Costa Rica, on a fertile plain, 3711 feet above the sea, 25 miles from Carillo, the terminus of the railway (70 miles) from Limon, the Atlantic port. The principal manufactories are the government distillery, steam flour-mills, and two foundries. Pop. 25,000.—(2) A thriving inland town of Uruguay, capital of the southern department of the same name, 60 miles by rail NNW. of Montevideo. Pop. 9000.—(3) Three towns in the Philippine Islands, with from 7000 to 10,000 inhabitants.—(4) A town in Cuba, 20 miles SE. of Havana. Pop. 3100. See also CÚCUTA.

San Juan (*San Hoo-ahn'*), a frontier province of the Argentine Republic, bordering on Chili, with an area of 37,697 sq. m. and a pop. of 100,000. The capital, San Juan, on the river San Juan, is by rail 735 miles W. by N. of Buenos Ayres and 98 N. of Mendoza. Pop. 12,000.—(2) Of several San Juans in Mexico the chief is on the river Tabasco, 70 miles from its mouth. Pop. 10,600. See also ST JOHN'S (Porto Rico), GREYTOWN, and FUCA.

Sankuru, an affluent of the Kassai, itself a tributary of the Congo (q.v.).

Sanlúcar de Barrameda (*Barramay'da*), a seaport of Spain, 15 miles N. by W. of Cadiz, at the mouth of the Guadalquivir. Pop. 23,746.

San Luis (*Loo-eess'*), a province of the Argentine Republic, with an area of 29,304 sq. m. and a pop. of 100,000.—The capital, San Luis, is on the trans-continental railway, 480 miles W. by N. of Buenos Ayres. Pop. 11,000.

San Luis Potosi (*Potozee'*), capital of the Mexican state of the same name, stands on the edge of a plateau, 7400 feet above the sea, 362 miles by rail NNW. of Mexico city. It contains a handsome cathedral, railway workshops, a cotton-factory, and great smelting-works. There are silver-mines near by. Pop. 70,000.—The *state* has an area of 27,503 sq. m. and a pop. of 582,500.

San Marco in Lamis, a town of South Italy, 18 miles N. of Foggia. Pop. 15,345.

San Marino (*Marce'no*), an Italian republic, the smallest independent state of Europe, lies among the eastern spurs of the Apennines, 9 miles SW. of Rimini on the Adriatic. Area, 33 sq. m.; pop. 11,100, including a town of the same name (pop. 1600) and some villages. The town is built on a mountain crag, and is accessible only by one road; the streets are steep and narrow. In the 13th century San Marino cast in its lot with the house of Urbino; but on the annexation of this duchy to the Papal States in 1631 the independence of San Marino was recognised, and has

since been maintained, though it acknowledges the king of Italy as its protector. From the Grand Council of sixty life-members, self-elected, are selected the Council of Twelve. The executive is committed to two captains-regent.

San Miguel' (*Meegayl'*), a town of Salvador, at the foot of a volcano (7775 feet). Pop. 25,000.

San Miguel Alende, a town of Mexico, on the side of a high hill overlooking the Rio de la Lara, 253 miles by rail NW. of Mexico. Pop. 15,000.

San Miniato (*Min-i-ah'to*), a cathedral city of Italy, 22 miles W. by S. of Florence. It was the original seat of the Bonapartes. Pop. 2147.

San Nicandro, a town of Italy, 26 miles N. of Foggia. Pop. 8257.

San Nicolás, an Argentine city, on the Paraná, 150 miles NW. of Buenos Ayres. Pop. 15,000.

San Paulo. See São Paulo.

Sanpo. See Brahmaputra.

Sanquhar (*Sang'har* or *Sang'kar*), a town of Dumfriesshire, on the Nith, 26 miles NNW. of Dumfries. It has a ruined castle, was the birthplace of the 'Admirable' Crichton, and has many Covenanting memories. The *Corda* of Ptolemy, it was made a royal burgh in 1598, and with Dumfries, &c. returns one member. Pop. 1375. See James Brown's *History of Sanquhar* (1891).

San Remo (*Ray'mo*), a city of Northern Italy, stands on rising ground on a bay of the Gulf of Genoa, 26 miles by rail ENE. of Nice and 84 SW. of Genoa. The shelter of the hills behind and its delightful climate make it one of the favourite winter-resorts of the Riviera, especially for Englishmen and Germans. There are two quarters, an old town of steep, narrow streets, and a new town of handsome streets and picturesque villas, hotels, and palaces. Pop. 19,285.

San Roque, a town of Spain, 8 miles N. by W. of Gibraltar. Pop. 8497.

San Salvador', or Banza Congo, a decayed town of Africa, in Portuguese Angola, 170 miles E. by S. of the Congo's mouth. Pop. 700.

San Salvador', the capital of the republic of Salvador (q.v.), stands in the midst of a fertile plateau, among green hills, and at the foot of the extinct volcano of San Salvador (8360 feet). The government buildings are handsome; the cathedral is unfinished. San Salvador was founded in 1528, and in 1854, when it had a pop. of 25,000, was destroyed by an earthquake. A town of Nueva San Salvador was built 12 miles SW., the capital until 1858. Violent shocks of earthquake have since visited the old capital in 1873, 1879, and 1891. Pop. 60,000.—San Salvador is also a name for Bahia (q.v.), and for Cat Island in the Bahamas (q.v.).

Sansanding, or Sansandig, a town of Africa, on the Niger's left bank, 370 miles SW. of Timbuctoo. Pop. 20,000.

San Sebastián, a fortress and seaport in the north of Spain, 402 miles by rail NNE. of Madrid, and 11 from the French frontier. It is built on a peninsula, stretching from the base of a conical hill, Orgullo (400 feet), which is crowned with a strong castle. Since its storming by Wellington (1813), the town has been rebuilt on a regular plan. On the west is a magnificent roadstead, but difficult of access. It is bordered by a beautiful shore, which attracts many summer visitors. Most of the loading and unloading is done at Pasages, 2½ miles E. The imports include coal, metals, fish, spirits, and yarn; the exports wine, minerals, textiles, and matches. Pop. 37,800.

San Severo (*Sevay'ro*), a cathedral city of Italy, 18 miles by rail NW. of Foggia. Pop. 25,000.

San Stef'ano, a village 6 miles W. of Constantinople.

Santa Ana, a town of Salvador, 40 miles NNE. of Sonsonate. Pop. 45,000.

Santa Barbara, 'the Newport of the Pacific,' is on the coast of S. California. Pop. 7000.

Santa Catharina (*Kataree'na*), a southern coast state of Brazil, with an area of 27,436 sq. m. and a pop. of 295,000, largely Germans. The capital is Desterro (30,000), on a small island.

Santa Clara, capital of a province in the centre of Cuba. Pop. 13,800.

Santa Cruz (*Krooz*), also called Sainte Croix, one of the Virgin Islands, with an area of 74 sq. m. and a pop. (1890) of 21,000. Sugar, rum, and cotton are produced; the capital is Christianstadt (pop. 5500). Discovered by Columbus on his first voyage, the island was held by Dutch, English, Spanish, French, and the Knights of Malta, and was bought by Denmark in 1733.—(2) Or Nitendi, the largest (area, 216 sq. m.) of a group of Melanesian islands, sometimes called Queen Charlotte Islands, east of the Solomon archipelago and 100 miles N. of the New Hebrides. Bishop Patteson was murdered on Nukapu, one of the smaller isles. —(3) Or Tenerife, the capital and chief seaport of the Canary Islands (q.v.), on the NE. side of the island of Tenerife. It is the seat of a bishop. Santa Cruz is much resorted to by steamers for re-coaling.—(4) Santa Cruz de la Palma is the capital of Palma, another of the Canary Islands (q.v.). Pop. 7617.—(5) Santa Cruz, a southern territory of the Argentine Republic, stretching from the Atlantic to the watershed of the Andes; area, 106,890 sq. m.

Santa Fé (*Fay*), a wealthy province of the Argentine Republic, N. of Buenos Ayres; area, 54,790 sq. m.; pop. 575,000. The largest town is Rosario. The capital is Santa Fé, on the Rio Salado, by rail 7 miles from its port, Colastiné, on the Paraná. Pop. 25,099. See also Bogotá.

Santa Fé, till 1906 capital of the territory of New Mexico, in that year incorporated with the state of Arizona, is 6840 feet above the sea. It is an old Spanish-American town, and its *adobe* archiepiscopal cathedral is the oldest existing Christian edifice in the States. Pop. 5713.

Santa Lucia. See St Lucia.—Santa Lucia is also the name of a town of Uruguay, 30 miles NW. of Montevideo. Pop. 5000.

Santa Marta, a port of Colombia, on the Caribbean Sea, was founded in 1525, the second Spanish town planted on the mainland. In 1834 an earthquake almost utterly destroyed the place, which is a bishop's see. Pop. 9000.

Santa Maura. See Leukas.

Santander (Span. pron. *San-tan-dair'*), a seaport of Spain, on an inlet of the Bay of Biscay, 316 miles by rail N. of Madrid, with cigar-factories, breweries, cotton, paper, and flour mills, iron-foundries, and shipbuilding yards. The exports include flour, wine, food-stuffs, and metals; the imports, tobacco, food-stuffs, cod-fish, iron and steel goods, textiles, coal, petroleum, chemicals, timber, &c. Santander is a favourite seaside-resort in summer. Pop. 54,800. It was here Charles I. embarked for England after his trip to the Spanish court. The town was sacked by Soult in 1808, and in November 1893 was wrecked, with great loss of life, by the explosion of a dynamite-freighted ship in the

harbour.—Area of *province* of Santander, 2113 sq. m.; pop. 276,000.

Santarem (*San-ta-ren'*), capital of the Portuguese province of Estremadura, on the Tagus' right bank, 46 miles NE. of Lisbon by rail. An old Moorish castle, crowning a hill was the ancient residence of the kings of Portugal; and there is also a cathedral with interesting tombs. Pop. 8500.—(2) A town of Brazil, at the confluence of the Tapajos with the Amazon; pop. 5000.

Santa Rosa, capital of Sonoma county, California, on Santa Rosa Creek, 51 miles by rail N. by W. of San Francisco. Pop. 6700.

Santa Rosa, (1) a town of Chili, 82 miles by rail E. by N. of Valparaiso; pop. 6000.—(2) A mining-town of Colombia, in Antioquia, 8335 feet above the sea; pop. 11,000.—(3) A town of Boyacá in Colombia, 9055 feet above the sea; pop. 9000.

Santee, a river of South Carolina, flowing 150 miles SE. to the Atlantic.

Santiago. See CAPE VERD ISLANDS.

Santiago (*San-tee-ăh'go*), the capital of Chili, stands near the western base of the Andes, 1700 feet above sea-level, and 115 miles by rail ESE. of Valparaiso. The snow-capped cordilleras seem to enclose it on the north and east; while in the east of the city rises the picturesque Cerro de Santa Lucia (800 feet above the plain), dotted with grottoes, statues, kiosks, restaurants, a historical museum, and an observatory. The small but turbulent stream, the Mapocho, is crossed by five bridges. The city is regularly laid out, lit with gas and the electric light, and has tramways in all directions; most of the houses are of one story only, owing to the earthquakes (the most serious occurred in 1575, 1647, 1730, 1822, 1835, 1906). On the great Plaza Independencia are the government palaces, the Grand English Hotel, the cathedral, and the archbishop's palace. On the site of the Jesuit church, burned down in 1863, a monument was erected (1872) in memory of the 2000 worshippers who perished in the fire. Santiago boasts a noble Alameda, adorned with four rows of poplars and statues. Facing it are the university (1842), and the National Institute. The city has also a military school, schools of arts and agriculture, a conservatoire, a national library (1813), with 102,000 volumes; botanical and zoological gardens, &c. The manufactures include cloth, ship's biscuits, beer, brandy, &c., and it has also an ice-factory, a fruit-conserving establishment, and copper-smelting works. Santiago was founded by Pedro de Valdivia in 1541. Pop. (1865) 168,553; (1902) 330,000.—Area of the *province*, 5223 sq. m.; pop. 485,000.

Santiago de Compostella, a city of Spain, the former capital of Galicia, stands surrounded by hills, 33 miles S. by W. of Corunna and 26 by rail NE. of its port, Carril. Here in 835 the bishop of Iria discovered, according to the legend, the bones of St James (San Iago), being guided to the spot by a star, whence Compostella (*campus stellæ* = 'field of the star'); the relics were in 1884 solemnly affirmed by the pope to be still beneath the cathedral. This building, Romanesque in style, was built 1078–1188, and contains some fine sculptures and metal-work. It was the shrine that attracted every 25th July so many thousands of pilgrims, especially Englishmen, in the middle ages, but is now out of repute. Ruined monasteries give the town a deserted appearance; but it is still an archbishop's see, and has a university (1504) with 700 students. Ornaments are made and linen is woven. Pop. (1900) 24,920.

Santiago de Cuba, the former capital of Cuba, and now the chief town of the eastern department of the island, stands on a bay on the south coast, and has a fortified harbour. It contains a cathedral and seminary, foundries, cigar-factories, sawmills, &c. Pop. 43,100.

Santiago del Estero (*Santeeăh'go del Es'tero*), a north central province of the Argentine Republic. Area, 39,510 sq. m.; pop. 180,700.—The capital, Santiago, on the Rio Dulce, 750 miles by rail NNW. of Buenos Ayres, was founded in 1553. Pop. 10,000.

Santipur', a town of Bengal on the Hooghly, 43 miles N. of Calcutta. Pop. 26,900.

Säntis, or SENTIS, a mountain (8216 feet) on the borders of the Swiss cantons of St Gall and Appenzell. There are on it an observatory (since 1887) and a hotel.

Santo Domingo. See SAN DOMINGO.

Santo Espiritu (*Sancti Spiritus*), a town of Cuba, 40 miles by rail ENE. of Trinidad. Pop. 12,700.

Santorin', or THERA, an island of the Ægean, the southernmost of the Cyclades, 70 miles N. of Crete. It is shaped like a crescent, the horns pointing west; between them lies the island of Therasia. In the SE. of Santorin Mount St Elias rises to 1887 feet. The chief town, Thera or Phera, on the west coast of Santorin, is perched some 900 feet above the water. Pop. of island, about 12,000. Eruptions took place in 196 B.C., 726 A.D., 1573, 1650, 1707, and 1866.

Santos, a port of the state of São Paulo in Brazil, founded in 1546, on the island of São Vicente. It has fine wharves, tramways, and a good water-supply; but it is hot and unhealthy. A railway (40 miles, 5 of them by cable up the Serra do Mar—2500 feet) connects it with São Paulo, whose port it is. Pop. 40,000.

São Vicente, a pretty town of Salvador, 40 miles NE. of San Salvador. Pop. 17,800.

São Francisco (*Sown' Fransees'ko*), a large river of Brazil, rises in Minas Geraes, and flows 1800 miles to the Atlantic.

São-Leopoldo, a town of Rio Grande do Sul, Brazil, 20 miles N. of Porto Alegre. Pop. 10,000, mainly Germans.

Saône (*Sone*), a river of France, an affluent of the Rhone (q.v.), rises in the dep. of Vosges, in the Faucelles Mountains, and flows 282 miles (170 navigable) SW. and S. to the Rhone at Lyons. It receives the Doubs from the left. See Hamerton's illustrated description of the river (1887).

Saône, HAUTE (*Ote Sone*), a dep. in the east of France. Area, 2061 sq. m.; pop. (1861) 317,183; (1901) 266,605. The arrondissements are Gray, Lure, and Vesoul (the capital).

Saône-et-Loire (*Sone-ay-Lwar*), one of the largest deps. of France, part of Burgundy. Area, 3300 sq. m.; pop. (1872) 598,344; (1901) 620,360. There are arrondissements of Autun, Châlon, Charolles, Louhan, and Mâcon (the capital).

São Paulo (*Sown' Pow'lo*), capital of a Brazilian state, stands on a wide plain bounded by low hills, 4 miles from the Rio Tiete and 310 by rail W. by S. of Rio de Janeiro. The principal buildings are the old Jesuit college, now the government palace, the bishop's palace, and a celebrated law-school. São Paulo is the headquarters of the coffee trade, and has cotton-works, with manufactories of tobacco, cigars, spirits, matches, gloves and hats. Pop. 100,000, including 12,000 Italians and 1500 Germans.—The *state* has an area of 112,330 sq. m. and a pop. of 1,750,000.

Saragossa (Span. *Saragoza*), a city of Spain, formerly the capital of Aragon, by rail 212 miles NE. of Madrid and 227 W. by N. of Barcelona, stands on the Ebro, which is crossed by a noble stone bridge of seven arches, built in 1437. From afar it has an imposing appearance with its many towers and spires. Saragossa was the Celtiberian *Salduba*, changed to *Cæsarea Augusta* in 25 B.C., of which the present name is a corruption. One of the first cities of Spain to adopt Christianity (3d century), it was taken by the Goths in the 5th and by the Moors in the 8th century, and was recovered from them in 1118 after a five years' siege, during which great part of the inhabitants died of hunger. The most momentous event in its recent history was the siege by the French (June to August 1808 and December 1808 to February 1809), in which the inhabitants offered a most determined resistance, some 60,000 in all perishing. The services of the 'Maid of Saragossa' seem to have been greatly exaggerated by Southey, Byron, and Sir David Wilkie. Saragossa has two cathedrals, the older a Gothic edifice (1316); the more modern (17th century) boasts of a pillar on which the Virgin descended from heaven. The citadel was anciently the palace of the kings of Aragon and later the headquarters of the Inquisition. There are also a university (1474) with 800 students, and a large archiepiscopal palace. The leaning Torre Nueva, dating from 1504, was in 1890 voted unsafe and doomed to demolition. The industries comprise cloth, silks, leather, soap, and chocolate. Pop. (1900) 99,500.—The *province* has an area of 6727 sq. m. and a pop. of 422,000.

Sarajevo (*Sarī-yay'vo*; Turkish *Bosna-Serai*), capital of Bosnia, stands on the hill-slopes that overlook the Bosna River (3 miles distant), 166 miles SW. by rail of Bosna-Brod, on the Danube, and 100 E. by rail (1891) of Metkovich, a port near the mouth of the Narenta in the Adriatic. The citadel and the minarets of 100 mosques, the crowded charsia or bazaar, and the steep and narrow streets climbing the hillsides amidst gardens, represent the ancient moslem town; the wide streets on the plain near the railway station, traversed by tramways and lit with the electric light, the Roman Catholic Cathedral, and the Bosnian museum reflect the swift progress that has taken place since the Austrian occupation in 1878. The Bogova-Jamia mosque dates from 1506; the Greek Cathedral is a large building; and the Moslem College (1890) is a fine building in Oriental style. The town has considerable trade, and manufactures tobacco, cigars, and cigarettes; the Hungarian government have revived, in a large factory, the ancient Bosnian art of inlaying gold and silver in copper and wood. Pop. 41,200, mostly all Bosniaks by race, and more than half Mohammedans, with 5000 Greek Catholics, and nearly as many Roman Catholics, and 3000 Jews.

Sarakhs, a town of NE. Persia, mainly a collection of Turkoman huts, with a strong fort, stands on the Heri-Rud. The Russians in 1885 occupied the opposite bank.

Saransk, a town of Russia, 65 miles N. of Penza. Pop. 13,921.

Saraswati. See ALLAHABAD.

Saratoff (*Sar-ăh'toff*), a city of Russia, on the Volga's right bank, exactly 500 miles by rail SE. of Moscow. It is a city of broad streets and fine squares, and stands on terraces rising from the river. There are a handsome new cathedral (1825), an old cathedral (1697), and the museum with its art gallery and a library. Manufactures of brandy, liqueurs, flour, oil, and tobacco are carried on. Fishing is prosecuted in the river, and market-gardening (especially fruit and the sun-flower) in the vicinity. Pop. (1830) 50,000; (1870) 85,220; (1897) 137,109.—The *government*, the east side of which is washed by the Volga, has an area of 32,624 sq. m. and a pop. (1891) of 2,433,445, including several flourishing German colonies (pop. 120,000) which settled here in 1763–65.

Saratoga Springs, one of the chief watering-places in the United States, is on a monotonous plateau in New York, 38 miles by rail N. of Albany. It contains about 30 mineral springs, whose saline waters (some chalybeate, some sulphureous, and all impregnated with carbonic acid), prescribed in diseases of the liver, chronic dyspepsia, rheumatism, &c., are bottled in large quantities for exportation. The hotels provide for 20,000 visitors, and life in Saratoga is notorious for luxury. There is a race-track, and regattas are held on Saratoga Lake, 4 miles distant. Twelve miles to the east a handsome obelisk (1877), 155 feet high, on a bluff 350 feet above the Hudson River and overlooking the scene, commemorates the surrender of Burgoyne to Gates, on October 17, 1777. Pop. 13,500.

Sarawak (*Sar-ăh'wak*), a state in the north-west of Borneo, since 1888 a British protectorate. The Chinese Sea washes its north-west side; on the north-east is the protected state of Brunei; and on every other side it is surrounded by Dutch Borneo. Area 41,000 sq. m.; pop. 600,000. The coast-belt is in many parts low, the interior hilly, rising to close upon 8000 feet near the frontiers. The longest river, the Rajang, has a sinuous course of 350 miles, and is navigable for 150 miles. Antimony, quicksilver, gold, and coal are mined, and copper, diamonds, and manganese exist. Sago, pepper, gambier, gutta-percha, india-rubber, birds' nests, rattans, tea, coffee, and timber, are exported. The people consist principally of Malays, Chinese, and Dyaks. The chief town, Kuching (pop. 25,000), stands 20 miles up the Sarawak River. Sir James Brooke (1803–68), who became Rajah of Sarawak in 1841, was succeeded by his nephew, Sir C. J. Brooke, who, after greatly extending his territory, put it in 1888 under the protection of Britain. See Spencer St John, *Life in the Forests of the Far East* (1862); his *Life of Sir James Brooke* (1879); and Charles Brooke, *Ten Years in Sarawak* (1866).

Sardes. See SARDIS.

Sardinia, an island of Italy, after Sicily the largest in the Mediterranean, lies 135 miles W. of the Tiber mouth, and immediately south of Corsica, being separated from it by the Strait of Bonifacio, 7½ miles wide. It is 170 miles long from N. to S., and 75 miles broad; area, 9206 sq. m. The surface is generally mountainous, the highest point (6233 feet) is Gennargentu. The south-west corner is separated from the rest by the low alluvial plain of Campidano, at both extremities of which are extensive salt lagoons. Malaria prevails in the low-lying tracts; the higher parts are healthy. Sardinia has a fertile soil, valuable mines, and forests, and fisheries; but owing to conservatism, apathy, lack of enterprise, and imperfect means of communication, its resources are undeveloped. Of the total area about one-third is arable land, one-third pasture, and nearly one-third forest. The principal produce is wheat, barley, beans, potatoes, wine, olive-oil, oranges, lemons, tobacco, flax and hemp, cheese, butter, and wool. The growing of fruits and the breeding of the domestic

animals are important industries. Besides being in ancient times the granary of Rome, Sardinia was renowned for its mineral wealth. At the present time some 12,000 persons are employed in extracting lead (with silver) and zinc, lignite, antimony, and manganese. Iron and copper also exist. Granite, marble, and clay for pottery are quarried. Salt is manufactured from sea-water. The centre and north of the island are chiefly covered with forests—oak, ilex, cork, and wild-olive—which yield timber, cork, bark for tanning, acorns, and charcoal. The seas (to Italian, not Sardinian, fishermen) yield large quantities of tunny, sardines, anchovy, and coral. There is some tanning and making of cigars, aerated waters, macaroni, flour, and spirits. Until the year 1828 Sardinia had no roads for wheeled vehicles, the Roman roads having gone to ruin centuries ago. Now there are good roads throughout the island; and they are supplemented by 350 miles of railway. The island has good ports—Cagliari (the capital) being the chief. The inhabitants are of mixed race, Spanish and Italian elements predominating. Pop. (1815) 352,867; (1881) 682,000; (1904) 811,036—87·15 to the sq. m. Education is in a very backward state. The two universities at Cagliari and Sassari are frequented by 260 students; ·83 per cent. of the population are unable to read and write. The vendetta and brigandage were extremely prevalent, but have now almost ceased. The language is a mixture of Latin, Spanish, and Italian, but the dialects differ considerably; classical Italian is the official language. The moufflon or wild sheep, deer, and wild boar, are hunted. There are two provinces of Cagliari and Sassari. Some 3000 *nuraghe* or round towers, and many 'giant's graves,' are prehistoric or very ancient curiosities. See works by Tennant (1885), Tyndale (3 vols. 1849), and Edwardes (1889).

Sardis, the capital of ancient Lydia in Asia Minor, stood, on the golden-sanded Pactolus, at the northern foot of Mount Tmolus (5906 feet) and 2½ miles S. of the Hermus. On its site is Sart, a small village, with ruin mounds.

Sargasso Sea. See ATLANTIC OCEAN.

Sari (*Sáh'ree*), the decayed capital of the province of Mazanderan, Persia, 18 miles S. of the Caspian Sea. Pop. 8000.

Sar-i-kol, or SARIQ-QOL, a great valley or depression in Eastern or Chinese Turkestan, on the eastern side of the Pamir plateau.

Sark (Fr. *Gers*), the smallest of the four Channel Islands (q.v.), 6 miles E. of Guernsey and 12 NNW. of Jersey. Almost entirely rockbound, and only 2 sq. m. in area, it consists of two portions, Great and Little Sark, connected by an isthmus. Fishing and agriculture are the occupations. Pop. 500.

Sark, a Dumfriesshire stream, winding 11½ miles SSW. (mainly along the Border) to the head of the Solway Firth.

Sarnen, capital of one of the divisions of the Swiss canton of Unterwalden, lies on its own lake, 15 miles S. of Lucerne by rail. Pop. 4200.

Sarnia, a town and port of Canada, just below the issue from Lake Huron of the St Clair River, 170 miles WSW. of Toronto by rail. Pop. 8847. See ST CLAIR.

Sarno, a city of Italy, 30 miles by rail E. of Naples, on the farther side of Vesuvius, has an old castle, a cathedral (1625), paper, cotton, linen, silk, and ribbon manufactories. Pop. 18,464.

Sarrakhs. See SARAKHS.

Sarreguemines. See SAARGEMUND.

Sarthe (*Sährt*), a dep. of France, north of the Loire, formed out of Anjou and Maine. Area, 2396 sq. m.; pop. (1866) 465,615; (1901) 422,700.

Sarum. See SALISBURY.

Sarzana (*Sartzáh'na*), a cathedral city of N. Italy, 8 miles by rail E. of Spezia. Pop. 8016.

Sasebo, a great naval port of Japan, on the west coast of Kiushiu, 30 miles N. of Nagasaki. Pop. 70,000.

Saskatch'ewan, a large river of Canada, whose North Branch rises among the glaciers near Mount Hooker, its South Branch in the north of Montana, flowing respectively 770 and 810 miles before they meet. The river then flows east 282 miles to Lake Winnipeg, from which its waters are carried to Hudson Bay by the Nelson River (q.v.), rendered unnavigable by rapids. With the Nelson, the total length is 1514 miles. The river gives name to a province of the Dominion, constituted in 1905 out of the former territory of Saskatchewan, together with half of Athabasca, and the greater part of Assiniboia; the extended Alberta absorbing the rest of these two territories, which have now disappeared. Area of the province of Saskatchewan, 275,000 sq. m.; pop. 250,000. Regina (pop. 3000) is the capital.

Sassari (*Sass'aree*), a city of NW. Sardinia, 12 miles by rail from its port, Porto Torres (pop. 4500), on the Gulf of Asinara, and 162 miles N. by W. of Cagliari. It has a cathedral (1531), castle (1331), university (1677), &c. Pop. 38,500.

Sasun, or SASSOON, a small town of Armenia, 50 miles W. of Bitlis. In 1893–94 the Kurds and Turks committed great atrocities here.

Sátárá (*Satáh'ra*), a town of Bombay, near the Kistna, 56 miles S. of Poona. Pop. 29,601.

Satoralja-Ujhely, a town of Hungary, 30 miles SE. of Kaschau, near a spur of the Carpathians. Pop. 17,000.

Sauchie (*Saw'hee*), or SAUCHIEBURN, a battlefield 3 miles SSW. of Stirling, where in 1488 James III. was defeated and slain.

Saugor. See SAGAR.

Sault Ste Marie, a town of Ontario, Canada (pop. 7500), and one in Michigan (pop. 12,000), separated by the St Mary's River and the St Mary's Falls ship-canal, which connect Lake Huron with Lake Superior. A vast system of locks simplifies the navigation; the falls or rapids (*Sault*, pron. *soo*) generate electrical energy, which is largely utilised for various industries. A great bridge links the (American) North Pacific and the Canadian Pacific railways.

Saumur (*Somür'*, nearly *So-meer'*), a town of France, dep. Maine-et-Loire, on the left bank and on an islet of the Loire, 38 miles by rail W. by S. of Tours. It has an old castle (now arsenal and powder magazine), a 16th-century town-house, a museum, and a cavalry school with some 400 pupils. Rosaries and articles in enamel are manufactured. Pop. 14,400. Saumur was a Huguenot stronghold with 25,000 inhabitants, and from 1598 till the revocation of the Edict of Nantes (1685) had a famous school of Protestant theology. Saumur was captured by the Vendeans in 1793. The largest dolmen in France is 1½ mile S.; and prehistoric caves line the river.

Saundersfoot, a Pembrokeshire seaport village on Carmarthen Bay, 3½ miles NE. of Tenby.

Sauternes, a village of the dep. of Gironde, 18 miles SE. of Bordeaux, noted for its white wines.

Savage Island, or NIUE, a coral islet E. of the Friendly Islands. Pop. 5000.

Savaii. See SAMOA.

Savanilla, a port of Colombia, on a bay of the Caribbean Sea, 17 miles WNW. of Barranquilla by the railway to Puerto Colombia.

Savan'nah, a river which forms the boundary between Georgia and South Carolina, rises near the North Carolina frontier, and flows 450 miles SSE. to the Atlantic. It is navigable from November to June for large vessels to Savannah, for steamboats of 150 tons to Augusta.

Savannah, a city and port of Georgia, capital of Chatham county, stretches along the south bank of the Savannah River, 18 miles from its mouth, and 115 by rail SW. of Charleston. It is built on a sandy plain, 40 feet above the river, with broad streets shaded by beautiful trees. The dozens of parks are a delightful feature of the place; and almost in the centre of the city is Forsyth Place (30 acres), thickly planted with forest pines. Here is a monument to the Confederate dead; and others in the city commemorate General Nathaniel Greene and Count Pulaski, who fell here. The chief edifices are the custom-house, city exchange, cotton exchange, court-house, Hodgson Hall, the Telfair Academy of Arts and Sciences, a Roman Catholic cathedral, the Independent Presbyterian Church, Christ Church, on the site of the chapel where John Wesley first ministered to the colonists, and the hospitals and asylums. Savannah has long been the first naval stores station and the second port of the United States in respect of the quantity of cotton exported. Other articles of export are spirits of turpentine, resin, lumber, rice, and cotton-seed. The imports include fertilisers, brimstone, fruit, cotton ties, and salt. The industrial works comprise rice-mills, foundries, planing-mills, flour, cotton, and paper mills, cotton-presses, packing-houses, ice and furniture factories, &c. The city was founded in 1733, and incorporated in 1789. It was taken by the British in 1778, and by General Sherman in December 1864, the harbour having been closed to commerce by the Federal fleet from 1861. Pop. (1880) 30,709; (1900) 54,244.

Save (Ger. *Sau;* Hung. *Száva*), a river in S. Austria, rises in Carniola, and flows 556 miles (366 navigable) SE. and E., separating Carniola from Styria, and Bosnia and Servia from Slavonia, till it falls into the Danube at Belgrade.

Savernake, a beautiful woodland region in Wiltshire, to the south of the town of Marlborough. Its 40,000 acres of farm and forest and hill were sold in 1891 to Lord Iveagh for £750,000 by the Marquis of Ailesbury, whose ancestor acquired it by marriage in 1676—a sale, however, cancelled two years later.

Savigliano (*Saveelyah'no*), a town of Italy, by rail 32 miles S. of Turin. Pop. 9932.

Savo'na, a seaport of Italy, on the Gulf of Genoa, 26 miles by rail S. by W. of Genoa and 91 SSE. of Turin. A handsome modern town embowered in orange-groves, it has a Renaissance cathedral (1589–1604), with the tomb of Pope Sixtus IV.; a castle (1542), now a prison, in which Mazzini was confined in 1830–31; the Della Rovere Palace, a picture-gallery, a marine institute, ironworks, potteries, glass-works, tanneries, and brick-yards. Pop. 24,481.

Savoy', formerly a province of the kingdom of Sardinia, was transferred to France in 1860, and divided into the two deps. of Savoie and Haute-Savoie. It is an alpine region, having the Graian Alps on the eastern frontier, as the boundary next Piedmont. On that side it runs up to 15,782 feet in Mont Blanc, and to 11,792 in Mont Cenis; thence it falls away gradually to the Rhone (950 feet), which separates it on the west from the French dep. of Ain. The area is 3889 sq. m. (2223 in Savoie and 1666 in Haute-Savoie); the total pop. (1881) 540,525; (1901) 518,584, of whom 254,781 were in Savoie and 263,803 in Haute-Savoie. The dep. of Savoie has the four arrondissements of Albertville, Chambéry (the capital), Moûtiers, St Jean-de-Maurienne; Haute-Savoie has the four arrondissements of Annecy (the capital), Bonneville, St-Julien, Thonon.

Savu', an island of the East Indies, lies W. of Timor, and is ruled by five Malay rajahs who pay tribute to the Dutch. Pop. 16,000.

Sawbridgeworth, a town of Herts, on the Stort, 4 miles S. of Bishop Stortford. Pop. of parish, 2085.

Sawley, a Derbyshire village, on the Trent, 8½ miles ESE. of Derby. Pop. of parish, 1751.

Saxe-Coburg, &c. See SAXON DUCHIES.

Saxmundham, a Suffolk market-town, 22½ miles NE. of Ipswich. Pop. of urban dist., 1452.

Saxon Duchies, a group of Central German states lying between Prussian Saxony, the kingdom of Saxony, Bavaria, and Hesse-Nassau.

State.	Area in sq. m.	Pop. in 1900.
Saxe-Altenburg	511	194,114
Saxe-Coburg-Gotha	755	229,550
Saxe-Meiningen	953	250,731
Saxe-Weimar-Eisenach	1387	362,873

Altenburg and Coburg-Gotha each consists of two principal portions, with smaller fragments; Weimar-Eisenach embraces three large divisions; and Meiningen has detached parcels. Except the easternmost part of Altenburg, they are all generally hilly, embracing the Thuringian highlands, and are watered by the Elbe's tributaries—the Saale, Unstrut, Ilm, and Elster—and by the Werra. The four duchies maintain the university of Jena. At the head of each is a duke (in Weimar a grand-duke), controlled or assisted by an assembly. To the house of Saxe-Coburg, an independent duchy since 1680, belonged both the mother of Queen Victoria and the Prince Consort; the dukedom passed in 1893 to the Duke of Edinburgh, and in 1900 to the son of the Duke of Albany.

Sax'ony, a kingdom of Germany, fifth in area, but third in population, amongst the states of the empire; it is surrounded by Bohemia, Silesia, Prussian Saxony, and the minor Saxon states. It measures 130 miles E. and W. by 90 miles, and has a total area of 5787 sq. m. (a little smaller than Yorkshire). The greater part of the surface is diversified by the spurs of the Erzgebirge (highest point 3343 feet), with to the west the outliers (2900 feet) of the Fichtelgebirge and to the east the northern extensions (2600 feet) of the Riesengebirge. The northern districts pass over into the great North German plain. In many parts the surface is studded with isolated peaks of basalt and sandstone (e.g. the Saxon Switzerland above Dresden). It lies almost wholly within the basin of the Elbe. The population grows fast: (1815) 1,178,802; (1840) 1,706,276; (1880) 2,972,805; (1900) 4,202,216. By race the majority of the people are Germanised Slavs, close upon 50,000 being Wends, living in Lusatia; more than 96 per cent. are Lutherans, though the royal

dynasty are Catholic. The capital is Dresden; the largest towns are Dresden, Leipzig, and Chemnitz, having respectively about 480,700, 456,200, and 214,100 inhabitants. Saxony is essentially a mining and manufacturing country. The manufactures are the textile industries (linen, damask, muslin, hosiery, ribbons, cloth and buckskin, flannel, woollen goods, and waxcloth), the making of machinery, pottery, porcelain and glass, chemicals, beer, spirits, lace, paper, straw-plait, tobacco, artificial flowers, pianofortes, hats, toys, watches, books, musical instruments, ornamental wooden articles, &c. Coal, argentiferous lead, zinc, iron, and cobalt are produced; and Freiberg is one of the chief mineral centres in Germany. Amongst the recruits of 1887 there was only 1 in 5000 who could not read and write. Amongst the educational institutions are the university of Leipzig, two famous schools at Meissen and Grimma, a polytechnic at Dresden, an industrial academy at Chemnitz, a mining academy at Freiberg, a forestry school at Tharandt. The annual national income and expenditure balance at about £5,750,000; the public debt, principally incurred for railways, amounted in 1892 to £41,500,000. The king exercises the supreme executive, and there are two legislative chambers. Saxony sends 23 members to the Reichstag of the empire, and 4 to the Reichsrath.

The old Saxons, a low-German people, once occupied all North Germany from the Rhine to the Elbe, from the Harz Mountains to the North Sea, and sent out warlike emigrants to found the English state. At home they had long wars with their kinsmen the Franks, and were not conquered and christianised (by Charlemagne) till 804. Duke Henry extended the Saxon dominion far east of the Elbe and over the present kingdom, subduing the Slavic tribes there. The Emperor Frederick I. (1180) confined the Saxon duchy to the country east of the Elbe; about 1360 the duke became an elector. In 1485 the reigning family split into two main branches, the electoral branch in the west, and the Albertine line beyond the Elbe. The Emperor Charles V. crushed the elector, conspicuous on the Protestant side, in 1547, and gave lands and title to the eastern branch. In the Thirty Years' War, the electors of Saxony (now the part containing the present kingdom) were driven to take the Protestant side, but becoming for a time kings of Poland, early in the 18th century returned (and have ever since remained attached) to Catholicism. Saxony sided with Austria in the Seven Years' War, and was severely handled by Frederick the Great. In 1806 the elector took the title of king and went over to the side of Napoleon, in consequence of which the Congress of Vienna took away from Saxony a large part of its dominions, and handed them over to Prussia (see SAXONY, PRUSSIAN). In the Franco-German war, the Saxons fought bravely by the side of the Prussians.

Saxony, PRUSSIAN, a province of Prussia, formed in 1815 out of districts taken from the kingdom of Saxony, part of the duchy of Magdeburg, the Altmark, the principalities of Halberstadt and Erfurt, &c. Anhalt (q.v.) almost divides it in two. Area, 9746 sq. m.; pop. (1900) 2,832,616. The capital is Magdeburg; other towns are Halle, Erfurt, Halberstadt, Aschersleben, Mühlhausen, and Nordhausen.

Say. See NIGER.

Scafell (*Skaw-fell'*), a double-peaked mountain, the loftiest summit in England, on the Westmorland border of Cumberland, 14½ miles SSW. of Keswick. Of its two peaks, the higher, Scafell Pike, attains 3210 feet, the other 3161.

Scala Nova (*Skâh'la Nova;* Turkish *Kuschadassi*), a port of Asia Minor, at the head of a gulf, 40 miles S. of Smyrna, opposite Samos, and near the ruins of Ephesus (q.v.). Pop. 9000.

Scalloway, a seaport village of Shetland, 6 miles WSW. of Lerwick. Pop. 860.

Scalpa, an island of Harris, Inverness-shire, in East Loch Tarbert. Area, 3 sq. m.; pop. 587.

Scalpay, an island off the E. coast of Skye, attains 994 feet. Area, 10 sq. m.; pop. 35.

Scanderoon', or ALEXANDRETTA (*Iskanderun*, 'Alexander's town'), the port of Aleppo (77 miles SE.) on the Gulf of Scanderoon, in the NE. angle of the Levant. It is a poor and unhealthy place of 1500 inhabitants, with a neglected harbour; yet it has a transit trade of over £2,000,000 a year. It was founded by Alexander the Great to commemorate his victory of Issus (333 B.C.). Off here Sir Kenelm Digby defeated a Franco-Venetian squadron (1628); and close by Mehemet Ali defeated the Turks in 1832.

Scandina'via, the peninsula comprising Sweden and Norway. Historically Scandinavia includes also Denmark and Iceland.

Scarba, an Argyllshire island, 1½ mile N. of Jura, attains 1500 feet. Area, 5¾ sq. m.; pop. 13.

Scar'borough, the 'Queen of Watering-places,' in the North Riding of Yorkshire, 54 miles N. of Hull, 21 SSE. of Whitby, 43 NE. of York, and 233 N. of London. Backed by Oliver's Mount (500 feet), it rises like an amphitheatre round a beautiful sandy bay, protected on the north by a castle-crowned headland (300 feet), beyond which is the quieter North Cliff. The South Cliff and the old town (below the Castle) are separated by a picturesque gully, which is spanned by the Cliff Bridge (1827; 414 feet long, 75 high), and, farther up, by the Ramsdale Valley Bridge (1865). Scarborough (A.S. *Skardeburge*, 'fortified rock') is an old place, for Harold Hardrada ravaged it in 1066, and in 1181 it received a renewal of an earlier charter; it returned two members to parliament from Edward I.'s time till 1885, when the representation was reduced to one. The castle, now a shattered Norman keep, dates from 1136, but was rebuilt as a royal fortress by Henry II. Near it is St Mary's, the church originally of a Cistercian priory (1320), Transition Norman and Early English in style, with later additions. St Martin's (1862) is a good Early English structure, with windows by Morris. Other buildings are the splendid aquarium (1877), the museum (1828), the market-hall (1853), the huge Grand Hotel (1867), and the Spa (1880), the third on the site, whose two saline and chalybeate springs were discovered about 1620, and which has charming grounds. The tidal harbour, with a lighthouse and a floating-dock, was formed between 1732 and 1850, and is enclosed by three piers, the longest and outermost curving 1380 feet; on the North Sands is a promenade pier 1000 feet long; and here, too, a promenade, nearly 4000 feet long and 24 wide, was constructed in 1887-90 at a cost of £50,000. The jet manufacture is a specialty. The season lasts from June till the middle of October, when visitors pour in by thousands. Sir F. Leighton was a native. Resident pop. (1851) 12,915; (1881) 30,504; (1901) 38,160. See works by Gent (1735), Hinderwell (2d ed. 1811), J. Brogden Baker (1882), and Haviland (1883).

Scarpan'to (anc. *Carpatho*), a long narrow mountainous island, attaining 4000 feet, and

belonging to Turkey, midway between Rhodes and Crete. Area, 85 sq. m.; pop. 5000 Greeks.

Scattery Island, an islet in the Shannon's estuary, 3 miles SW. of Kilrush, with a lighthouse, a fort, fragments of several small churches, and an ancient round tower 87 feet high.

Scawfell. See SCAFELL.

Schaffhausen (*Shaff-how'zen*), the most northern canton of Switzerland, is bounded on all sides but the south by Baden. Area, 114 sq. m.; pop. (1870) 37,721; (1900) 41,514, German-speaking and Protestant. The Rhine forms the southern boundary; and the surface is hilly.—SCHAFFHAUSEN, the capital, is beautifully situated on the Rhine's right bank, 31 miles by rail WNW. of Constance. Overlooking the town, remarkable for its antique architecture, stands the castle of Munoth (1564–90), and there are also the cathedral (12th century), a concert hall, a library, a museum, and a statue to the historian Johannes von Müller, a native. Pop. 16,648. The grand falls of Schaffhausen, about 3 miles below the town, are utilised for factories, which turn out iron, arms, oil, flour, beer, spirits, soap, candles, wool, cotton, and agricultural machines.

Schässburg. See SEGESVÁR.

Schaumburg-Lippe (*Shown'boorg-Lippeh*), a sovereign German principality, lying between Westphalia and Hanover. Area, 131 sq. m.; pop. (1900) 43,132, mostly Lutherans. Some coal is extracted. Capital, Bückeburg (pop. 5186).

Scheldt (*Skelt;* Fr. *Escaut*), a river that rises in the French dep. of Aisne, flows north past Cambrai and Valenciennes, and, entering Belgium, passes Tournai, Oudenarde, Ghent, Dendermonde, and Antwerp, receiving the Lys, Dender, and Rupel. Before it reaches the North Sea it is divided by the islands of Beveland (N. and S.) and Walcheren into two great arms, the Wester (on which is Flushing) and the Ooster Scheldt. The river is navigable to Cambrai, 211 miles from its mouth and 56 from its source.

Schellenberg (*Shellenberg*), a village 9 miles S. of Salzburg, where Marlborough defeated the Austrians in 1704.

Schemnitz (*Shem'neetz;* Magyar *Selmeczbánya*), the most famous mining-town of Hungary, in a mountain gorge, 65 miles N. by W. of Pesth. The mines have since Roman times produced gold and silver, copper and lead. Pop. 18,265.

Schenectady (*Shenek'tady*), a city of New York, on the Erie Canal and the south bank of the Mohawk River, 17 miles by rail NW. of Albany. It is the seat of Union University (1795), and contains locomotive works, stove-foundries, woollen and flour mills, &c. Schenectady was settled by the Dutch in 1661. Pop. 31,700.

Scheveningen (*Skay'ven-ing-en*), a Dutch seaside-resort on the North Sea, now practically part of the Hague, 2 miles NW. Pop. 21,000. Off Scheveningen the Dutch fleet was defeated, and its admiral Tromp killed, by the English under Monk on 8th–10th August 1653.

Schiedam (*Skee-damm'*), a Dutch town, 2½ miles W. of Rotterdam, and close to the Maas; here Hollands gin is made, in some 300 distilleries. There is a large shipping trade, cooperages, malt-kilns, &c. Pop. 27,500.

Schiehallion (*Shee-hal'yon;* Gael. 'maiden's pap'), an isolated Perthshire mountain (3547 feet), 11 miles WNW. of Aberfeldy. Here, in 1774, Maskelyne fixed the earth's mean density.

Schipka. See SHIPKA.

Schlangenbad (*Shlang'en-bat*), a German spa. The Rheingau stands in a wooded valley of the Taunus Mountains, 5 miles W. of Wiesbaden. The water of the baths (82°–90° F.) is used, for the most part externally, in baths, and is helpful in nervous diseases, for women's complaints, and for purifying the skin. Pop. 508. Visitors in the season, 2000. The place gets its name ('snakes' bath') from a harmless snake found there.

Schleswig. See SLESWICK.

Schlettstadt (*Shlett'stat*), a town of Lower Alsace, on the Ill's left bank, 27 miles by rail SSW. of Strasburg, manufacturing wire-gauze. In the 15th century, a free imperial city, it was the seat of a great humanist school. In 1634 the town became French; it was fortified by Vauban in 1676. The Germans, after capturing the town in 1870, razed the fortifications. Here Bucer the Reformer was born. Pop. 9500.

Schlüsselburg (*Schleess'elboorg*), a town (pop. 5542) and prison-fortress of Russia, the fortress being on a rocky islet in the Neva where it issues from Lake Ladoga. Here Ivan VI. was murdered, after twenty-three years' imprisonment.

Schmalkalden (*Shmahlkahl'den*), an old town of Hesse-Nassau, Prussia, 19 miles SW. of Gotha. The Protestant 'League of Schmalkald' was concluded here on 4th April 1531. Pop. 8729.

Schneeberg (*Shnay'berg*), a mining-town of west Saxony, 20 miles SW. of Chemnitz, producing silver (though not in its former great abundance), cobalt, tin, and iron. Pop. 8949.

Schneekoppe (*Shnay'kop-peh*), the highest point (5260 feet) of the Riesengebirge (q.v.).

Schneidemühl, a Prussian town half-way between Berlin and Danzig, in a flat and dreary region in the north of Posen, with 19,700 inhabitants and some manufactures of iron, machines, starch, bone-dust, felt, and carpentry. An artesian well sunk here in 1893–94 poured forth such floods of water and mud as to inundate part of the town, and cause serious subsidences.

Schönebeck (nearly *Shay'neh-bek*), a town of Prussia, 9 miles by rail S. of Magdeburg, on the Elbe's left bank. Here 65,000 tons for salt are made annually, also machinery, chemicals, starch, varnish, &c. Pop. 16,319.

Schönhausen (nearly *Shaynhow'zen*), a village of Prussian Saxony, 60 miles WNW. of Berlin by rail (pop. 1700), with the old seat of the Bismarck family, and the institute or hospital for secondary teachers and their widows and orphans, founded in 1885 by Prince Bismarck with the fund raised to celebrate his 70th birthday.

Schoodic. See MAINE.

Schouwen (*Skow'wen*), an island of the Dutch province of Zealand, with an area of 62 sq. m. and a pop. of 24,000. Chief town, Zierikzee.

Schreckhorn, one of the mountains of the Bernese Oberland, SE. of Grindelwald; the highest peak (13,386 feet) was first ascended by Mr Leslie Stephen in 1861.

Schuylkill (*Skoolkill*), a river of Pennsylvania, rising in the coal region, and flowing 130 miles SE. to the Deleware at Philadelphia.

Schwalbach (*Shval'bahh*), or LANGENSCHWALBACH, a German spa, 8 miles W. by N. of Wiesbaden, has eight springs impregnated with iron and carbonic acid gas, efficacious in female complaints, poor blood, and muscular weakness. Pop. 2678, increased to 7000 in the season.

Schwarzburg-Rudolstadt, a German principality, consists of the upper lordship (283 sq.

m.) in Thuringia, surrounded by the Saxon duchies of Weimar, Altenburg, and Meiningen; and the lower lordship (80 sq. m.), lying 40 miles to the N. in Prussian Saxony. Pop. 94,000. Both divisions are mountainous; in the lower lordship stands the Kyffhäuser (1545 feet), under which, according to legend, Frederick Barbarossa sleeps. Capital, Rudolstadt.

Schwarzburg-Sondershausen, a German principality, consists of the lower lordship (200 sq. m.) in Prussian Saxony and two separate portions constituting the upper lordship (132 sq. m.) in the Thuringia, surrounded by the Saxon duchies of Gotha, Weimar, and Meiningen. Pop. 81,000. Capital, Sondershausen.

Schwarzwald (*Shvartzvalt*). See BLACK FOREST.

Schwedt (*Shvayt*), a town in the Prussian province of Brandenburg, on the Oder, 28 miles SSW. of Stettin, the residence of the margraves of Brandenburg from 1689 to 1788. Pop. 9756.

Schweidnitz (*Shvide'neetz*), a town of Prussian Silesia, 36 miles by rail SW. of Breslau. Woollens and linens, implements, gloves, needles, pottery, beer, &c. are manufactured. Pop. 28,440.

Schweinfurt (*Shvine'foort*), long an imperial free city of NW. Bavaria, on the Main, 28 miles NE. of Würzburg by rail. Rückert the poet was born here (monument 1890). Pop. 15,500.

Schwerin (*Shvay-reen'*), capital of Mecklenburg-Schwerin, lies on the Lake of Schwerin (14 miles in length and 3 broad). It contains the grand-duke's castle (1845–58), a Renaissance structure; the cathedral (1365–1430); an arsenal; a museum and picture-gallery; and manufactures of lacquered wares, machinery, cloth, &c. Pop. 40,000.

Schwyz (*Shveets*), a Swiss canton, touches in the north the Lake of Zurich, and in the west the Lakes of Zug and Lucerne. Area, 350 sq. m.; pop. 56,000, German-speaking and Catholics. The surface is mountainous, rising on the border to 9052 feet. The monastery of Einsiedeln attracts pilgrims, and the Rigi vast numbers of tourists in the summer. Schwyz, the capital, is picturesquely situated 26 miles by rail E. of Lucerne. Here, on 1st August 1891, was held the sixth centenary of the League of Brunnen and the seventh of the founding of Bern. Pop. 7624.

Sciacca (*Shakka*; anc. *Thermæ Selinuntinæ*), a seaport of S. Sicily, on a bold cliff 30 miles NW. of Girgenti, has a fine 11th-century cathedral, two ruined castles, and hot sulphurous and saline springs. Off the coast coral banks were discovered in 1875–80. Pop. 20,709.

Scicli (*Shee'klee*), a town in the SE. of Sicily, 36 miles SW. of Syracuse. Near by are the remains of the ancient *Casmenæ*. Pop. 13,842.

Scilly Islands (*Silly*), a Cornish group, lie about 27 miles WSW. of Land's End. They occupy, as a group, about 30 sq. m. of sea-room, and consist of six large islands—St Mary's (1528 acres; pop. 1290), Tresco (697 acres; pop. 328), St Martin's (515 acres; pop. 175), St Agnes (313 acres; pop. 148), Bryher (269 acres; pop. 103), and Samson (78 acres, uninhabited)—and some thirty small ones, besides innumerable rocks and ledges. None reaches more than 160 feet above the sea. They are wrongly identified with the *Cassiterides* or 'Tin Islands' of the ancients. The idea of a land of Lyonesse between the islands and the mainland submerged within historic times is now abandoned. The present name 'Scilly' belongs strictly to a small, very inaccessible, rocky island in the north-west, and is probably derived from Cornish *silya*, 'a conger eel.' Athelstan conquered the islands in 938, and established monks upon Tresco. The islands were handed over to Tavistock Abbey by Henry I., and in 1568 leased by Queen Elizabeth to Sir Francis Godolphin. In 1834 they were leased to Mr Augustus John Smith, who made Tresco his home for thirty-eight years, built churches and schools, suppressed smuggling, encouraged agriculture, and forbade overcrowded holdings. He was succeeded in 1872 by his nephew.

The climate is mild, but necessarily damp, and the weather is changeable and frequently stormy; but the temperature is extremely equable, averaging 58° F. in summer and 45° F. in winter. The leading natural features of the scenery are the fantastically weathered rocks and rock-basins and the bold coast-lines. There are remains of cromlechs and stone circles. There has been a lighthouse on St Agnes since 1680, on Bishop Rock since 1858, and on Round Island since 1887; there are also lights on the Wolf, the Seven Stones (floating), and the Longships of Land's End. Hugh Town, on St Mary's, is the only town on the islands; there is good anchorage in the roadstead. Wrecks used to be a fruitful source of wealth. One of the most famous was that of three ships of Sir Cloudesley Shovel's fleet in 1707, when 2000 men, including the admiral, were drowned. Smuggling was formerly largely indulged in. Kelp-making, introduced in 1684, has been given up; so, too, has shipbuilding. Nowadays most of the young men emigrate. Farming is practised, and early potatoes and broccoli are exported; but the chief industry now is the cultivation of narcissus and other lilies—100 tons of flowers being shipped in a single spring. See works by Borlase (1756), White (1850), Tonkin (Penzance, 1887), and Besant (1890).

Scinde. See SIND.

Scindia's Dominions. See GWALIOR.

Scio (*Shee'o*). See CHIOS.

Scioto (*Sī-o'to*), a beautiful river of Ohio, flowing nearly 300 miles E. and S., to its junction at Portsmouth with the river Ohio.

Sclavonia. See SLAVONIA.

Scone (*Scoon*), in Perthshire, on the Tay's left bank, 2 miles N. of Perth, was the capital of Pictavia as early as 710, and the coronation place of the Scottish kings from 1153 till 1488, as afterwards in 1651 of Charles II. The 'Stone of Destiny' was carried off in 1296 by Edward I. An Augustinian abbey, founded by Alexander I. in 1115, was demolished by a rabble in 1559; and the subsequent Palace of the Viscounts Stormont, occupied by the Old Pretender for three weeks in 1716, and visited by Prince Charles Edward, gave place to a modern mansion, the seat of their descendant, the Earl of Mansfield. See Urquhart's *History of Scone* (1884).

Scotland, the northern part of Great Britain, is washed on the W. and N. by the Atlantic, on the E. by the North Sea, and on the S. is parted from England by the Solway Firth and the (largely artificial) line described in the article BORDERS. Its length, from Cape Wrath to the Mull of Galloway, is 274 miles; its breadth varies between 24 and 146 miles; and its total area is 19,777,490 acres or 30,902 sq. m., of which 631 sq. m. are water. The geology, physical geography, meteorology, &c. have been sketched at GREAT BRITAIN. Of 787 islands, belonging mostly to the Hebrides, Orkneys, or Shetland, sixty-two

exceed 3 sq. m. in area, and of these the largest are Long Island (Lewis and Harris, 859 sq. m.), Skye (643), the Mainland of Shetland (378), Mull (347), Islay (246), Pomona (207), Arran (168), Jura (143), and North Uist (136). Of twenty-six rivers flowing direct to the sea the chief are the Tweed (97 miles long), Forth (75), Tay (93), Dee (87), Don (82), Deveron (62), Spey (96), Clyde (106), and Nith (71); and of these the Forth, Tay, and Clyde expand into important estuaries. There is also the Moray Firth; and indeed the whole coast is so intersected by arms of the sea that few places are more than 40 miles inland. Fresh-water lakes are numerous—Lochs Lomond (27 sq. m.), Ness (19), Awe (16), Shin, Maree, Tay, Earn, Leven, Katrine, &c. The division into Highlands and Lowlands is explained at HIGHLANDS. In the Lowlands the highest points are Merrick (2764 feet) in Kirkcudbrightshire, and Broad Law (2723) in Peeblesshire; in the Highlands 184 summits exceed 3000 feet above sea-level—among them Ben Nevis (4406), Ben Macdhui (4296), Ben Lawers (4004), Ben Cruachan (3689), Ben Wyvis (3429), and Ben Lomond (3192). See CHEVIOTS, OCHILS, GRAMPIANS, &c. In the whole of Scotland the percentage of cultivated area is only 24·2—in Fife as high as 77·8, in Sutherland as low as 2·4. Woods cover less than 1400 sq. m.; and there are 2420 acres of orchards, nearly 5300 of market-gardens, and 1400 of nursery grounds. Between 1857 and 1903 horses increased from 185,406 to 200,530, cattle from 381,053 to 1,247,246, sheep from 5,683,168 to 7,227,395; pigs decreased from 140,354 to 136,771. In 1903 the quantities of the principal minerals raised were, in tons: coal, 34,992,240 (7,448,000 in 1854); ironstone, 846,094; oil-shale, 2,009,265; fireclay, 892,942; igneous rocks and sandstone from quarries, 2,848,275. In 1905 there were in all Scotland about 750 textile factories, with some 2,500,000 spindles, 75,000 power-looms, and 170,000 hands. In shipbuilding there has been of late a minimum output of about 200 vessels of 115,000 tons yearly, a maximum of 380 of 300,000 tons; whilst at the same time foreign and colonial imports ranged between £27,000,000 and £40,000,000, the exports between £18,000,000 and £30,000,000. In 1902, at the twenty-eight principal ports, there entered (including coastwise shipping) 63,395 sailing and steam vessels of 15,643,745 tons, and cleared 62,600 of 16,126,435 tons. The railways grew from 1243 miles in 1857 to 3664 in 1903. Pop. (1801) 1,608,420; (1821) 2,091,521; (1841) 2,620,184; (1861) 3,062,294; (1881) 3,735,573; (1901) 4,472,103, of whom 2,173,755 were males and 2,298,348 females, and 230,800 were Gaelic-speaking. 3,120,241 (69·77 per cent.) lived in the towns. In 1901 the twelve principal towns were Glasgow (pop. 761,709; with suburbs, 1,010,000), Edinburgh (316,837), Dundee (161,173), Aberdeen (153,503), Paisley (79,363), Leith (77,439), Greenock (68,142), Coatbridge (36,991), Kilmarnock (34,165), Kirkcaldy (34,079), Perth (32,873), Hamilton (32,775); the other towns with over 20,000 inhabitants are Motherwell, Falkirk, Ayr, Dunfermline, Arbroath, Airdrie, Inverness, Wishaw; and with over 10,000, Dumbarton, Stirling, Hawick, Port-Glasgow, Rutherglen, Galashiels, Dumfries, Montrose, Peterhead, Musselburgh, Alloa, Forfar, Pollokshaws, Johnstone, Kirkintilloch, and Broughty-Ferry. Most Scotsmen adhere to the Presbyterian churches, but there are also Episcopalians, Independents, Baptists, Methodists, and some 400,000 Roman Catholics (most of them of Irish descent). The officers of state for Scotland are the Secretary for Scotland, the Lord Keeper of the Privy Seal, the Lord Clerk Register, the Lord Advocate, and the Lord Justice-clerk. The duties of the first, appointed under an Act of 1885 (amended 1887), were transferred to him from the Home Secretary, and relate to education, sanitation, manufactures, prisons, &c. Under the Local Government (Scotland) Act, 1889, many changes were made in the county boundaries, detached portions of Nairn, Perth, Selkirk, &c. being annexed to the counties surrounding them; whilst Orkney and Shetland, united for parliamentary purposes, were dissevered. There thus are thirty-three counties, whose area and population are shown in this table:

Counties.	Area in statute acres.	Population. 1801.	1901.
Aberdeen	1,262,097	121,065	304,439
Argyll	2,134,274	81,277	73,642
Ayr	735,262	84,297	254,468
Banff	413,791	37,216	61,488
Berwick	297,161	30,206	30,824
Bute	143,997	11,791	18,787
Caithness	448,867	22,609	33,870
Clackmannan	31,876	10,858	32,029
Dumbarton	172,677	20,710	113,865
Dumfries	705,946	54,597	72,571
Edinburgh	234,926	122,597	488,796
Elgin	312,346	27,760	44,300
Fife	328,427	93,743	218,840
Forfar	569,851	99,053	284,082
Haddington	179,142	29,986	38,665
Inverness	2,767,078	72,672	90,104
Kincardine	248,195	26,349	40,923
Kinross	49,812	6,725	6,981
Kirkcudbright	610,343	29,211	39,383
Lanark	568,863	147,692	1,339,327
Linlithgow	81,113	17,844	65,708
Nairn	127,906	8,322	9,291
Orkney	240,640	24,445	28,699
Peebles	227,869	8,735	15,066
Perth	1,664,690	125,583	123,283
Renfrew	163,428	78,501	268,980
Ross and Cromarty	1,861,572	56,318	76,450
Roxburgh	428,464	33,721	48,804
Selkirk	166,524	5,388	23,356
Shetland	352,876	22,379	28,166
Stirling	298,579	50,825	142,291
Sutherland	1,359,846	23,117	21,440
Wigtown	327,906	22,918	32,685

When the Romans extended their conquests (84 A.D.) to the Forth and Clyde, the country beyond, known to them as *Caledonia*, was occupied by the Picts, a Celtic people (perhaps partly by Celticised Iberians) speaking Gaelic, who called their country *Alban* or *Albyn;* while the south of what is now Scotland was possessed, like south Britain, by Cymric Celts, speaking a kind of Welsh. In the 5th century the Scots came from their home in Ireland into Argyllshire, and after centuries of war with the Picts, put the crown of Scots and Picts on the head of their king, Kenneth, in 843. The Scots, partially Christianised when they came, had Columba as their great missionary, and by means of him and his followers converted the Picts, the Cymri, and the northern tribes of the English, who since the 5th century had established themselves in the eastern parts of Britain as far north as the Forth. In the 10th century the country of the Picts and Scots came to be known by the name of *Scotia* (till then the name of Ireland), *Nova Scotia*, or *Scotland;* and it soon came to include all of what is now called Scotland, and for a time even Cumberland and Westmorland; Cymric Strathclyde became permanently Scottish in the 10th century, and in the same century and the beginning of the next, Lothian, the Merse, and Teviotdale, all heretofore part of Northumbria, all as English as any part of England, and more Anglian perhaps than any part of the south, were bestowed on the Scottish kings.

The reign of Malcolm Canmore (1057–93) was a period of social, political, and religious revolution. Malcolm, long an exile in England, married Margaret, the sister of Edgar Atheling. Malcolm and his saintly queen (afterwards canonised) encouraged the introduction of English customs and civilisation, the English language, and English settlers; and began the process which led to the conforming of the stubborn Celtic Church to Roman usages. English (Anglo-Saxon) settlers established themselves in large numbers outside of the already purely English region in the south-east, which more and more became the headquarters of the kingdom; and the Anglo-Saxons were soon followed by many Normans, bringing with them a measure of French culture. David (1242–53) greatly promoted the well-being of church and state; and Scotland was a prosperous country till the death of Alexander III. (1286). Then the attempts of Edward I. of England to get Scotland incorporated by hook or crook with the rest of south Britain, led to the long, bloody, and destructive wars of independence, wars disastrous to all save national spirit and energy, and for 400 years Scotland, though free, was poor, barbarous, and torn by dissension. The Celtic element ventured, under the Lord of the Isles, to try conclusions with the Saxon lowlanders at Harlaw in 1411, but were signally worsted. Bannockburn (1314) encouraged the nation to resist to the uttermost the superior might of England; and not till after the Reformation (when Scotland adopted heartily the Presbyterian polity) were the crowns of England and Scotland united in the person of James VI. of Scotland, heir also to the English crown (1603). The Scots, enraged by the attempts of Charles I. to impose the Anglican ritual, fought stoutly with the English Parliament against the king, but enthusiastically supported the Restoration. Under Charles II. and James II. the National Church was depressed, and the Covenanters persecuted; and the Revolution was welcomed (1688) by the great bulk of the nation. The crowns had been conjoined by the personal tie of the sovereign in 1603; the kingdoms were united by legislative union in 1707 (the Scottish Church and Scots law being maintained intact), in spite of a good deal of Scottish discontent; and it was mainly the Highlanders who, in 1715 and 1745, rose in defence of the claims of the family of the exiled James II., under the old and the young Pretenders. From this time the history of Scotland may be regarded as merging in that of Britain, though Scotland and England, Scotsmen and Englishmen, are still in many respects very distinguishable. Scotsmen have taken a prominent part in the political and intellectual life of the United Kingdom, and done more than their share in building up the colonial empire of Great Britain.

See P. Hume Brown's *Early Travellers in Scotland*, 1295–1689 (1891); F. Grose's *Antiquities of Scotland* (2 vols. 1789–91); Sir John Sinclair's *Statistical Account of Scotland* (21 vols. 1791–99); Dorothy Wordsworth's *Tour in Scotland* (ed. by Shairp, 1874); G. Chalmers' *Caledonia* (3 vols. 1807–24; new ed. Paisley, 7 vols. 1888 *et seq.*); R. Chambers's *Picture of Scotland* (2 vols. 1827); the *New Statistical Account* (15 vols. 1845); Sir Thomas Dick Lauder's *Scottish Rivers* (ed. by Dr John Brown, 1874); Billings' *Baronial and Ecclesiastical Antiquities of Scotland* (4 vols. 1848–52); Cosmo Innes' *Origines Parochiales Scotiæ* (3 vols. 1850–55); Hugh Miller's *Cruise of the Betsey* (1858); Sir A. Geikie's *Scenery of Scotland viewed in connection with its Physical Geology* (1865; 2d ed. 1887); Dean Ramsay's *Reminiscences of Scottish Life and Character* (22d ed. 1874); Dr Joseph Anderson's *Scotland in Early Christian and Pagan Times* (4 vols. 1881–86); F. H. Groome's *Ordnance Gazetteer of Scotland* (2d ed. 3 vols. 1893–95); C. Rogers' *Social Life in Scotland* (3 vols. 1884–86); MacGibbon and Ross's *Castellated and Domestic Architecture of Scotland* (4 vols. 1886–92).

Scotsbrig, a Dumfriesshire farm, 3 miles NE. of Ecclefechan, the home (1826) of the Carlyles.

Scrabster. See THURSO.

Scranton, a city of Pennsylvania, the capital of Lackawanna county, on the Lackawanna River, 144 miles by rail NW. of New York. It has a great trade in coal and mining supplies; and it has car and carriage factories, and large iron and steel manufactories, turning out locomotives, boilers, machinery, stoves, and edge-tools. Founded in 1840, it became a city in 1856. Pop. (1860) 9223; (1890) 75,215; (1900) 102,026.

Scrivelsby. See HORNCASTLE, and a work by the Rev. S. Lodge (1893).

Scutari (Italian or Levantine form of the Turkish *Zskiüdar*), a town of Asiatic Turkey, on the eastern shore of the Bosporus, opposite Constantinople, with mosques, bazaars, and baths, and a college of howling dervishes. It manufactures silks and cotton fabrics and leather goods, and has long been famed for its extensive cemeteries, adorned with magnificent cypresses. The pop. is variously estimated at from 40,000 to 60,000. During the Crimean war the barracks on the southern outskirts were occupied as barracks and hospital by the English troops, and formed the scene of Miss Nightingale's labours. Scutari occupies the site of the ancient *Chrysopolis*; and 2 miles S. lies the village of Kadiköi, the ancient *Chalcedon*.—(2) A town of European Turkey, at the S. end of the Lake of Scutari, in northern Albania, 16 miles from the Adriatic. It is overlooked by an old Venetian citadel, manufactures arms and cotton goods, and trades in wool and skins. Pop. 25,000.

Seacombe, a NW. suburb of Birkenhead.

Seaford, a watering-place of Sussex, 3 miles E. of Newhaven, with golf-links. It was a dependency of the Cinque Port of Hastings in the 15th century, and was disfranchised in 1832. Of late it has grown in size and prosperity. Pop. 3500.

Seaforth, LOCH, an arm of the sea, 14 miles long, in the east of the island of Lewis-with-Harris.

Seaham Harbour (*See'am*), a seaport of Durham, 6 miles S. of Sunderland. Founded in 1828 by the Marquis of Londonderry, it communicates by rail with neighbouring collieries, and has docks and quays for the shipment of coal. There are also bottle-works, blast-furnaces, an iron-foundry, chemical works, and a seamen's infirmary (1849). Pop. (1851) 3538; (1901) 10,163.

Sea Islands, a group of low sandy or marshy islands on the coast of South Carolina (q.v.), famed for their rice and fine cotton.

Sealkote. See SIALKOT.

Seathwaite. See BORROWDALE.

Seaton, a Devon watering-place, on a bay at the mouth of the Axe, 6½ miles SW. of Axminster. Pop. 1330.

Seaton Carew, a Durham watering-place, 2 miles S. of West Hartlepool. Pop. 1400.

Seattle (*Se-at'tel*), capital of King county, Washington, on Elliott Bay, an arm of Puget

Sound, 18 miles by rail N. of Tacoma. It owes its phenomenal growth to the lumber trade. Over 1000 vessels of about 1,000,000 tons enter and clear the port annually, carrying away coal and timber. Shipbuilding and a busy fishery are also carried on. There are cable and electric tramways, and the town possesses a university. In 1889 a terrible fire destroyed the whole business portion, and did damage estimated at nearly $10,000,000; but within a year 265 new buildings, mostly of iron and stone, besides sixty wharves, with a frontage of 2 miles, were erected. Pop. (1880) 3533; (1890) 42,837; (1900) 80,671.

Sebastopol (Russian pron. *Se-vas-top'ol*), a Russian seaport and fortress, is situated on the site of an old Tartar village near the south-west extremity of the Crimea, on the southern side of one of the finest natural harbours in the world, 4½ miles long from east to west, and ½ mile across. The place is celebrated for its eleven months' siege by the allies during the Crimean war of 1854–55. It sustained repeated bombardments until the capture of the Malakoff and Redan works forced the Russians to evacuate the lines and retire to the north side. The town was completely ruined; the docks and forts still standing were blown up by French and English engineers, and by the treaty of Paris (1856) were not to be restored; but the restrictions were removed by the Conference of London (1871). Since 1885 the Russian government have restored fortifications and reconstructed the docks, mainly for the imperial navy. The sole export is grain, the chief imports cotton and coal. Pop. 50,720.

Sebenico (*Seb-en-ee'ko*; Slav. *Sibenik*), a picturesque town of Austrian Dalmatia, stands on a landlocked bay of the Adriatic, 43 miles by rail NW. of Spalato. The chief ornament of the place is its cathedral (1430–1555). Pop. 11,000.

Secunderabad. See HYDERABAD.

Sedalia, capital of Pettis county, Missouri, 188 miles by rail W. of St Louis. It has large railway-shops, flour-mills, and manufactories of woollens, machinery and agricultural implements, wagons, furniture, and soap. Pop. 15,250.

Sedan (Fr. pron. *Se-don*^{g}), a frontier town of France, dep. Ardennes, stands on the Meuse, 64 miles by rail NE. of Rheims. Colbert founded here cloth-factories which are still busy; metal-working is carried on, and there is an active trade in wool. Pop. (1872) 13,807; (1901) 16,120. The citadel capitulated to the Germans in 1815; but Sedan is chiefly noted for the surrender (September 2, 1870) of Napoleon III. and 86,000 men to the Germans. The fortress was dismantled after 1875. Marshals Turenne and Macdonald were born here. Previous to its incorporation with France (1642) Sedan was the capital of an independent principality and a Protestant stronghold. Its industrial prosperity was largely due to the influx of Huguenots; and at its theological seminary, famous until the revocation of the Edict of Nantes, notable Scotsmen such as Andrew Melville taught.

Sedbergh, a town in the West Riding of Yorkshire, on the Rawthey, 32 miles NW. of Skipton. It has a Norman church and a grammar-school (1551) of high repute, where Sedgwick was educated and Hartley Coleridge was a master. Pop. of parish, 2474. See the Rev. W. Thompson, *Sedbergh, Garsdale, and Dent* (Leeds, 1892).

Sedgefield, a town of Durham, 9 miles NW. of Stockton, with a cruciform Early English church and a grammar-school. Pop. of parish, 3170.

Sedgemoor, a marshy district of Somerset, 5 miles SE. of Bridgwater. Here, on 6th July 1685, James II.'s 4000 disciplined soldiers routed the 8000 followers of the Duke of Monmouth.

Sedgley, a town of Staffordshire, 3 miles S. of Wolverhampton. Pop. 16,500.

Seein, a village of Tyrone, 3 miles S. of Strabane. Pop. 1175.

Seeland (Dan. *Sjælland*). See ZEALAND.

Sefton, a Lancashire parish, 6 miles N. of Liverpool, with the Liverpool race-course.

Segesta, an ancient city of NW. Sicily.

Segesvár (*g* hard; Ger. *Schässburg*), a town of Transylvania, on the Great Kokel, 60 miles by rail NE. of Hermannstadt. Pop. 11,000.

Seghill, a Northumberland town, 6½ miles NNE. of Newcastle. Pop. 2269.

Segovia, an old city of Spain, at the northern foot of the Sierra de Guadarrama, 32 miles NNW. of Madrid. It occupies a rocky eminence 3300 feet above sea-level, is surrounded by ruinous walls with round towers, and consists of narrow uneven streets, with quaint old stately houses. The Moorish castle on the rocky height has been restored since its destruction by fire in 1862; it lodged our Charles I. in September 1623. The cathedral (1521–77) is one of the finest specimens of Late Gothic in Spain. The grand Roman aqueduct, built in Trajan's time, consists of two rows of arches, the one resting upon the other, some 2600 feet long and 102 feet high. Pop. 14,328. Segovia was a place of importance under the Romans, and was a frequent residence of the kings of Castile and Leon. The unresisting town was sacked in 1808 by the French.—Area of *province* of Segovia, 2714 sq. m.; pop. 154,443.

Segu, or SEGU-SIKORO, an important trading town of western Africa, stands on the Niger (here called the Joliba), 400 miles SW. of Timbuctoo; once the capital of a large native state, now practically French (1890). Pop. 36,000. See Gravier, *Voyage à Segu* (1887).

Seil, an Argyllshire island, 4 miles SE. of Mull, attains over 800 feet. Area, 6 sq. m.; pop. 448.

Seine (*Sayn* or *Sehn*), one of the four chief rivers of France, rises on the slope of the plateau of Langres, north-west of Dijon, and winds 482 miles NW., past Troyes, Fontainebleau, Melun, Paris, St Denis, St Germain, Mantes, Elbeuf, and Rouen, till it falls into the English Channel by a wide estuary, on which stand the ports of Harfleur, Havre, and Honfleur. It is navigable for boats from Marcilly, 350 miles from its mouth, and since 1890 the canalisation of the Seine has been one of two projects (the other a ship-canal) for connecting Paris with the Atlantic. The Seine receives the Aube, Marne, and Oise from the right, and the Yonne, Loing, Essonne, and Eure from the left; and is connected by canals with the Somme, Scheldt, Meuse, Rhine, Saône, and Loire. Works for keeping open a navigable channel through the estuary, which is liable to silt up, were carried out in 1848–70; by these 28,000 acres of land have been reclaimed, and vessels of 2000 tons, drawing 20 feet of water, can get up to Rouen. A canal connects Havre with the Seine at Tancarville.

Seine, the metropolitan dep. of France, completely enclosed by the dep. of Seine-et-Oise, is a portion of the former province of Île-de-France. One-sixth of its area is covered by the city of Paris (q.v.), and the rest is thickly studded with the suburban villages of the capital—Boulogne,

Puteaux, Clichy, Montreuil, &c. It is at once the smallest and the most populous dep. in the republic: its area is 185 sq. m.; its pop. in 1876 was 2,410,849, and in 1901, 3,669,930. The arrondissements are Paris, St Denis, and Sceaux.

Seine-et-Marne (*Sehn-ay-Marn*), a dep. in the north of France, is bounded on the W. by the dep. of Seine-et-Oise, and forms a portion of that wide basin in the middle of which stands Paris. Area, 2214 sq. m.; pop. (1901) 355,638. The arrondissements are Melun (the capital), Coulommiers, Fontainebleau, Meaux, and Provins.

Seine-et-Oise (*Sehn-ay-Wâhz*), a dep. in the north of France, encloses the dep. of Seine. Area, 2163 sq. m.; pop. (1901) 700,405. Arrondissements; Versailles (the capital), Corbeil, Étampes, Mantes, Pontoise, and Rambouillet.

Seine-Inférieure (*Sehn-Anᵍfayriehr'*), a maritime dep. of northern France, part of Normandy, and bounded N. and W. by the English Channel. Area, 2330 sq. m.; pop. (1901) 843,928. The arrondissements are Dieppe, Havre, Rouen (the capital), Neufchâtel, and Yvetot.

Seir, Mount. See Edom.

Seistan, Sistan, or Hamoon, Lake, a large shallow lake or swamp in the west of Afghanistan, close to the Persian frontier, a division of whose province of Khorassan (mainly steppe) is named Seistan after it. The lake is not a single expanse of water, but is divided into three depressions. Much of the area is generally dry.

Selan'gor, a state of the Malay Peninsula, which since 1874 has been under British protection. It lies between Malacca and Perak, has an area of 5000 sq. m. and a population of 170,000, including many Chinese. It contains rich deposits of tin. The capital is Kwala Lampur, which is connected by rail (22 miles) with the port of Klang.

Selborne, a pleasant Hampshire parish of 12 sq. m. and 1320 inhabitants, 5 miles SSE. of Alton station and 20 E. of Winchester. Gilbert White (1720–93) has made it for ever famous by his *Natural History of Selborne* (1789). 'The Wakes,' the ivied house where he was born and died, still stands, though added to; the church, where he lies, was restored in 1877. Nothing remains of an Augustinian priory (1232).

Selby, a market-town in the West Riding of Yorkshire, on the right bank of the Ouse, 15 miles S. of York and 20 E. of Leeds. The great cruciform parish church, measuring 283 by 59 feet, was the church of a mitred Benedictine abbey, founded in the 12th century. It exhibits every style from Norman to Perpendicular; lost its south transept by the fall in 1690 of the central tower (meanly rebuilt twelve years later); and has undergone much restoration since 1873. Other edifices are a Roman Catholic church (1859), St James's Church (1868), and a modern market-cross. The river is navigable for vessels of 200 tons; and there is a carrying trade by railway and canal. Selby has manufactures of flax, ropes, leather, beer, &c., besides boat-building and brick-making. It is the traditional birthplace of Henry I. (1068), and in the Great Rebellion was recaptured from the royalists by Fairfax (1644). Pop. (1851) 5109; (1901) 7786. See W. W. Morrell's *History of Selby* (1867).

Selenga, a river (740 miles) of Mongolia and Siberia, flowing by three arms into Lake Baikal. It is navigable in summer for 200 miles from the Chinese frontier, and steamers ply on it.

Seleu'cia, the name of several ancient cities in Syria, Pisidia, Pamphylia, Cilicia, Caria, and Mesopotamia, founded under the Seleucid kings.

Seli'nus, an ancient Greek colony of Sicily, now represented by ruins close to the modern Castelvetrano (q.v.).

Selkirk, a Scottish royal burgh, the county town of Selkirkshire, on an eminence 400 to 619 feet above sea-level, that flanks the right bank of Ettrick Water, 6½ miles S. by W. of Galashiels by a branch-line (1856) and 40 SSE. of Edinburgh. The county buildings (1870), the town-hall (1803), with a spire 110 feet high, and the statues of Scott (1839) and Mungo Park (1859) are the chief features of the place, with the beautiful grounds of the Haining House. The 'souters of Selkirk' were long famous for their 'single-soled shoon;' but to-day the staple manufacture is that of tweeds, which dates from 1835. With Hawick and Galashiels, Selkirk returns one member since 1868. Pop. (1831) 1880; (1861) 3695; (1901) 6292. About 1113 Earl David founded at *Schelechyrch* ('kirk of the shiels') a Tironensian abbey, which as David I. he removed about 1126 to Kelso (q.v.). Mr Andrew Lang is a native.

Selkirk Mountains, an outlying range of the Rocky Mountains, in British Columbia, extending southwards from about 52° N. lat. to near the United States frontier. The Canadian Pacific Railway climbs over the mountains at a point 4300 feet above the sea. See W. S. Green, *Among the Selkirk Glaciers* (1890).

Selkirkshire, an inland county in the south of Scotland, bounded by Peebles, Edinburgh, Roxburgh, and Dumfries shires. Measuring 28 miles by 17, it has an area of 260 sq. m. or 166,524 acres, of which barely one-seventh is under crops. Silurian in formation, and drained by Ettrick and Yarrow Waters to the Tweed, it is a pastoral region of grassy rounded hills—Minchmoor (1856 feet), Dun Rig (2433, the highest), Ettrick Pen (2269), and eight others exceeding 2000 feet above sea-level. Sheep-farming (over 160,000 head) is an important industry; and the manufactures are confined to the two towns of Selkirk and Galashiels. The Duke of Buccleuch owns about three-fifths of the whole county. Since 1867 Selkirkshire has united with Peeblesshire to return one member. Pop. (1801) 5388; (1851) 9809; (1871) 14,005; (1901) 23,356. Smaller than Middlesex, and than all but six of the thirty-three Scotch counties, Selkirkshire yet contains within its narrow bounds almost all the old Forest of Ettrick; St Mary's Loch; the whole course of the Yarrow; the vale of Ettrick, where the 'Shepherd' was born and lies buried; the birthplaces, too, of Laidlaw and Mungo Park, of the 'Flower of Yarrow' and Alison Cockburn; Ashiesteel, where Scott wrote *Marmion;* the scenes of the ballads of 'The Douglas Tragedy,' 'The Dowie Dens,' 'The Outlaw Murray,' and 'Young Tamlane;' the battlefield of Philiphaugh; and the ruins or sites of the castles and peel-towers of Newark, Dryhope, Tushielaw, Oakwood, and Buccleuch. See works by Craig-Brown (2 vols. 1886) and Angus (1894).

Selma, capital of Dallas county, Alabama, on the Alabama River, 165 miles by rail NNE. of Mobile. It has ironworks, cotton-factories, steam planing-mills, car-works, &c. Pop. 8720.

Selsey, or Selsea, a village on a flat and fertile peninsula on the Sussex coast, 7 miles S. of Chichester. Here in the 7th century the cathedral church of the South Saxons was founded by Wilfrid of York; and twenty-two bishops held the see, ere in 1079 the bishopric

was transferred to Chichester. The sea has greatly encroached on the peninsula, which ends in Selsey Bill; the site of the cathedral is now submerged. Pop. of parish, 1260.

Selters, a village, 8 miles SE. by rail of Limburg in Nassau. Its springs supply the mineral waters called in England seltzer water.

Semendria, a fortress of Servia, on the Danube's right bank, 26 miles SE. of Belgrade. Pop. 6578.

Semipalatinsk', a province of Asiatic Russia, stretching northwards from Lake Balkash. It embraces outliers of the great Altai, rising to 10,000 feet, and enclosing wide stretches of steppe-land. Area, 183,145 sq. m.; pop. 685,197, mostly Kirghiz. The chief town, Semipalatinsk, is on the right bank of the Irtish; pop. 27,820.

Semiretchinsk', a province of Asiatic Russia, having East Turkestan on the SE., and Lake Balkash on the N., is a mountainous region, being crossed from east to west by the Ala-tau and Thian-Shan Mountains, whose peaks run up to 16,000 feet. Between them lies the mountain-lake of Issyk-kul. Area, 147,298 sq. m.; pop. 990,200. Vyernyi (pop. 22,980) is the chief town.

Semliki (*Sem-lee'kee*), a river of equatorial Africa, flowing NE. to Albert Nyanza.

Semlin (Hung. *Zimony*), a frontier town of Hungary, stands on a tongue of land at the junction of the Save and the Danube, above Belgrade. It contains the ruined castle of John Hunyady, who died here. Pop. 14,836.

Sem'mering, a mountain (4577 feet) on the borders of Styria and Austria, 60 miles SW. of Vienna, over which the Trieste Railway was constructed in 1850–53 at a cost of £2,000,000.

Sempach (*Zem'pahh*), a small Swiss town (pop. 1183), 9 miles by rail NW. of Lucerne, on the east shore of the lake of Sempach. Under its walls Leopold of Austria, with 4000 men, was routed on 9th July 1386 by 1500 Swiss.

Sempringham, a Lincolnshire parish, 13 miles E. by S. of Grantham. St Gilbert (1083–1189) was probably a native.

Semple. See LOCHWINNOCH.

Senaar. See SENNAAR.

Sendai, a coast-town of Japan, 220 miles NNE. of Tokyo by rail. Pop. 83,500.

Sen'eca Falls, a post-village of New York, on the Seneca River (which falls 50 feet here), 10 miles from the lake and 41 by rail WSW. of Syracuse, with manufactories of steam fire-engines, pumps, &c. Pop. 6880.

Sen'eca Lake, one of a range of narrow lakes in the west of New York State, 36 miles N. and S., two miles in average width, and 530 feet deep.

Seneffe', or SENEF, a Belgian town (pop. 3438), 27 miles S. by W. of Brussels. Here William of Orange (III. of England) was defeated by Condé in 1674, and in 1794 the Austrians by the French.

Senegal (*Sen-e-gawl'*), a river of West Africa, has two main sources, the Bafing from Futa-Jallon, and the Bakhoy from the SE., which meet at Bafulabé, 700 miles from the coast; thence the united Senegal flows to the Atlantic 10 miles below St Louis. In July–October, boats can get up to Kayes, 40 miles below Bafulabé. The channel is in the higher reaches obstructed by falls and narrows, its lower course is studded with low, flat islands, and its mouth blocked by a formidable bar. There is a railway along the left bank between Kayes and Dioubéba (25 miles beyond Bafulabé), to be continued to Bammako on the Niger (320 miles from Kayes). For the colony of SENEGAL, see next article.

Senegambia, a territory subject to France, on the west coast of Africa and embracing the colony of Senegal proper, a territory on both banks of the river Senegal (pop. 135,500), and various protected states, between the Atlantic Ocean and the Senegal and Gambia rivers; the word 'Senegambia' (not used by the French) is compounded of the names of these two rivers. Until 1890 Senegambia included the region known as the 'Rivières du Sud' (q.v.) and districts on the Gold Coast and Bight of Benin. To the north the French claim the Atlantic coast southwards from Cape Blanco to the mouth of the Senegal; whilst inland they have extended their authority over Futa-Jallon, Beledugu, and Macina as far as the Joliba (Niger). These protected states of the interior are called the French Soudan, and administered by an officer under the governor of Senegal. Moreover, in virtue of recent treaties—e.g. with Great Britain in 1890—the vast expanse of the Sahara south of Algiers and Tunis, right up to the Niger, and to a line drawn eastwards from Say on that river to Barrawa on Lake Chad, is recognised as being within the French 'sphere of influence;' and in 1894 the French, not without mishaps, established themselves at Timbuctoo. South of the Niger too they have, since 1889, established a protectorate over the Kong states, an immense area stretching almost down to the Gulf of Guinea. Thus the territory claimed by France in this part of Africa extends from Tunis to Sokoto and the Gulf of Guinea, and from the Atlantic and the frontier of Morocco to Lake Chad. The only interruptions to the continuity of this vast area are the British colonies of Gambia and Sierra Leone, Liberia, and the numerous small colonies belonging to different European powers on the Guinea coast.

Of this gigantic territory France actually occupies little more than the colonies of Senegal, 'Rivers of the South,' and the two groups on the Gold Coast. These, with protected states, are estimated to have a total area of 165,000 sq. m. and a total pop. of over 2,000,000. The people are mostly Fulah and Mandingo Negroes, in part Moslems, in part fetich-worshippers. The 'French Soudan' has an area of probably 54,000 sq. m. and an estimated pop. of nearly 300,000. The French Sahara may have an area of a million miles, mostly desert. The principal geographical feature in these united regions is the plateau (2000 to 4000 feet) of Futa-Jallon (q.v.); from its valleys issue many rivers that flow (e.g. the Gambia) west and south-west to the Atlantic, north to the Senegal, and east and north-east to the Joliba (Niger). Ground-nuts, gums, india-rubber, timber, &c. constitute the bulk of the exports—three-fourths to France. The imports (textiles, liquors, and food-stuffs) are valued at £1,120,000—nearly half from France. St Louis (q.v.) is the principal town in these colonies. The French first settled in this part of Africa early in the 17th century, became active after 1854, and greatly extended their influence since 1880.

Senlac. See HASTINGS.

Senlis (*Son^{g}leece'*), a very ancient town of France, dep. of Oise, 33 miles NNE. of Paris. It has walls flanked with towers, partly Roman; the ruins of a royal castle; and a small but beautiful cathedral (begun 1155). Senlis ceased to be a bishop's seat in 1801. Pop. 6000.

Sennaar, SENNAR, or SENAAR, a city of the

Eastern Soudan, on the Blue Nile, 160 miles SSE. of Khartoum. Pop. 8000. It is the chief town of a district lying between the Blue and the White Nile, which was made an Egyptian province in 1820, but fell to the Mahdi in 1884.

Sennen, a Cornish village, Land's End.

Sens (*Son*), an old walled town of France, dep. Yonne, stands on the right bank of the Yonne, 70 miles by rail SE. of Paris. Its principal ornament is the Gothic cathedral of St Stephen (1122–68), with splendid portals, fine stained glass, and the vestments of Thomas à Becket. Pop. 13,642.

Sentis. See Säntis.

Seoni (*Se-o'nee*), a town in the Central Provinces of India, half-way between Nagpur and Jabalpur. Pop. 12,000.—There is another Seoni (pop. 7100) 35 miles SW. of Hoshangabad.

Seoul, or Söul (*Sowl*), the capital of Corea, stands on the river Han, 75 miles from its entrance into the Yellow Sea and 57 miles from its port Chemulpo. It was the objective of the armies of Japan and China in the war of 1894. Pop. 190,000, or, with extensive suburbs, 300,000. See Curzon's *Problems of the Far East* (1894).

Seraïevo. See Sarajevo.

Seraing (*Seran'*), a town of Belgium, 4 miles by rail SW. of Liége, stands on the right bank of the Meuse, and is connected by a suspension bridge with the village of Jemeppe. It is the seat of a colossal manufactory of steam-machinery, locomotives, &c., established by an Englishman, John Cockerill (1790–1840), in 1817 in the old summer palace of the bishops of Liége. It employs some 12,000 work-people in hundreds of machine-shops, forges, coal-mines, &c. Pop. (1827) 2000; (1881) 28,385; (1900) 39,623.

Serajgunj. See Sirajganj.

Serampur', a town of India, built in European style, along the right bank of the Hooghly, 13 miles by rail N. of Calcutta. A Danish settlement till 1845, it was the centre of the Baptist mission. Pop. 44,460.

Serang. See Ceram.

Seres, in Turkey, 43 miles NE. of Saloniki, trades in wool, skins, and tobacco. Pop. 30,000.

Sereth, a river running nearly 300 miles S. through Moldavia to the Danube.

Sergipe (*Ser-shee'peh*), a maritime state of Brazil, NE. of Bahia. Area, 7370 sq. m.; population, 380,000.—There is a small town, Sergipe or São Christovão, on the Sergipe River; but the capital is the port of Aracajú; pop. 20,000.

Serinagar. See Srinagar.

Seringapatam' (properly *Sri Ranga Patanam* = 'City of Vishnu'), the capital of Mysore state in Southern India from 1610 to 1799, is built on an island in the Kaveri, 10 miles NE. of Mysore city. The island is 3 miles long and 1 broad; at its western end stands the fort enclosing the palace of Tippoo Saib and the principal mosque. Outside it are the garden in which was built the mausoleum of Tippoo and his father, Hyder Ali, and Tippoo's summer palace. The fort was besieged by Lord Cornwallis in 1791, and again in 1792. A British army appeared before the walls again in 1799, and on 3d May the fort was stormed and Tippoo slain. Pop. 150,000 in Tippoo's day; now only 10,000, most of whom live in the suburb of Ganjam, the ancient city being ruinous.

Seringham (*Srirangam*), a town in the Madras Presidency, on an island in the Kaveri, 11 miles W. of Trichinopoly, with a great temple of Vishnu, a vast complex of halls and colossal gateways. Notable is one 'hall of a 1000 columns' (960 really), 450 feet long by 130 wide. Pop. 23,050.

Serpukoff, a Russian town, 57 miles by rail S. of Moscow, with a cathedral (1380), manufacturing cottons, woollens, leather, &c. Pop. 24,000.

Servia, a kingdom of the Balkan Peninsula, south of the Danube, and bordering on Bosnia, Hungary, Roumania, Bulgaria, and Turkey, with an area of 18,750 sq. m. The surface is mountainous; the highest peaks occur in the frontier chains (6382 feet in the SW.); and there are many isolated peaks and groups, clothed with forests and parted by fertile valleys. The principal highway of the country is through the central valley of the Morava, stretching SSE. from the Danube. Servia is essentially an agricultural country. Of the total area 58½ per cent. is cultivated, the principal crops being wheat, maize, and other cereals, and grapes for wine. Plums are dried and exported to a value between £250,000 and £500,000 a year, and from them the Servian brandy is made. Large herds of swine are fed on the acorns of the oak forests, and then driven into Hungary to be sold. Cattle and sheep are exported, also wheat and other cereals, hides, wine, wool, timber, and cordage. The total exports for the five years ending 1905 averaged over £2,630,000 annually. The imports consist principally of cottons, woollens, salt, timber, iron, steel, and other metals, hides, sugar, coffee, glass, paper, tobacco, machinery, &c., and range from £1,500,000 to over £2,000,000. And there is a rapidly growing transit trade. By far the greater portion of the foreign trade of Servia is in the hands of Austria-Hungary, and is concentrated at Belgrade, the capital. But a little is done by Nisch, the chief town of southern Servia, by rail (since 1889) through Salonica (q.v.). The manufacturing industry is still in its infancy, but clothing and carpets are made by the women in their own homes. The country is naturally rich in minerals, and a little coal, lignite, quicksilver, lead, silver, antimony, copper, and oil shale is mined. Belgrade is the capital. Along the valley of the Morava passes the railway from Vienna to Constantinople; and Nisch or Nissa, on this line, is connected by rail (1889) with Salonica.

The Servians are a well-built, stalwart Slavonic (or perhaps in part Slavonised Albanian) race, proud and martial by temperament; the most striking feature of their social life is the family community or *Zadruga*. Their literature is rich in poetry, especially lyrics. Pop. (1884) 1,901,736; (1900) 2,493,770, including some 160,000 Roumanians, 46,000 Gypsies, and 20,000 of other nationalities. Besides these the Montenegrins (250,000) are almost all pure Servians by race, as are also the Bosnians and Herzegovinians (1,300,000), not to speak of over 2,400,000 Servians in other parts of Austria-Hungary. The people of Servia belong to the Greek Catholic Church. There are 1100 elementary schools, some technical and theological schools, and a university (300 students) at Belgrade. Servia is a constitutional and hereditary monarchy, the legislative power being vested in the king and the National Assembly or *Skupshtina*. Besides this body and the ministry, there is a senate of sixteen members, elected by the king and the Skupshtina, which acts as a permanent state council. The national income in 1904 was £3,312,000, and nearly balanced the expenditure; the debt is over £18,800,000. There is a standing army (with universal military service) of 27,000, and a war strength of 300,000.

The Servians came from the Carpathians into these regions in the 7th century, and were Christianised and founded a great state which about 1350 embraced not merely the present kingdom but Albania and great part of Bulgaria and Macedonia; but at Kossovo in 1389 the Turks crushed the Servian power and made Servia first tributary and then a pashalik of the Ottoman empire. A national rising against Turkish tyranny had some success under Kara George in 1807–10, and through Russian influence it was arranged that Servia should have some measure of internal autonomy. Still more successful was a rising in 1815 under Obrenovich. Under his successors there was considerable progress; and after the Russo-Turkish war of 1877–78, Servia obtained complete independence, and became a kingdom. King Milan abdicated in 1889. On 11th July 1903 a party of officers, representing a wide conspiracy, assassinated King Alexander and Queen Draga. A few weeks afterwards Prince Peter Karageorgevitch was proclaimed king.

See Denton, *Servia and the Servians* (1862); and books on the Balkan States by Laveleye (trans. 1887) and Miller (1906).

Sessa, 32 miles NW. of Naples, has a fine cathedral and ruins. Pop. 8000.

Sestos. See ABYDOS.

Sestri Ponente, a suburb of Genoa.

Setif, capital of a department of Algeria, 70 miles west of Constantine. Pop. 16,000.

Settle, a town in the West Riding of Yorkshire, on the Ribble, and at the base of the Castlebergh cliff (300 feet), 43 miles NW. of Leeds. Dr Birkbeck was a native. Pop. of parish, 2300.

Setu'bal (called by English sailors ST UBES), a seaport of Portugal, on the N. side of the Bay of Setubal, 17 miles by rail SE. of Lisbon. Setubal is the old Roman *Cetobriga*. Pop. 21,800.

Sevastopol. See SEBASTOPOL.

Sevenoaks (*Sen'oaks*), a pleasant town of Kent, on an eminence 22 miles SE. of London. It has a Perpendicular church with some interesting monuments, the Walthamstow Hall (1882) for 100 daughters of missionaries, and a grammar-school founded in 1432 by Lord Mayor Sir W. Sennocke, incorporated by Queen Elizabeth, and reconstituted as a first-grade modern school in 1877, at which Grote and Bishops Christopher and Charles Wordsworth were educated. Knole, the magnificent seat of Lord Sackville, is close by. It was mainly built between 1460 and 1608 by Archbishop Bourchier and Thomas Sackville, first Earl of Dorset, and has a park of 1000 acres. Pop. 8250.

Severn (Lat. *Sabrina*), after the Thames, the largest of the rivers of England, rises, 1500 feet above sea-level, from a chalybeate spring on the eastern side of Plinlimmon, 12 miles west of Llanidloes, in Montgomeryshire, North Wales. Flowing eastward to Llanidloes, to which town it retains its original British name of Hafren, it afterwards flows north-east past Newtown (465 feet) and Welshpool to the eastern boundary of Montgomeryshire, then east-south-east past Shrewsbury and Bridgnorth in Salop, and finally southward through Worcester and Gloucester, in which last it begins to form the estuary that merges in the Bristol Channel (q.v.). It is navigable for barges to Welshpool (180 miles). Its entire length is 210 miles (from source to mouth as the crow flies only 80). The chief affluents are the Terne and the Upper and Lower Avon on the east, and the Teme and Wye on the west. A canal 18½ miles long, and navigable for vessels of 350 tons, extends from Gloucester to the upper portion of the estuary; and in 1891 the improvement of the navigation to Worcester was begun. The Montgomery Canal extends from Welshpool to Newtown, and other canals connect with the Thames, Trent, Mersey, &c. In some of the reaches below Gloucester, especially near Newnham, the tide, which flows with great velocity, produces a bore (locally termed *hygre*) or wave sometimes 5 or 6 feet high. The railway twice crosses the estuary—near Berkeley by a viaduct (1879), 1194 yards long, and near Chepstow by a tunnel (1873–85), 4½ miles long.

Severo, CAPE. See CHELYUSKIN.

Sev'ille (Span. *Sevilla;* pron. *Seveel'ya*), one of the most famous of Spanish cities, stands on the left bank of the navigable Guadalquivir, 62 miles (95 by rail) N. by E. of Cadiz, and is connected with a large suburb (Triana) on the right bank by an iron bridge (1848). Until quite recently it had the appearance of a picturesque Moorish town; but during the last few years it has been greatly modernised by the clearing away of the narrower quarters to make room for wide straight streets and modern houses and shops. The water-supply was formerly brought from Alcalá de los Panaderos by an old Roman aqueduct of 410 arches, but this has been superseded by new water-works constructed by Englishmen in 1883. The vast Gothic cathedral, built in 1401–1519 on the site of a Moorish mosque, is one of the largest in Europe, and contains valuable paintings by Murillo (a native of Seville) and other masters; magnificent Flemish stained glass of the 16th century; one of the largest organs in the world; the tombs of King Ferdinand III. and Ferdinand the son of Columbus; and much most excellent artistic work in bronze, wood-carving, and sculptured work. Close beside it stands the beautiful campanile called Giralda, 275 feet high. Both cathedral and tower were seriously damaged by an earthquake in 1884. Another of the glories of Seville is the Alcazar, or Moorish royal palace, begun in the end of the 12th century, enlarged and beautified by Peter the Cruel; its halls and gardens are surpassed only by those of the Alhambra. Amongst other places must be mentioned the so-called House of Pilate; the museum, with masterpieces by Murillo, Zurbaran, and other artists of the Seville school, as well as by Velasquez (also a native of Seville); the charity hospital; the exchange (1585), sheltering the valuable archives of the Americas; the university (1254; rebuilt 1567); the palace (1697) of the archbishop; the Palace of San Telmo, founded as a naval college by Columbus' son, but now a palace of the Duke of Montpensier; and the bull-ring for 18,000 spectators. There are manufactures of cigars (a royal factory employing 4000 work-people), iron, machinery, pottery, cannon, silks, cottons, &c. The imports consist principally of chemicals, timber, textiles, petroleum, machinery, coal, metals, spirits, fish, haberdashery, tinplate, and furniture; the exports of lead, quicksilver, wine, copper, oranges, olives, and olive-oil and corks. Pop. (1878) 133,938; (1900) 148,350. The Roman *Hispalis*, and from 712 to 1248 the *Ishbilia* of the Moors, Seville was then captured by Ferdinand III. of Castile, and 300,000 Moors abandoned the place.—Area of *province*, 5428 sq. m.; pop. (1887) 544,815.

Sèvres (*Sehvr*), a town of France, dep. Seine-et-Oise, 10½ miles SW. of Paris, has since 1756 been celebrated for its state factory of artistic por-

celain. The Sèvres vases are of great value and are known the world over; painted glass and mosaic are also made. Pop. 7950.

Sèvres, Deux- (*Duh-Sèhvr*), a dep. in the west of France, formed chiefly out of the ancient province of Poitou. Area, 2315 sq. m.; pop. (1901) 342,474. The arrondissements are Niort (the capital), Bressuire, Melle, and Parthenay.

Seychelles (*Say-shell'*), a group of British islands, dependent on Mauritius, are situated near the middle of the Indian Ocean, 600 miles NE. of Madagascar and 934 N. of Mauritius. There are thirty larger islands and numerous smaller ones, their total area being 102 sq. m.; the largest and most important is Mahé (17 miles by 7). They were colonised by the French in 1742, though they were known to the early Portuguese navigators. The British wrested them from the French when they also took Mauritius (1794). The islands are mountainous, and in Mahé reach close upon 3000 feet. Coral-reefs grow round most of the islands. The climate, though tropical (70° to 93° F.), is very healthy. The soil is fertile and vegetation luxuriant. The principal products are the fibre, nuts, and oil of the cocoa-nut palm; but coco-de-mer, maize, manioc, tobacco, coffee, vanilla, cloves, tortoiseshell, soap, and vacoa bags are exported. The imports consist chiefly of cotton, haberdashery, coal, spirits and wine, and provisions. Victoria, the chief town on Mahé, is a coaling station. Pop. of the islands, upwards of 20,000—negroes, coolies, and French creoles.

Seymour, a city of Indiana, 88 miles by rail W. of Cincinnati. Pop. 6450.

Seyne, La (*Sayn*), a seaport of France (dep. Var), on the Mediterranean, 3 miles SW. of Toulon, with shipbuilding yards. Pop. 19,160.

Sezze (*Set'zeh*; anc. *Setia*), a cathedral city of Italy, 40 miles SE. of Rome, has ruins of a temple to Saturn, amphitheatre, &c. Pop. 6114.

Sfax, the second port of Tunis, on the Gulf of Cabes, 150 miles S. by E. of the town of Tunis. It trades in dates, olive-oil, esparto grass, wool, fruits, sponges, &c.; and manufactures cottons, woollens, and silks. Pop. 30,000.

Shadwell, a parish, now included in Tower Hamlets (q.v.).

Shaftesbury (locally *Shaston*), a very ancient municipal borough in Dorsetshire, 3 miles SSW. of Semley station and 22 WSW. of Salisbury. It stands on a narrow chalk ridge, and commands magnificent views over Dorset-, Somerset-, and Wiltshires. The *Caer Palladwr* of the Britons, it was made by King Alfred the seat of a famous abbey of Benedictine nuns (880), whither Edward the Martyr's body was translated in 980, and where Canute died in 1035. At the date of Domesday Shaftesbury had three mints and twelve churches, but four remain—St Peter's (Norman) the most interesting. Till 1832 Shaftesbury returned two members, and till 1885 one. Population, 2000. See Mayo's *Municipal Records of Shaftesbury* (Sherborne, 1891).

Shahabad', a town of Oudh, 80 miles NW. of Lucknow by rail, with a pop. of 20,153—only a third of what it was in the 16th century.

Shahjahanpur', a town in the United Provinces, 100 miles by rail NW. of Lucknow. It was founded in 1647, in the reign of Shah-Jehan. It was a hot-bed of rebellion in 1857. Sugar is made and exported. Pop. 76,960.

Shamo, or Gobi. See Asia.

Shamo'kin, a borough of Pennsylvania, 188 miles by rail W. of New York, with rich mines of anthracite coal. Pop. 18,200.

Shandernagar. See Chandernagore.

Shandon, a Dumbartonshire village and large hydropathic, on the E. shore of the Gare Loch, 5½ miles NW. of Helensburgh. See also Cork.

Shandy Hall, Sterne's residence (now cottages) at Coxwold (q.v.).

Shanghai (*Shang-hī'*), the most important seaport for central China, stands on an affluent of the Yang-tsze-kiang, 12 miles from its mouth and 160 SE. of Nanking. The Chinese city, with narrow, filthy streets, is surrounded by a wall, and between it and the river lie densely-crowded suburbs. On the north of the Chinese city the French and English settlements, with broad streets, well lighted, well paved, and handsome houses and public buildings, stretch northwards parallel to the river. The English cathedral was designed by Sir G. G. Scott. Powerful batteries guard the river-approach. The city lies low, and suffers greatly from dysentery, cholera, and fevers during the very hot summers. Shanghai has an enormous trade in tea and silks, and in cottons, woollens, opium, metals, &c. It taps the provinces of middle China by a vast and complicated system of interlacing canals, and so gets the lion's share of the tea and silk to export. The total trade of the port has grown enormously since Shanghai was thrown open to foreign commerce in 1842. A large proportion of the trade of Shanghai is for goods in transit. The imports of greatest value are cotton goods, opium, metals, woollens, coal, kerosene oil, bêche de mer, edible birds'-nests, dyes, ginseng, matches, pepper, sandalwood, seaweed, timber, shark's fins, &c. Pop. 450,000 (about 3000 foreigners).

Shanklin, a watering-place on the south-east coast of the Isle of Wight, 8 miles by rail S. of Ryde. It has memories of Keats. Population, upwards of 4500.

Shannon, the largest river of Ireland, rises in the Cuilcagh Mountains, County Cavan, and falls after a course of 254 miles into the Atlantic Ocean between Loop Head and Kerry Head. It flows SW. to Lough Allen in Leitrim; thence S. through a succession of expansions—Loughs Boderg, Bofin, Forbes, Ree, and Derg—past the towns of Carrick, Athlone, and Killaloe, to Limerick; and finally W., forming a wide estuary some 70 miles long and 10 miles across at its seaward extremity. About 10 miles from the entrance the river narrows to 1½ mile in width. Outward navigation commences at Foynes, connected by railway with Limerick. Vessels of 1000 tons can get up to Limerick, and small steamers to Athlone; boats ascend to beyond Lough Allen. The Suck and Fergus enter from the right, and the Inny, Brosna, Mulkcar, Maigue, and Deel from the left. The river is canalised for some distance below Athlone, and between Killaloe and Limerick; and it is connected with Dublin by the Grand and Royal Canals.

Shan-si, a province of northern China, having the Hoang-ho on its western boundary.

Shan States, a collective name for a large area between Burma, Siam, Annam and China, occupied by numerous tribes of Shans or Laos, a people akin to the Siamese and southern Chinese. Some of the tribes are directly dependent on Burma, still more on Siam, and others on China and Annam; many are virtually independent. The country consists of valleys and hill country

on the upper courses of the Irawadi, Salwen, Mekong, and their tributaries. There are great forests of teak; iron, rubies, and silver are mined; copper, coal, and petroleum are known to exist; the country has a large trade with China, and schemes for railways from Burma and Siam to the Chinese frontiers have been proposed. The total number of Shans is guessed at 4,000,000. Zimmé (Chieng-mai) and Luang-Prabang give name to the chief states—the latter now Annamite or French.

Shan-tung, a maritime province of N. China.

Shap, a Westmorland town, 12 miles SSE. of Penrith. It has a ruined abbey, a mineral spring, and granite-quarries near. Pop. 1260.

Shapinshay, an Orkney island, 4 miles NNE. of Kirkwall. Area, 11 sq. m.; height, 162 feet; pop. 765.

Shari (*Shah'ree*). See CHAD, LAKE.

Sharon, an extensive tract of plain and cornland in Palestine, lying between the sand-dunes of the coast and the foot-hills of the interior, and extending from Carmel to near Joppa.

Sharon, a borough of Pennsylvania, on the Shenango River, 71 miles by rail NNW. of Pittsburgh. Pop. 8950.

Sha-shi, or SHA-TSZE, a Chinese treaty port in Hupeh, on the left bank of the Yang-tsze, 110 miles below Ichang, with a great trade. Pop. 80,000.

Shat-el-Arab. See EUPHRATES.

Sheboygan, capital of Sheboygan county, Wisconsin, on Lake Michigan, at the mouth of the Sheboygan River, 53 miles by rail N. of Milwaukee. It has a harbour, foundries, tanneries, &c. Pop. (1880) 7314; (1900) 20,962.

Shechem. See NABLUS.

Sheen. See RICHMOND.

Sheerness', a strongly fortified seaport and royal dockyard in Kent, on the north-west extremity of the Isle of Sheppey, at the confluence of the Thames and Medway, 11 miles ENE. of Chatham and 52 E. of London by rail. It consists of four divisions, Blue-town, Mile-town, Banks-town, and Marina-town, and of these the first is within the limits of the garrison. The dockyard, dating from 1814, is one of the finest in Europe, and covers 60 acres, comprising wet and dry docks, immense storehouses, and official residences. At Garrison Point are the residence of the port-admiral, the telegraph, coastguard station, and barracks. The chief trade is in supplying the requirements of the employees in the government establishments, and seeds and oysters are exported. The sea-bathing is excellent. Pop. (1851) 8549; (1881) 14,286; (1901) 18,273. Sheerness was captured by the Dutch under De Ruyter in 1667, and here the mutiny of the Nore broke out in 1798.

Sheffield, a municipal, parliamentary, and county borough in the West Riding of Yorkshire, in a hilly country, at the confluence of the Sheaf with the Don, 46 miles SSW. of York, 41 E. of Manchester, and 165 NNW. of London. It possesses some fine public buildings, such as the parish church of St Peter, supposed to have been erected in the reign of Henry I., 240 feet long by 130 feet broad; St Mary's Roman Catholic Church (1850), surmounted by a spire 195 feet high; the Albert Hall (1873), cutlers' hall, corn exchange; the new market-hall, or Norfolk Market, erected in 1851 by the Duke of Norfolk at a cost of about £40,000; music-hall, assembly-rooms, theatres, &c. In 1875 and succeeding years a street improvement scheme was carried out at a cost of upwards of half a million. The new town-hall (1891–97) cost, with site, about £130,000. There are botanic gardens and fine cemeteries; the Free Grammar-school, the Wesley College (1838). The Firth College (1879) became a university in 1905, with faculties of arts and science, and medicine, and a technical department, including laboratories, foundries, and machine-shops. The Mechanics' Institution dates from 1832. There are free and other public libraries, an Athenæum, a Literary and Philosophical Society, and the Mappin Art Gallery; and Mr Ruskin founded the St George's Museum here (formerly at Walkley, but since 1890 in the town itself), in which he deposited an important collection of minerals, illuminated manuscripts, engravings, and drawings. Sheffield has long been noted for the manufacture of cutlery; and at the present day an endless variety of articles in brass, iron, and steel is produced, such as knives, silver and plated articles, Britannia-metal goods, coach-springs, spades, spindles, hammers, files, saws, boilers, stoves, grates, buttons, &c. The introduction of the manufacture of armour-plates, railway-springs, tires, and rails in 1871 gave a remarkable impetus to the growth of the town. Sheffield has several public parks (one presented in 1878), and two sets of public baths. Pop. (1821) 69,479; (1841) 111,091; (1861) 154,093; (1881) 284,508; (1901) 380,717.

Sheffield has from Saxon times been the capital of a district known as 'Hallamshire.' William de Lovetot built a church at it about 1103. The next lords of Sheffield, the Furnivals, sided with Henry III. against the barons, and the castle was burned in 1266. The Talbots inherited Sheffield, and the third Earl of Shrewsbury greatly increased the dignity of Sheffield castle. Queen Elizabeth imposed on the sixth Earl of Shrewsbury the responsibility of holding Queen Mary of Scotland a prisoner here (1572–86, with short intervals). Through the Arundels, the vast Sheffield estates ultimately vested in the Dukes of Norfolk. Sheffield sided against King Charles; and in August 1644 the castle was taken by the parliamentarians, and soon afterwards demolished. The cutlery trade had existed from the earliest times; the 'Sheffield whittle' was spoken of by Chaucer, and the Cutlers' Company was founded in 1624. Up to the middle of the 18th century Sheffield was a mean place, but rose in the 19th to be the 'capital of steel' in Britain, and perhaps in the world. Till 1845 the whole town was included in one parish; there are now thirty-seven ecclesiastical parishes. Sheffield was first enfranchised in 1832; and by the bill of 1885 the borough was divided into five parliamentary districts, each with one member. In March 1864 a new embankment, constructed for the Sheffield Water Company, at Bradfield, gave way; 250 persons perished; mills, houses, and hamlets were swept away, and damage done to private property to the extent of near £300,000. In 1866 trade outrages in the form of 'rattening,' long a discredit to Sheffield, were put an end to. See Hunter's *Hallamshire* (1819; new ed. 1869); Gatty's *Sheffield, Past and Present* (1873); Leader's *Reminiscences of Old Sheffield* (1875); and Leader's *Sheffield in the Eighteenth Century* (1901).

Shemakha (*She-mäh'ha*), a town of Russian Caucasus, 63 miles W. by N. of Baku, with silk manufactures. It was overwhelmed by an earthquake in 1859, and again in 1872. Pop. 28,545.

Shenando'ah, (1) a river of Virginia, drains the beautiful and fertile valley between the Blue Ridge and the principal range of the Alleghanies. It rises in two branches, which unite 85 miles W. of Washington, and runs 170 miles NE. to the Potomac, at Harper's Ferry.—(2) A borough of Pennsylvania, 105 miles north-west of Philadelphia, with a trade in anthracite coal. Population, 20,500.

Shendy, a town in Lower Nubia, on the Nile's right bank, 100 miles NNE. of Khartoum. Pop. 5000 (40,000 before 1822).

Shen-si, a northern inland province of China.

Shepherd's Bush, a west suburb of London.

Shepley, a Yorkshire village, 7 miles SE. of Huddersfield. Pop. 1725.

Shepperton, a Middlesex Thames-side parish, 19 miles SW. of London. Pop. 1820.

Sheppey, Isle of, a portion of Kent, insulated from the mainland by the Swale, an arm of the Medway estuary. It now is only 9 miles long and 4 broad, the sea having gradually eaten away the northern shore, which is lined by cliffs of London clay 60 to 80 feet high. Minster church, formerly in the middle of the island, is now close to the north coast. In the north corn is grown, but the low south districts are laid out in grass. Almost all the inhabitants are massed in Sheerness (q.v.).

Shepton Mallet (locally *Shep'un*), an ancient market-town of Somerset, 5 miles ESE. of Wells and 15 SSW. of Bath. It has an hexagonal market-cross of 1500, 51 feet high; a church with a splendid timber roof; a grammar-school (1627); and manufactures of silk, velvet, crape, ale. Pop. (1851) 3885; (1901) 5238. See a work by Farbrother (1860).

Sherborne (A.S., 'clear brook'), a pleasant old-fashioned town of Dorsetshire, in the Vale of Blackmore, on a gentle southern hill-slope above the Yeo, 17 miles N. by W. of Dorchester and 5 E. of Yeovil. In 705 Ina, King of Wessex, made it the seat of a bishopric, with St Aldhelm for first bishop, whose twenty-fifth successor in 1075 transferred the see to Sarum. The noble cruciform minster, measuring 207 by 102 feet, with a tower 114 feet high, was the church of a great Benedictine abbey, founded by Bishop Roger in the first half of the 12th century. It was converted from Norman to Perpendicular after a great fire in 1436, and was restored in 1848–58 at a cost of over £32,000. Noteworthy are the clerestory, vaulting, and choir; and in the retrochoir are the graves of Asser and two of King Alfred's brothers. King Edward's School, comprising remains of the abbey buildings, was founded in 1550, and reorganised in 1871, since when it has risen to be one of the great public schools of England, with a yearly endowment of £800 and 300 boys. Among former pupils may be named Dr J. M. Neale and Mr Lewis Morris. Sherborne Castle is an Elizabethan mansion, built in 1594 by Raleigh in the grounds of Bishop Roger's Norman castle (*c.* 1125), which, taken by Fairfax in 1645, is now a ruin. Sherborne has also a literary institute (1859), Bishop Neville's 15th-century hospital, and the Yeatman memorial hospital (1863), with some manufactures of lace, buttons, and silk. Pop. (1851) 4878; (1901) 5753. See Horne's *Sherborne Register* (1893).

Sherbro, an island off the coast of Sierra Leone.

Sherbrooke, a city of Quebec, at the junction of the rapid Magog (with falls) and St Francis rivers, 168 miles by rail E. of Montreal, with many busy factories. Pop. 11,800.

Sherburn, (1) a town of Yorkshire, 12 miles E. of Leeds. Pop. 650.—(2) A place 3 miles ESE. of Durham, with a lepers' hospital (1181), now an almshouse.

Sheriffmuir', in Perthshire, on the northern slope of the Ochils, 2½ miles ENE. of Dunblane, was the scene, on 13th November 1715, of an indecisive battle between 8400 Jacobites under Mar and 3500 Hanoverians under Argyll.

Sherman, capital of Grayson county, Texas, 64 miles by rail N. of Dallas. Pop. 10,250.

Sherringham, a Norfolk coast town, 4 miles WNW. of Cromer. Pop. 2500.

Sherwood Forest, a stretch of hilly country in the west of Nottinghamshire, lying between Nottingham and Worksop, about 25 miles N. to S. and 6 to 8 miles E. to W. It was formerly a royal forest, and the traditional scene of many of the exploits of Robin Hood; but it is now almost wholly disafforested, and is occupied by gentlemen's seats and fine parks. The town of Mansfield and a number of villages are within the ancient bounds. Numerous remains of the old forest are still to be seen. See works by R. White (1875) and Sissons (1888).

Shetland, or Zetland (Scand. *Hjaltland*, 'high land'), a group of more than a hundred islands, islets, and skerries, forming the northernmost Scottish county, whose capital, Lerwick, is 116 miles NE. of Kirkwall, 300 N. by E. of Edinburgh, and 222 W. of Bergen in Norway. Extending 70 miles, and 36 in extreme breadth, they have a total area of 551 sq. m., the largest of the twenty-nine inhabited islands being Mainland (378 sq. m.), Yell (83), Unst (47), Fetlar, Bressay, Whalsay, and Foula. The cliff-scenery is very fine, and the sounds and *voes*, or firths, are so numerous that no spot is more than 3 miles from the sea. The surface is more rugged than that of Orkney, the highest points being Ronas Hill (1475 feet) in Mainland, and the Sneug (1372) in Foula. Metamorphic crystalline rocks predominate, with isolated Old Red Sandstone; and the soil is peaty, barely one-sixth of the total area being in cultivation, whilst trees there are none. The live-stock includes from 100,000 to 120,000 sheep, some 19,000 cattle, and over 5000 shaggy 'Shetland ponies,' 9 to 10 hands high. The climate is equable but moist (rainfall, 49 inches); at the longest day the sun sets for only five hours, at the shortest for over eighteen. The herring and other fisheries are the leading industry, having been greatly developed since 1872. Shetland unites with Orkney to return one member to parliament; but it was dissevered therefrom as a county by the Local Government (Scotland) Act, 1889. Pop. (1801) 22,379; (1861) 31,679; (1901) 28,185. Subject, like Orkney (q.v.), to the Scandinavian crown until 1468, Shetland—the *Ultima Thule* of the ancients—is still markedly Norse in many of its characteristics, Norse (spoken in Foula as late as 1774) having bequeathed many words to the Shetland dialect. In 1766 it was sold by the Earl of Morton to the ancestor of the Earls of Zetland, but the present earl's property here is small. See Scott's *Pirate;* Edmondston's *Shetland Glossary* (1866); and other works by Brand (1701), Tudor (1883), Sheriff Rampini (1884), and the Rev. J. Russell (1887).

Shettleston, a Lanarkshire mining-town, 3 miles E. by S. of Glasgow. Pop. (1861) 1947; (1891) 5430; (1901) 12,154.

Shiant Islet, a basaltic group, 21 miles S. of Stornoway. Pop. 8.

Shiel (*Sheel*), Loch, a fresh-water lake in the west of Scotland, on the boundary between Moidart in Inverness-shire and Ardgour in Argyllshire, 18 miles W. of Fort-William. It extends 17½ miles south-westward, is 1 mile broad, is overhung by mountains nearly 3000 feet high, abounds in fish, and communicates with the sea by the river Shiel and salt-water Loch Moidart. Prince Charles Edward was here, a fugitive, in 1746; and Queen Victoria in 1873. At the head is Glenfinnan (q.v.).

Shields (*Sheeldz*), North, a seaport of Northumberland, on the Tyne's north bank, near its mouth, 8 miles ENE. of Newcastle-upon-Tyne. In the 13th c. the germ of the present town was a collection of fishermen's huts or 'sheles' (hence *Shields*). The prior of Tynemouth previous to 1279 built twenty-six houses and a quay here, but the burgesses of Newcastle frustrated his design to establish a town. For five hundred years North Shields, oppressed by Newcastle, remained a mere village, but during the 19th century its development has been rapid. The town is without any architectural character, the streets being monotonously plain, and, near the river, narrow and dingy. The principal public buildings and institutions are the town-hall (1844), the theatre-royal, the covered market, the free library and museum, the Tyne Sailors' Home (1856), and the Master Mariners' Asylum (1838). The Northumberland Park (with remains of St Leonard's Hospital) covers 17 acres. The mouth of the Tyne forms an important harbour; the depth of water on the bar at low-water (spring-tides) is 20 feet; at high-water, 37. Within the borough are two extensive docks—the Northumberland (1857) and the Albert-Edward (1884), the one having an area of 55 acres, the other of 24. Upwards of 2½ million tons of coal and coke are shipped hence in a twelvemonth; the principal imports are corn, timber, and esparto grass. There is much building and repairing of steam and sailing vessels and manufactures of anchors, chain-cables, ropes, &c.; and fishing is carried on. At Clifford's Fort is a submarine mine station. In conjunction with Tynemouth (q.v.) and three small townships North Shields forms a municipal and parliamentary borough, named after Tynemouth, and sending one member to parliament. Pop. of this borough (1881) 44,118; (1901) 51,514. This town is the birthplace of the painters George Balmer and Birket Foster, also of William Wouldhave (see South Shields).

Shields, South, a seaport, municipal and parliamentary borough of Durham, popular also as a watering-place, stands on the south bank of the Tyne at its mouth, 9 miles ENE. of Newcastle-upon-Tyne. On the Lawe, an eminence overlooking the river, the Romans had an important military station, in Saxon times called Caer Urfa. Salt-pans were established here in 1489, and glass-works in 1619. The oldest, dingiest part of the town extends for about two miles along the river-bank. Ocean Road—a fine broad thoroughfare nearly a mile long—stretches from the market-place to the pier. The cliffs to the southward are hollowed into picturesque caves. The principal public buildings are the town-hall (1768); the public library, news-room, and museum (1859); the marine school (1869); the theatre-royal (1866); and the Ingham Infirmary (1873). South Shields is in the parish of Jarrow (q.v.). The North and South Marine Parks, 45 acres in extent, are divided by the pier parade. A portion of the site of the Roman station, containing the remains of the forum, treasury, western gateway, &c., has been enclosed and laid out as a recreation ground. The south pier—a gigantic breakwater 5218 feet in length—was constructed in 1854–92. The harbour is lined with ship and boat yards, iron, glass, alkali, and rope works, paint and varnish manufactories, &c. The Tyne Docks, covering an area of 50 acres, are the property of the North-Eastern Railway, and ship over five million tons of coal and coke. The large colliery in the town—the St Hilda—was opened in 1810; in an explosion here in 1839 fifty-nine persons were killed. The first lifeboat was built at South Shields, and used for the first time on January 30, 1790; a memorial to its inventors Wouldhave and Greathead has been erected on the pier parade. South Shields was incorporated in 1850. Since 1832 it has returned one member. Pop. (1851) 28,974; (1881) 56,875; (1901) 96,267.

Shifnal, a town of Shropshire, 17 miles E. by S. of Shrewsbury, with iron manufactures. Pop. 3234.

Shigatze, or Digarchi, a town (pop. 9000) of Tibet, stands on the right bank of the Sanpo or Brahmaputra, 140 miles W. by S. of Lhassa, at an altitude of 12,000 feet. Near by is the great monastery (3500 monks) of the Tashilunpo.

Shikarpur', a town in Sind, stands 18 miles W. of the Indus, on the railway to Quetta and Pishin. Carpets, cottons, furniture, &c. are manufactured. Pop. 49,500.

Shikoku. See Japan.

Shildon, a Durham town, 3 miles SSE. of Bishop Auckland, with neighbouring quarries and coal-mines. Pop., with East Thickley, 11,760.

Shilka. See Amur.

Shillelagh (*Shilleh'la*), County Wicklow, 17 miles SW. of Aughrim, a once famous oak-forest.

Shiloh, one of the most desperate battles (6th and 7th April 1862) of the American civil war, named from a log meeting-house near the Tennessee River, 8 miles above Savannah.

Shimonoseki, a port of Japan, at the SW. extremity of the main island, open to foreign trade since 1890, was partly destroyed during a bombardment by a combined English, French, Dutch, and American fleet in 1864. Pop. 42,800.

Shin, Loch. See Sutherland.

Shingking. See Mukden.

Shingles, a shoal, 2½ miles long, off the Isle of Wight, between the Needles and Hurst Castle.

Shipka, a Balkan pass, 50 miles NE. of Philippopolis, stoutly held by the Russians against the desperate assaults of Suleyman Pasha, August 21–26, and September 9–17, 1877.

Shiplake, an Oxfordshire village, on the Thames, 3½ miles S. by E. of Henley. Tennyson was married here.

Shipley, a Yorkshire town, on the Aire, 3 miles NNW. of Bradford. It manufactures worsted. Pop. (1851) 3272; (1901) 25,573.

Shipston-on-Stour, a market-town in Worcestershire (detached), 6 miles E. of Chipping Campden station. Pop. 1546.

Shiraz (*Shee-râhz'*), capital of the Persian province of Fars, much celebrated in Persian poetry for its climate, its wine, and its rose-gardens, is situated in a broad plain, 115 miles ENE. of Bushire and 35 SW. of the ancient Persepolis. Rose-water is prepared; and inlaid articles in

wood and metal, glass, and woollens are made here. The city was founded in the 8th century, and was a favourite resort of the Persian princes. In 1812 a destructive earthquake laid it partly in ruins, and another in 1824 cost 4000 lives, and destroyed its splendid mosques and bazaars. It was rebuilt and numbered 40,000 people, when a third visitation, in 1853, laid almost the whole town again in ruins, and caused 10,000 deaths. It has since been partially rebuilt, and its pop. is now 40,000. The tombs of the poets Hafiz and Sádi, both natives, are in the vicinity.

Shirburn Castle, Oxfordshire, 7 miles SSW. of Thame, the seat (1332) of the Earl of Macclesfield.

Shiré (*Shee'ray*), a river of East Africa, flows 370 miles S. out of Lake Nyassa to the Zambesi. The navigation is obstructed by cataracts (Murchison Cataract) for 35 miles, in which the Shiré falls 1200 feet. The Shiré Highlands are included in Nyassaland (q.v.). See John Buchanan, *The Shiré Highlands* (1885).

Shirwa, a lake of South-east Africa, 45 miles SE. of Lake Nyassa. It is 40 miles long, 15 to 20 miles broad, and 1970 feet above sea-level. On the W., between the lake and the river Shiré, is Mount Zomba (7000 feet).

Shisdra, a town of Russia, 80 miles SW. of Kaluga, on a branch of the Oka. Pop. 11,678.

Sho'a, a mountainous country of Africa, usually accounted one of the three divisions of Abyssinia (q.v.), lying S. of Abyssinia proper, and watered by the Blue Nile and the Hawash. Area, 26,000 sq. m. The people, partly Abyssinians and partly Gallas, number about 1½ million. The capital is Addis Abeba (pop. 10,000), under Menelek (from 1892) capital of Abyssinia also.

Shoeburyness, on the coast of Essex, and at the mouth of the Thames, faces the Nore, 3 miles E. of Southend and 45 of London. Its dreary marshland, purchased by government in 1842–55, has since been the seat of a school of gunnery, with artillery barracks, batteries, targets, and other appliances for experimenting on cannon.

Sholapur', a town of Bombay presidency, 150 miles by rail SE. of Poona, with silk and cotton manufactures. Pop. 75,000.

Shooter's Hill, an eminence (446 feet) in Kent, near Greenwich and Woolwich, which commands a splendid view of London.

Shoreditch, a metropolitan and parliamentary (two members) borough of London. Pop. met. bor. (1901) 118,637; of par. bor. (1901) 117,706.

Shoreham, New, a seaport of Sussex, at the mouth of the Adur, 6 miles W. of Brighton. It arose when the harbour of Old Shoreham, now a mile inland, became silted up; and it has some shipbuilding, oyster and other fisheries, and a trade with France from its tidal harbour. Charles II. embarked here after Worcester for Normandy. The suspension bridge (1833), the Norman and Early English parish church, and the 'Swiss Gardens,' may be noticed. The parliamentary borough of New Shoreham, including the Rape of Bramber (177 sq. m. and 42,442 inhabitants in 1881), and returning two members, was merged in the county in 1885. Pop. of parish, about 3900.

Shorncliffe, in Kent, 2½ miles W. of Folkestone, the seat of a military camp during the Peninsular war, and since the Crimean war of a permanent one for 5000 men.

Shoshone Falls (*Shoshonee'*), on the Snake River, in southern Idaho, about 950 feet wide, and with a clear leap of 210 feet (that of Niagara is under 170 feet). The river runs in a deep gorge between walls of volcanic rock 1000 feet high. Four miles higher up are the Little Shoshone Falls, a broken cataract of 182 feet.

Shoshong, once capital of the Bamangwato tribe, and the largest native town in South Africa (20,000), depopulated since it was superseded (1890) by Palapwe (q.v.), now capital of the Bechuanaland protectorate.

Shotover Hill, an eminence (599 feet) 4 miles E. of Oxford.

Shottery. See Stratford-on-Avon.

Shotts, a Lanarkshire mining parish, 16 miles SE. of Glasgow. Pop. (1831) 3220; (1901) 15,562.

Shreveport, the second city of Louisiana, on the west bank of Red River (spanned by an iron bridge of 1200 feet), 328 miles by rail NW. of New Orleans. It ships cotton, hides, wool, and tallow, and has planing and saw mills, foundries, machine-shops, breweries, and manufactories of cotton-seed oil, soap, ice, carriages, &c. Pop. 16,700.

Shrewsbury (*Shrowzbury*), the county town of Shropshire, on the Severn, 36 miles SSW. of Crewe, 42 W. by N. of Birmingham, and 163 NW. of London. The river here makes a serpentine curve round a hilly peninsula, and is spanned by the English Bridge (rebuilt 1774) of seven arches, the Welsh Bridge (rebuilt 1795) of five, and the iron Kingsland Bridge (1882), which lead to the suburbs of Abbey-Foregate, Coleham, Frankwell, Castle-Foregate, and Kingsland. With its steep, narrow streets, and its black and white half-timbered houses, Shrewsbury is picturesque as very few English towns. Its Norman castle has been greatly modernised; Holy Cross or Abbey Church belonged to a Benedictine abbey (1083). St Mary's is Norman to Perpendicular in style, with a Jesse window, the tomb of Admiral Benbow, and a spire 222 feet high (restored in 1894 after partial wreckage). Noteworthy also are the Roman Catholic church (1856), by Pugin; the council-house (1501–60), where Charles I. stayed in 1642, and James II. in 1687; the old market-house (1595); the new market-hall (1868); the shire-hall (rebuilt 1836, and again, after fire, 1883); the corn exchange (1869); the post-office (1877); the county infirmary (1747–1830); the eye, ear, and throat hospital (1881); the 'Raven' Hotel, where Farquhar in 1704 wrote the *Recruiting Officer;* the 'Quarry,' a pretty park of 23 acres, with its lime-tree avenue (1719); a Doric column (1816) to Lord Hill, 134 feet high; and a bronze statue (1860) by Marochetti of Clive. The county museum and a free library now occupy the old buildings (1630) of the grammar-school, which was transferred to a fine new site of 26 acres (now 50 acres) in 1882, since which time the number of the boys has increased from 170 to over 300. Founded by Edward VI. in 1551, though not actually opened till 1562, and augmented by Queen Elizabeth in 1571, this school was recognised as one of the seven great public schools in the Public Schools Act of 1868, and owes its greatness partly to its rich endowment (£3100 per annum), but still more to the exertions of two successive headmasters, Dr Samuel Butler (1798–1836), afterwards Bishop of Lichfield, and Dr Kennedy (1836–66). Among its alumni have been Sir Philip Sidney, Fulke Greville, Wycherley, Judge Jeffreys, the Marquis of Halifax, Charles Darwin (a native), Bishop Fraser of Manchester, Archbishop Thomson, Viscount Cranbrook, the Right Hon. H. C. Raikes, S. J. Weyman, and such scholars as Professor Kennedy, F. A.

Paley, Professor Munro, R. Shilleto, and Professor Mayor. Glass-painting, malting, iron-founding, and the manufacture of agricultural implements are industries; 'Shrewsbury cakes' and the brawn made here have long been famous. Chartered by Richard I., the borough returned two members till 1885, when the representation was reduced to one. Pop. (1851) 19,681; (1881) 26,481; (1901) 28,396. The Cymric *Pengwerne* ('alder hill'), after its capture in 778 from the king of Powys by Offa of Mercia the place changed its name to *Scrobbesbyrig* ('town in the wood'), of which the modern name is a corruption. It has been visited by most of the English kings, and repeatedly besieged—e.g. by Llewellyn (1215) and the parliamentarians (1644). In the battle of Shrewsbury, fought at Battlefield, 3 miles NE., on 21st July 1403, Henry IV. routed Hotspur and his confederates. See works by T. Phillips (1779), H. Owen and J. B. Blakeway (1825), H. Pidgeon (1857), and W. Phillips (1878).

Shropshire, or SALOP, a West Midland county of England, on the Welsh border, bounded by the counties of Cheshire, Stafford, Worcester, Hereford, Radnor, Montgomery, and Denbigh. It measures 50 miles by 41, and has an area of 844,565 acres or 1319 sq. m. The Severn, entering from Montgomeryshire, winds 55 miles across the interior, dividing Shropshire into two pretty equal portions, and being joined here by the Tern, whilst a lower tributary, the Teme, traces much of the southern boundary. Ellesmere (116 acres) is the largest of several lakes. The northern and eastern portion, to the left of the Severn, is level with the exception of the isolated Wrekin (1320 feet). The south-western portion is rugged and mountainous, and in the Clee Hills attains 1805 feet. Coalbrookdale is the chief of five coalfields, and the mineral wealth also includes iron, lead, limestone, and freestone. The soil is variable, but generally fertile and well cultivated, so that only about one-seventh of the whole area is waste, whilst woods and plantations cover 71 sq. m. and orchards 4000 acres. Much attention is paid to live-stock. The county is divided into 14 hundreds and 253 civil parishes. It contains the parliamentary borough of Shrewsbury, the county town, and the municipal boroughs of Bishop's Castle, Bridgnorth, Ludlow, Oswestry, and Wenlock. It returns four members for the Oswestry, Newport, Wellington, and Ludlow divisions. Clive was a native; and historic scenes or antiquities, other than those noticed in the articles on the different towns, are Acton-Burnell, Boscobel, Wroxeter, Watling Street, and Offa's Dyke. Pop. (1801) 169,248; (1841) 225,820; (1871) 248,111; (1901) 239,321. See works by C. Hulbert (2 vols. 1837), E. Lloyd (1844), R. W. Eyton (12 vols. 1853-60), J. C. Anderson (1864), Mrs F. C. Acton (1868), M. E. C. Walcott (1879), Miss G. Jackson (Dialect, 1879-81), and Miss C. Burne (Folklore, 1883-85).

Shrubland Hall, a Suffolk seat, with splendid gardens, 3 miles SE. of Needham Market.

Shumla (*Shoom'la*), a strongly fortified city of Bulgaria, 56 miles by rail W. by N. of Varna and 80 SE. of Rustchuk. The roads from the fortresses (Silistria, Rustchuk) on the Lower Danube and in the Dobrudja on the north, and from the passes of the Eastern Balkan on the south, converge upon Shumla, and make it an important strategic place. It manufactures slippers, clothing, copper wares, and silks. Pop. 23,000.

Shuna, an Argyllshire island, 1 mile SW. of the entrance to Loch Melfort. Area, 1¾ sq. m.; height, 200 feet; pop. 8.

Shusha, a town of Russian Transcaucasia, 65 miles SSW. of Elizabethpol. Pop. 32,040, who make celebrated carpets and coarse silk goods.

Shuster (*Shoos'ter*), a city of Persia, on the Karun, 250 miles W. by S. of Ispahan; pop. 18,000.

Sialkot (*See-al-kote'*), a town in the Punjab, near the Chenab's left bank, 72 miles N. by E. of Lahore, with manufactures of paper and cloth. The old fort, gallantly held by a few Europeans in 1857, is now converted into public offices; there are also Sikh and Mohammedan shrines, the Punjab military prison, a public garden, &c. Population, 60,200, including the cantonment, 1 mile N.

Siam' (native name *Muang Thai*, 'the Land of the Free') occupies the central portion of the Indo-China Peninsula, stretching from 4° in the Malay Peninsula to Chiengsen (20° 22′ N.), on the river Mekong, or a distance of nearly 1100 miles; greatest breadth, 750 miles. The main body of it lies between Burma (British), the Shan States (partly Siamese), and French Indo-China (Cambodia and Annam). In 1893 the French advanced their Annamese frontier to the Mekong, as far north at least as 18° N. The territory ceded to France was about 50,000 sq. m., with a pop. of 100,000. The area of the kingdom of Siam is now about 250,000 sq. m. (60,000 in the Malay peninsula); and the pop., which is concentrated principally in Bangkok and the Menam Valley, is estimated at about 12,000,000, of whom possibly 3,000,000 are Chinese. The Malay Peninsula excluded, the plain of the Menam Valley, the adjoining eastern coast, and the Korat plateau (from 400 to 1000 feet high) occupy the greater portion of the country. These plains are fringed by hills up to 5000 feet high, and the north generally is hilly. The Menam, with a course of 600 miles, is the principal river. Two other streams, the Meklong and the Bangpakong, flow into the Gulf of Siam. The Mekong (q.v.) has the main part of its course in or along Siamese territory, but navigation for vessels of any size is impeded by rapids. The rivers form the principal trade-routes, and in and around Bangkok there is an intricate network of canals. Only the land adjoining the rivers is under cultivation, and the greater portion of the country is covered by pathless jungle. The climate is considered healthy for the tropics; low malarial fever is the most frequent illness amongst the European community. There are two seasons—the wet and the dry, the former lasting from May till November. The average temperature for the year is 81°; the greatest heat in April should not exceed 94° in a well-made house.

The chief production of Siam is rice. It is the national food, and its export forms the great source of wealth of the country, making two-thirds of the total exports, which amount to between £4,000,000 and £5,000,000. The other principal exports are teak-wood, obtained in the north, pepper, salt, and dried fish, cattle (for consumption in Singapore), and til (sesame) seed. Goods are imported to the value of about £3,500,000, comprising treasure and gold-leaf, cotton manufactures and China goods, jewellery, and opium. The foreign trade is mainly with Singapore, Hong-Kong, and Britain. The principal commerce of the capital is in the hands of Chinese; the labour market is supplied by Chinese coolies, and the best tradespeople and artisans are Chinese. The native Siamese confine themselves to agriculture, fishing, boating, and

petty hawking, and many are simply idle hangers-on of the nobility. In addition to the exports, the country produces hemp, tobacco, cotton, coffee, cardamoms, and tropical fruits.

The wild elephant, tiger, bear (in the north), wild pig, deer, monkey, and squirrel abound in the distant jungles. Tame elephants are employed. Specimens of the famous 'white elephant' are kept in the courtyard of the royal palace at Bangkok, but are not regarded with any special veneration. Crocodiles are found at the mouths of the rivers. The python, cobra, reptiles of various kinds, mosquitoes, ants, fireflies, and tropical insects are plentiful. There are many species of birds, and the rivers and coast swarm with excellent fish. Gold has been produced in Siam from time immemorial; and argentiferous copper also is found. Alluvial tinmines are worked by Chinese in the Malay peninsula, and iron is turned out in the north by native smelters. Rubies and sapphires are found in the Chantaboon district (occupied by France in pledge of the fulfilment of the treaty of 1893). The only manufactures are coarse cloth and silk, rough paper made from bark, water-jars, and coloured tiles for the roofs of temples.

Pure Siamese are estimated to number only a third of the total population. The north and east are occupied by Laos or Shans, and besides the Chinese there are numbers of immigrant Burmese, Indians, Malays, and Cambodians. The character of the Siamese is essentially peaceful and indolent; they are very social, vain, and fond of bright dresses and jewellery. The houses are built of wood or bamboo, thatched with the leaf of the attap palm, and are raised a few feet from the ground on piles. Both sides of the river at Bangkok (q.v.) are lined for several miles with houses floating on wooden pontoons or on bundles of bamboo. Every Siamese, with certain exceptions, is bound to give the state free labour for about three months in the year, and to supply travelling officials with provisions and means of transport. The religion of the country is Buddhism. The sacred books are written in Pali in the Cambodian character. The old system of first and second kings has been abolished. The legislative power is vested in the king, in conjunction with a council of ministers and a council of state. There is a small permanent army, and the navy consists of a few tiny gunboats. The revenue of the country averages about £2,500,000, and includes £870,000 from the farmers of the sale of opium and spirits, and the keepers of gambling and pawnbroking houses; £1,086,000 from taxes on forests and mines, posts, telegraphs, and railways, capitation tax, land-tax, and fisheries, &c.; and £275,000 from customs. Since 1890 the government has made many reforms in administration. The civil list has been put on a definite footing; taxation has been lightened and simplified. Sanitation, education, and the administration of law and justice are all greatly improved. Railways are being extended (330 miles were open in 1905); the postal and telegraph systems have been developed; Bangkok has a telephone exchange and electric lighting and tramways. Education, carried on by the priests, is supplemented by schools for the teaching of English. Foreigners are subject only to their own laws, administered by consuls.

Ayuthia (q.v.), founded in 1350, remained the capital till 1768, when it was taken by the Burmese, Bangkok next year becoming the capital. Cambodia was conquered in 1532. In 1893 the French dictated a treaty granting themselves a large slice of Siamese territory. See books by Pallegoix (1854), Bowring (1857), Colquhoun (1885), Coit (1886), Hallett (1889), J. Anderson (1890), Grindrod (1896), Warrington Smyth (1898), Young (1900), Vincent (1900), and Campbell (1902).

Siang-tan, a great trading mart of central China, in the province of Hû-nan, on the Siang River, which flows through the Tung-ting lake into the Yang-tsze. Specially it is the centre of the drug trade. Pop. 100,000 or more.

Sibe'ria (*Sibir*) was originally heard of as a Tartar stronghold on the Irtish, captured by the Russians in 1580; and gradually widening in scope, the name is now applied to the vast territory belonging to Russia in northern Asia, lying between the Arctic Ocean and the Chinese empire, and extending from the Urals to the Sea of Japan. It covers an area of 4,833,500 sq. m.—nearly forty times as great as that of the United Kingdom—and has a population of 5,727,000. Its natural divisions, broadly corresponding to the administrative ones, are: *West Siberia*, including the governments of Tobolsk and Tomsk, as also parts of Perm; *East Siberia* (Yeniseisk, Irkutsk, Yakutsk, and Transbaikalia); *Kamchatka;* and the *Amur region*, which includes the governments of Amur, Usuri, the maritime province, and part of the island of Saghalien. The great plateau of eastern Asia enters Siberia to the east of Lake Baikal, where it is 3000-4000 feet high and 1300 miles wide, and stretches thence with a gradually decreasing height and width towards Behring Strait. It is fringed on the W. by the Altai (q.v.) and Sayan mountains, and on the E. by the Stanovoi Mountains. The border-ridges of the plateau attain heights of from 7000 to nearly 11,000 feet, but very few of them penetrate into the region of perpetual snow. A broad alpine belt fringes the plateau to the NW., thickly clothed with forests, and containing several auriferous districts. Another belt of high plains (1700-2500 feet high) spreads all along the base of the alpine belt. The whole of West Siberia, between these high plains and the shores of the Arctic Ocean, is an immense lowland, whose southern part—the prairies of Ishim, Upper Tobol, and Baraba—is extremely fertile, and covered with a luxurious grass-vegetation, with masses of deciduous forest. This is even now the granary of Siberia, and exports grain to the mines of the Urals. Nearly one-third of the population of Siberia is gathered on those prairies, and is more thoroughly Russian than in many parts of European Russia. Farther north, especially between the Obi and the Irtish, begin the *urmans*, or immense marshes, which cover nearly 100,000 sq. m., clothed with thickets and meagre forests, in which some 30,000 Ostiaks, Voguls, and Samoyedes find scanty means of existence in hunting and fishing. Farther north still begin the *tundras*, which extend along the Arctic seaboard as far as Kamchatka, and cover an aggregate area of some 450,000 sq. m., with a really terrible climate. Nevertheless some 50,000 human beings wander over these inhospitable tracts with reindeer and dogs. Of the plateau which fills vast tracts in East Siberia, the upper terrace, 3000 to 4000 feet high, is quite unsuitable for agriculture, but its lower terrace (2500 to 3000 feet), especially in Transbaikalia, is good for tillage and cattle-breeding, and is peopled by both Buriats and Russians; the smaller chains of mountains are rich in gold, copper, iron, and silver. The high plains (1500 to 2000 feet), watered by the Zeya and its tributaries, and covered with a very fertile soil

and excellent oak forests, are the richest part of the Amur territory, and are being rapidly occupied by immigrants, chiefly sectaries, from Russia, who already number about 60,000. Khabarovka, at the junction of the Usuri with the Amur, is the capital of the territory; the excellent harbour of Vladivostok is the terminus (since the loss of Port Arthur in 1905) of the Trans-Siberian railway (over 6500 miles from St Petersburg, and costing over 50 millions sterling). See Amur, Maritime Province, Saghalien, Kamchatka, and New Siberia. The rivers of Siberia are of immense value for navigation. They all rise in the plateau, and each of them receives a tributary only smaller than itself—the Obi, the Irtish; the Yenisei, the Tunguska; and the Lena, the Vitim; whilst the Shilka and Argun unite to form the Amur. Communication in summer by sea has been established between Western Europe and the Obi and Yenisei, on which, as on the Lena, steamers ply, save when they are frozen. On the Amur steamers ply for a distance of 2000 miles. Overland communication is maintained by means of post-stations between all the chief towns—the great highway from Russia to the Pacific passing through Tiumen, Omsk, Tomsk, Krasnoyarsk, Irkutsk, Tchita, Blagoveschensk, and Khabarovka. The chief lake is Baikal (q.v.).

Siberia fully deserves its reputation of being the coldest country of the world; but it has a much warmer summer than is generally supposed. In moderate latitudes July has an average temperature of from 61° to 67°, and 69° on the Middle Amur. The hot summer and a cloudless, bright sky favour vegetation, and melons are grown in the open air in the steppes of Minusinsk and Irkutsk. But the summer is short, as a rule, and cold weather sets in very rapidly. Night frosts are usual in September, and in November all rivers are frozen. In November, even in South Siberia, the mercury of the thermometer is occasionally frozen, and in December and January it remains frozen for weeks. In the far north the cold is really terrible; temperatures as low as − 75° and − 85° F. have been measured at Verkhoyansk and Yakutsk. The population of Siberia is very unequally distributed; there are from 20 to 40 inhabitants to the square mile in parts of South Tomsk and Tobolsk, while the deserts of the far north are almost uninhabited. The total population, which was less than 1,000,000 in 1800, has now attained over 5,720,000, and it is yearly increased by some 50,000 Russian immigrants. The Russians in Siberia proper number over 3,800,000. They occupy the best parts of the territory in the south, as well as the valleys of the chief rivers. The indigenous population hardly numbers now 700,000; the Ugrian stock is represented by the Voguls, the Ostiaks, and the Samoyedes on the slopes of the Urals. Various Turkish tribes inhabit the slopes of the Altai and Sayan mountains; the Yakuts number 200,000. The Mongolian race is represented by the Kalmucks (about 20,000 in the Altai), the Buriats (250,000) around Lake Baikal, and the nomadic Tunguses (about 50,000) in the mountains of East Siberia and the Amur region. Nearly 15,000 Manchurians and Chinese stay on Russian territory of the Amur and Usuri; and 3000 Coreans are settled around the Gulf of Peter the Great. Finally, in the north-east there are tribes akin to the Eskimos, including the Tchuktchis, the Koryaks, and the Kamchadales. On the Lower Amur we find the Gilyaks, and in the island of Saghalien the Ainos. The Russians belong to the Greek Orthodox faith, or to some of its nonconformist sects. Most Turkish tribes are Mohammedans. The Buriats profess Buddhism; and most of the Ugrian and Finnish peoples are Shamanists. The rapid increase of population which has taken place since 1875 is chiefly due to free immigration. The exiles transported to Siberia have contributed but little to the settled population. The facilities afforded by the Siberian railway have given an extraordinary impetus to dairy-farming in Siberia. From 1898 to 1904 the dairies increased from 140 to 2630 (250 of them co-operative), and the produce from 48,360 cwt. to 681,857 cwt. It is estimated that there are 25 million cows, giving milk rich in butter, of which about 80 million lb. are exported annually, two special lines of steamers from Reval and Riga carrying it in refrigerators to London. Agriculture and cattle-breeding are extending; several large districts now produce more corn than is wanted for the population, and export some. Hunting continues to be profitable in some parts. Sables, Arctic foxes, and gray foxes have become rare; squirrels, common foxes, bears, deer, antelopes, some ermines and a few beavers in the north-east, are still obtained. Fishing is extensively carried on in lakes and rivers. Tiumen builds steamers. In 1860–1900 from 400 to 600 cwt. of gold was annually obtained in East Siberia, and 50 cwt. in West Siberia, exclusive of Perm. Silver is extracted in the Altai; lead in the Altai, and in Nertchinsk; copper in Altai; and much iron. A university has been opened at Tomsk (1888). The Russians began the conquest of the territory in 1580, when a band of Cossack robbers under Yermak subdued the Tartars on the Tobol River. New bands of Cossacks, traders, and hunters supported by the Moscow government, and followed by dissenters flying from religious persecution and peasants escaping from serfdom, poured into Siberia during the next two centuries. The estuary of the Amur was discovered in 1849, and a military post established at the mouth of the river in 1851. The left bank of the Amur and the right bank of the Usuri were annexed in 1853–57. Nordenskiöld first circumnavigated Asia in 1878–79. See the relevant parts of Reclus, *Géographie Universelle* (trans. by Keane), and of *Picturesque Russia;* Seebohm, *Siberia in Asia* (1882); Lansdell, *Through Siberia* (1882); and books by Kennan (1891), Wright (1903), and De Windt (1904).

Sib'i, a pass, town, and district in British Beluchistan, traversed by the Sind and Pishin Valley Railway. Pop. of district, 14,000.

Sicily, the largest, most fertile, and most populous island in the Mediterranean, is separated from the mainland of Italy by the deep, but narrow, Strait of Messina (q.v.). Its shape resembles a triangle (whence the Greeks called it *Trinacria*, the 'Three-cornered'). Area, 9828 sq. m. (one-third that of Scotland); pop. (1881) 2,927,901; (1901) 3,529,266. Capo Passaro is only 56 miles from Malta; and Capo Boco only 80 from Cape Bon in Africa. Sicily is for the most part a plateau 500 to 1900 feet above sea-level, and traversed throughout its northern half by a chain of mountains reaching 6467 feet, and sending spurs to the south. The north and east coasts are steep and rocky, the south and west generally flat. None of the rivers is navigable. The only extensive plain is that of Catania, out of which Etna (q.v.) rises to 10,850 feet, with a base of 400 sq. m. in extent. The climate is warm and equable, especially on the north and east coasts; the mean temperature ranges from 45° F. in winter

to 79° in summer. Only for brief periods does the dry parching sirocco drive the thermometer up to over 100°. Relics of the primeval forests of oak and ilex are left; in some districts beeches clothe the mountains to their very summits, and chestnuts, pines, and enormous holly-trees flourish; but wide tracts have been reduced to absolute sterility by the destruction of the woodlands. Malaria is endemic in many parts. The soil is wonderfully fertile, and vegetation everywhere luxuriant. Dwarf-palms abound, and dates, Indian figs, agaves, prickly pears, oranges, lemons, olives, almonds, pomegranates, mulberries, and grapes are all largely grown. Sicily's wheat still represents a seventh of that of all Italy; it sends out two-thirds of Italy's wine. Of 'green fruit' (lemons, oranges, &c.) it yields nearly nine-tenths of all the Italian crop, and sends large quantities to the United States and to Britain; and sumach, for tanning, is exported to the value of nearly a million sterling.

After agriculture, the production of sulphur is the great resource of Sicily. There are some 300 mines in the island, and 350,000 tons have been exported in a year; but the export has declined. The rich deposits of rock-salt are scarcely worked. The sardine and tunny fisheries are productive; the coral-fishery has greatly declined. Amber is worked in Catania. Manufactures are of little consequence—some machinery, cement, crockery, gloves, macaroni, and soap. Commerce is mainly in the hands of English, Germans, and Swiss. Trade is much hampered in the interior by the scarcity of good roads; and there are but 650 miles of railway.

As a consequence of the successive foreign settlements on the island, the population is rather a conglomerate one; in the east the Greek element prevails, and the people are superior to those in the west, where Arab blood is strongest. The general dialect of the island differs markedly from that of the mainland. The country people are miserably poor and discontented; and the island was put under the state of siege in 1893–94. The results of this measure were not too satisfactory, for homicides, robberies, and thefts are very frequent, though brigandage on the grand scale has been put down. The maffia and other secret societies flourish, and the vendetta is popular. This state of things is largely to be traced to the low rate of wages and the excessive taxes, and to the deficient administration of justice; the two former causes induced extensive emigration to America. The people are very illiterate, though nominally education is free and compulsory, and there are many schools and academics, and universities at Palermo, Messina, and Catania, the principal towns of the island.

The earliest inhabitants of Sicily were the Sicani, amongst whom the Aryan Siculi from the mainland settled in the 11th century B.C. The Phœnicians made many settlements; but the real civilisers of Sicily were the successive shoals of Greek immigrants from the 8th to the 6th century B.C. The 'tyrants' of Syracuse bore the brunt of the struggle with the Phœnicians, and triumphed (367 B.C.). But the Romans appeared in the 3d century, and by 210 B.C. the island was a Roman province. In the 9th century A.D. it was conquered by the Saracens, in the 11th by the Normans, and in the 12th became a part of the empire. Charles, Count of Anjou, acquired it in 1264, but the French domination was put an end to by the rising and massacre known as the Sicilian Vespers in 1282. The island was connected with the crown of Aragon, and then closely associated with Naples (q.v.) as part of the 'kingdom of the Two Sicilies,' incorporated with Italy in 1860.

See Mrs Elliott's *Diary of an Idle Woman in Sicily* (1881); and histories of Sicily by Freeman (vols. i.–iv., 1891–94), and the shorter one in 'Story of the Nations Series' (1892).

Sicyon (*Siss'i-on;* Gk. pron. *Sik-ee-oan*), an important city of ancient Greece, stood 2 miles S. of the Corinthian Gulf and 7 NW. of Corinth. Its scanty remains have been excavated by the American School at Athens since 1887.

Sidi-bel-Abbès, a town of Algeria, 48 miles by rail S. of Oran. Pop. 25,750.

Sidlaw Hills. See FORFARSHIRE.

Sidmouth (*Sid'muth*), a watering-place of S. Devon, 14 miles by road, but 20¾ by a branch-line (1874), ESE. of Exeter. It lies in a narrow valley at the mouth of the little Sid between the red sandstone cliffs of High Peak (513 feet) on the west, and Salcombe Hill (497) on the east. Its esplanade is protected by a sea-wall (1838), 1700 feet long; and its parish church (1259; almost rebuilt 1860) has a stained west window inserted by Queen Victoria in memory of her father, the Duke of Kent, who died here in 1820. Sidmouth then was the favourite resort that it has once more become since the opening of the railway; its prosperity as a port, which in Edward III.'s day sent two ships to the siege of Calais, passed away through the silting up of the harbour. The climate is mild, the rainfall the least in Devon, and the beach yields agates and chalcedonies. Pop. 4200.

Si'don (Heb. *Zidon*), anciently a city of Phœnicia, situated on the east coast of the Mediterranean, half-way between Tyre and Beyrout. The present town of Saida, which was stormed by the allies under Napier in 1840, has 10,000 inhabitants, of whom 7000 are Mohammedans.

Sidra, GULF OF. See SYRTIS.

Siebenbürgen (*Zeebenbeer'gen, g* hard; 'Seven Castles'), the German name of Transylvania (q.v.).

Siebengebirge (*Zeebengebeer'geh, g's* hard; 'The Seven Mountains'), in Rhenish Prussia, on the right bank of the Rhine, 20 miles above Cologne. The highest is the Ölberg (1522 feet); but the most famous is the Drachenfels (q.v.). They are crowned with ruins of castles of the 12th century.

Siedlce (*Seed'l-tsay*), a town of Poland, 57 miles by rail E. by S. of Warsaw. Pop. 25,500.—Area of *province*, 5535 sq. m.; pop. 775,320.

Siegen (*Zee'gen, g* hard), a Prussian town of Westphalia, on the Sieg, 47 miles E. of Cologne. It manufactures leather, paper, linen, soap, iron, copper, lead, zinc, &c., having many mines in the vicinity. Rubens was born here. Pop. 22,111.

Sienna (Ital. *Siena;* anc. *Sæna Julia*), a walled city of Italy, 60 miles by rail S. of Florence. The streets are narrow, winding, and steep, with many mediæval features. The archiepiscopal cathedral, one of the finest examples of Gothic in Italy, was begun early in the 13th century; in 1339 it was intended to build a vastly larger church. But after the plague of 1348 the idea was abandoned, and only ruined walls indicate the ambitious design. The magnificent west front (1284–1357) of three arches is partly Pointed, partly Round-arched, and is enriched with red, white, and black marbles, gilding, and many sculptures. A fire did considerable damage to the exterior in 1890. A lofty square campanile stands on the south side. The art treasures of the interior embrace

the wonderful octagonal pulpit by Niccolo Pisano (1268); the marble mosaic floor; the series of frescoes commemorative of the life of Pope Pius II., by Pinturicchio, in the Piccolomini Library; the celebrated font (1428), with bas-reliefs by Donatello, Della Quercia, and other sculptors, in the church of San Giovanni, situated beneath the cathedral. The churches of Sant' Agostino, the Servites, San Domenico, and some others contain pictures by Sodoma, Matteo di Giovanni, and other Siennese artists. The greatly venerated church of St Catharine (a native of this city) stands on the site of her former dwelling. The municipal palace (1288–1309), a magnificent Pointed Gothic edifice of brick, has a lofty tower (1325), and contains paintings by Siennese artists. There are noble palaces, as the Piccolomini, Tolomei, Monte de' Paschi, Loggia del Papa, some dating from the 13th century. The more noteworthy of the public institutions are the university (1203), with faculties of medicine and law (less than 250 students), the state archives and the town library; and an Institute of Fine Arts (1816), with many fine pictures by masters of the Siennese school. The city has also given birth to a host of other illustrious men, as Æneas Sylvius (Pope Pius II.), Bernardino Ochino, and the two Socini (founders of Socinianism). In July and August celebrated horse-races are held in the market-place. Pop. 28,700.

Sierra Leone (*See-er'ra Le-o'nay*, 'Lion Mountain'; usu. *Le-oann'*), a British colony on the west coast of Africa, stretching 180 miles along the coast, from the French colony of Rivières du Sud in the north to Liberia in the south, with an area of 4000 sq. m.; pop. 100,000 (many of them descendants of liberated slaves). This includes the Los, Sherbro, and other islands. In 1896 a hinterland extending inland about 180 miles, with an area of about 30,000 sq. m. and a pop. of about 1,000,000, was proclaimed a protectorate. The name Sierra Leone is more strictly confined to a peninsula, 26 miles long by 12 broad, and rising to 3000 feet, that projects NW. just south of the Sierra Leone (the river Rokelle) estuary. The climate is very hot and very moist, and the vegetation dense. The thermometer varies between 64·5° and 100·5° F. The low-lying districts are infested with a good deal of fever and malaria; but the higher parts are comparatively healthy. Sierra Leone has long been notorious as the 'White Man's Grave;' but the title would be just as appropriate to any of the adjacent coast-regions of that part of Africa. Coffee, cocoa, tapioca, ginger, maize, cassava, and cotton are grown; but the bulk of the exports (groundnuts, kola-nuts, benni-seed, ginger, hides, palm-oil and kernals, india-rubber, and gums) come from the interior, and are exported to the annual value of from £330,000 to £400,000. The imports (clothing, provisions, wine and spirits, iron and steel goods, haberdashery, gunpowder, tobacco &c.), mostly from England, range from £350,000 to £550,000. The capital is Freetown (q.v.), now a fortified naval depot and coaling station. The colony has a frontier police of 290 men, besides part of the West India regiment (400 men). Fouray Bay College (1828), near Freetown, belongs to the Church Missionary Society, and was affiliated in 1876 to Durham University. Sierra Leone gives title to an Anglican bishop, and contains many Methodists, besides a large body of Mohammedans. The governor is assisted by an executive council, and a (nominated) legislative council. The revenue is from £168,000 to £230,000, leaving a surplus; the debt has been paid off. The coast was discovered by the Portuguese in 1462. Repeated efforts to establish here a colony of freed slaves had scant success, and in 1807 the company transferred their rights to the crown. See Silthorpes' *History* and his *Geography* of the colony (both in 1881), and Banbury's *Sierra Leone* (1888).

Sierra Madre (*See-er'ra Mah'dray*, 'Mother Chain'), a general name for the mountains in Mexico that stretch northward from about Guadalajara to Arizona, forming the western wall of the plateau, and separating Chihuahua from the maritime states of Sinaloa and Sonora.—The name has often been extended to include the central and eastern ranges of the Cordilleras.

Sierra Morena (*See-er'ra Mo-ray'na*), a broad mountain-ridge in the south of Spain, forming the southern edge of the great central plain. It separates the basins of the Guadiana and Guadalquivir, and ranges in height from 2000 to 5500 feet. Valuable mines of lead, silver, quicksilver, sulphur, and lignite, as at Tharsis and Rio Tinto, occur.

Sierra Nevada (*See-er'ra Ne-vâh'da*, 'Snowy Range'), a mountain-range of southern Spain, stretches east through the province of Granada to the frontiers of Almeria, is 60 miles in length, 20 to 30 in breadth, and 1060 sq. m. in area. The Pic de Velate (11,670 feet) is the highest point of the peninsula. The range receives its name from the perpetual snow which covers the highest summits (down to 11,000 feet).—(2) A range of mountains in California, forming the eastern boundary of its Great Central Valley, and extending from north-west to south-east 450 miles, until in the neighbourhood of 35° N. this and the Coast Range meet. Among the higher peaks are Mount Whitney (14,898 feet high), Mount Shasta (14,440), Mount Tyndall (14,386). The sides of the range are covered with forests, gold is found, and silver-mines have been opened on the east side. The Southern Pacific Railroad crosses the range at an altitude of 7042 feet.—(3) *Sierra Nevada de Mérida* is the principal chain of the Andes in Venezuela, rising to over 15,300 feet.—(4) *Sierra Nevada de Santa Marta* is a system in Colombia, flanking the sea, the central knot rising to peaks of from 16,400 to 17,500 feet. Copper, silver, gold, and coal are found.

Sigmaringen (*ng* as in *ring*), the capital of Hohenzollern (q.v.), on the Danube, 54 miles S. by E. of Tübingen. Its castle suffered much by fire, 18th April 1893. Pop. 4646.

Sikh States (*Seek*), in India, are fifteen protected native states of the Punjab (Patiala being the chief), the only existing representatives of the numerous states founded by the warlike and religious sect of the Sikhs, and welded into a powerful confederacy or empire by Ranjit Singh before 1839. The Sikh wars of 1845–46 and 1848–49 led to the annexation of all the Punjab by Britain, except a few small feudatories. The Sikhs amount to 7 per cent. of the population of the Punjab (q.v.), and to 2,200,000 in India.

Si-kiang (*See-ki-ang'*). See CANTON.

Sikkim, a protected state in the north-east of India, bounded N. by Tibet, W. by Nepal, and SE. by Bhotan. Area, 2820 sq. m.; pop. 60,000. The state lies on the southern slopes of the Himalayas, has mountains reaching to 24,000 feet and mountain-passes as high as 16,000. The maharaja, who resides at the village of Tumlong, ceded Darjeeling to the British in 1835, having already acknowledged their 'protection' in 1816. In 1888 the erection of a fort under Tibetan influence led to a British expedition against Sikkim. —Darjeeling (q.v.) is often called British Sikkim.

Sikrol, or SECROLE, a W. suburb of Benares.

Silbury Hill. See AVEBURY.

Sil'chester, a village in the extreme north of Hampshire, 7 miles N. of Basingstoke, famous for the remains of the ancient Romano-British town of *Caer Segeint*, called by the Romans *Calleva*, and by the West Saxons *Silceastre*. The chief visible remains are the amphitheatre, 50 yards by 40, and the walls, 2760 yards in length; excavations have shown the foundations of a basilica, the forum, a temple, baths, &c.; and coins, seals, rings, an ogam inscription, and much broken pottery have been found. See a work by Plummer (1879).

Sile'sia, a province of SE. Prussia, having Brandenburg and Posen on the N., the Polish provinces of Russia and Austria on the E., and Austrian Silesia, Bohemia, and Saxony on the S. Area, 15,557 sq. m.; pop. (1875) 3,863,699; (1900) 4,668,857, including more than 900,000 Poles, 65,000 Bohemians (Czechs), and 35,000 Wends. By religion 2,569,360 are Catholics and 2,042,600 Evangelical Protestants. The province is drained almost entirely by the Oder (navigable from Ratibor), which traverses it from SW. to NW. There are extensive marshy and sandy tracts, on which large forests grow; but between the Oder and the Sudetic Mountains in the SW. the soil is exceptionally fertile. In the SE. is one of the most productive coal-mining regions of Prussia; zinc and lead are also extracted. In point of industrial activity Silesia ranks high amongst the provinces of Prussia. Breslau is the capital. Early in the 10th c. Silesia, except the extreme western districts, was under Polish dominion, and in the 14th its dukes became vassals of Bohemia. In 1742 the duchies were divided pretty much as they now are, Prussia getting the lion's share; and the Seven Years' War (1756–63) confirmed Frederick the Great in possession.

Silesia, AUSTRIAN, a duchy of the Austrian empire, bounded by Prussian Silesia, Moravia, and Hungary. Area, 1987 sq. m.; pop. (1880) 565,475; (1900) 680,422. Subsidiary chains of the Carpathians and Sudetic Mountains diversify the southern and western frontiers; the duchy is watered by the systems of the Vistula (in the east) and the Oder (west). Mining (coal, iron, sulphur, &c.) and manufacturing industries flourish. The principal town is Troppau.

Silistria (anc. *Durostorum*), a town of Bulgaria, on the right bank of the Danube, here 1½ mile wide, 70 miles NW. of Varna. Long a formidable Turkish fortress, it has been repeatedly besieged by the Russians (as in 1828–29). On the outbreak of the Crimean war the Russians laid siege to it with 60,000 to 80,000 men, but were compelled to retreat after thirty-nine days. In 1877 again it successfully defied the troops of the czar. Pop. 12,500.

Sillery (*Sil-ler-ee'*), a village (pop. 400) near Rheims, famous for its champagne.

Sil'loth, a seaport and watering-place of Cumberland, on the Solway Firth, 20 miles W. of Carlisle. Prior to the opening of the railway in 1856 it was a mere hamlet, but it is now of growing importance, with good docks opened in 1857–85. Silloth, which commands a fine view, is much resorted to for sea-bathing, the climate being mild and salubrious, with a mean annual temperature of 49° 1′, the same as Worthing, and only 1° below Torquay. Pop. 2600.

Silsden, a town in the West Riding of Yorkshire, 4 miles NNW. of Keighley, with worsted and nail manufactures. Pop. 4300.

Sil'verton, a mining centre in the extreme west of New South Wales, only 18 miles from the border of South Australia, and 822 W. by S. from Sydney. It is connected with the railway system of South Australia. Silver, copper, tin, and gold are mined. Broken Hill, one of the largest silver mines in the world, is 17 miles SE.

Siman'cas, a village of Spain, 7 miles SW. of Valladolid, where the national archives have been kept since 1563. There are more than 30 million documents in all. Pop. 1231.

Simbirsk', a town of Russia, on the Volga's right bank, 350 miles SE. of Nijni-Novgorod. Rebuilt since its destruction by fire in 1864, it has two Greek cathedrals, a large trade, and a famous annual fair. Pop. 43,300.—Area of *government*, 19,100 sq. m.; pop. 549,460.

Sim'coe, LAKE, in Ontario, between Georgian Bay and Lake Ontario, 30 miles long and 18 broad.

Simferop'ol, a town of Russia, in the Crimea, 50 miles by rail NE. of Sebastopol. From 16,000 in 1850 its pop. had by 1905 grown to near 50,000.

Simla, since 1864 the summer headquarters of the British government in India, stands on the southern slopes of the Himalayas, in a beautiful situation, 170 miles N. of Delhi. Its first house was built in 1819, and it was first visited officially by the Indian government in 1827. There are two viceregal residences (the newer one built in 1886), handsome government buildings (1884), and a fine town-hall (1886). Pop. 14,848 in winter, and considerably more in summer.—The name Simla Hill States is given to twenty-three small native states (area, 6569 sq. m.; pop. 502,853).

Simonoseki. See SHIMONOSEKI.

Simon's Town (pop. 5000), on Simon's Bay. See CAPE COLONY.

Simplon (Fr. pron. *San^plon^'*; Ital. *Sempione*), a Swiss mountain-pass (6594 feet high), in the E. of the canton of Valais. The Simplon Road (1800–06; cost, £720,000), one of the greatest engineering achievements of modern times, leads over a shoulder of the mountain from Brieg in Valais to Domo d'Ossola (41 miles) in Piedmont. It is carried across more than 600 bridges, over numerous galleries cut out of the natural rock or built of solid masonry, and through great tunnels. Close to the highest point is the New Hospice (opened in 1825), one of the twenty edifices on this route for the shelter of travellers. In 1898–1906 a new double tunnel (12½ miles in length) was constructed, its Swiss terminus at Brieg and the Italian one at Iselle, costing £2,800,000.

Sinai (usu. *Sī'nay*; properly *See'nī*), the sacred mountain on which Moses received the tables of the Ten Commandments, is an individual peak in a vast rocky mass that almost fills the peninsula of Sinai. This stern, treeless peninsula is situated on the north-west of Arabia, between the Gulfs of Suez and Akaba, and shut in on the north by the desert. In this mountain-mass there are three separate mountains clearly distinguishable—Mount Serbal (6750 feet); Jebel Katherin or Mount St Catherine (8540 feet), lying south-east of Serbal; and Umm Shomer (some 8000 feet). Jebel Katherin has two well-marked peaks, a northern one called Horeb and a southern called Jebel Musa (Mountain of Moses)—the latter pointed out by tradition as the scene of the Hebrew law-giving. At its foot, in a ravine, stands the fortress-like monastery of St Catherine (founded probably about 527 by the Emperor Justinian). The Sinaitic peninsula and a strip of the Red Sea shore beyond Akaba belong politi-

cally to Egypt. See works by Hull (1885), Palmer (1871), Stanley (1856), and Haynes (1894).

Sinalo'a, a Pacific state of Mexico, with an area of 36,180 sq. m. and a pop. of 300,000. It contains over 100 mining districts, chiefly producing silver. The capital is Culiacan (q.v.); 100 miles NW. is the town of Sinaloa (pop. 2000).

Sinclairtown. See KIRKCALDY.

Sind, or SINDH (also *Sinde* and *Scinde*), a province of Bombay Presidency, bounded by Beluchistan, the Punjab, Rajputana, the Indian Ocean, and the Runn of Cutch. Area, 47,066 sq. m.; pop. (1901) 3,210,910. The sea-coast (150 miles) is low and flat, except the small portion beyond Karachi (Kurrachee), and is studded with mud-banks or sandhills. The province is traversed from north to south by the Indus (whence the name), and includes the whole of its delta. Along the river is an alluvial tract of great fertility, 2 to 12 miles wide, and mostly artificially irrigated. The soil contains in the north so much saltpetre, and in the south so much salt, that after the year's crops have been obtained these substances are extracted for home consumption and export. Between the Indus and its most easterly branch, the Nara, is an alluvial 'doab,' which, from want of irrigation, has become almost a desert. East of this is the Thur, a desert of shifting sand. West of the Indus the country is occupied by the desert of Shikarpur on the north, a desert not of sand, but of alluvial clay, the same as that of the delta, which only requires irrigation to render it fertile; and in the south it is traversed by the Hala Mountains. The climate is remarkably sultry and dry. The population consists of the native Sindis, with a large sprinkling of Beluchis and Afghans; the greater portion of them are Sunnite Mohammedans, and almost all are wholly engaged in agriculture. Trade is concentrated at Kurrachee (q.v.), the capital. Raw cotton, wool, and grain are the principal exports. Other towns are Hyderabad (57,790), Shikarpur, Larkhana, and Sukkur. Sind has been a British province since 1843. See five volumes by Sir R. Burton (1851–77), and A. W. Hughe's *Gazetteer of Sind* (1876).

Singanfoo', the capital of the Chinese province of Shen-hsi, on a tributary of the Hoang-ho. Pop. 1,000,000.

Singapore, a British dependency in Asia, the most important of the Straits Settlements (q.v.), consists of the island of Singapore (27 miles long, 14 broad; area, 206 sq. m.), separated from the southern extremity of the Malay Peninsula by a strait only half a mile wide at its narrowest, and of a great number of very small islands along its shores. The surface is undulating, the highest point reaching 520 feet only. The climate is hot and moist, but the soil is not particularly fertile; nevertheless the island is perpetually clothed with verdure, and yields good crops of coffee, pine-apples, cocoa-nuts, aloes, and every kind of fruit. This island was purchased in 1824 from the sultan of Johore. Pop. of island (1881) 172,993; (1901) 228,555, consisting more largely of Chinese than of Malays and Hindus.

The *capital*, Singapore (Sansk. *Sinhapura*, 'Lion City'), occupies a fine site on the SE. coast, little more than 1° N. of the equator, on the Strait of Singapore, the principal waterway for vessels trading between eastern Asia and India and Europe. This city was founded by Sir Stamford Raffles in 1819 as an emporium for British trade in the East Indies, and it has grown to be the most important trading-place in the south-east of Asia. Singapore is a picturesque, well-built town, with fine public buildings. It possesses a governor's residence, St Andrew's Protestant cathedral (1861–70), a Roman Catholic cathedral, Mohammedan mosques, Hindu temples, Chinese joss-houses, Raffles' museum (1823), the supreme law-courts, post-office (1883), hospitals, jail, barracks, and fine botanical and zoological gardens. It is defended by numerous batteries and forts, and is a naval coaling station and depot. The docks, stores, and dwelling-houses extend for 6 miles or more along the sea-front. The harbour is spacious and safe, and remarkably easy of access, with two graving-docks and an admiralty dock. The imports (£33,500,000) are mainly European manufactures, the exports (£22,500,000) the products of the East. Pop. (1824) 10,603; (1850) 50,000; (1901) 195,000.

Si-ngan-fu (also spelt *Hsi-an-fu, Se-gan*, &c.), a very ancient and famous city of China, capital of Shen-si, and in 1120 B.C. capital of the empire. Standing near the Wei, an affluent of the Hoang-ho, it has a large trade and many antiquities, amongst which are a stone with a Syriac inscription recording the establishment of Christianity here in the 7th century. Hither in 1900 the emperor and court fled from Peking.

Singbhum, one of the four districts of the division of Chota Nagpore (q.v.).

Sing Sing, since 1901 called OSSINING, in New York, on the left bank of the Hudson (here called Tappan Bay), 31 miles by rail N. of New York City. It contains villas, boarding-schools, and manufactories; but it is best known through its large state-prison (1825). The Croton Aqueduct rests here on an arch of masonry with a span of 88 feet. Pop. 7940.

Sinigaglia (*Seenigal'ya*; anc. *Sena-Gallia*), a seaport on the Adriatic coast of Italy, 16 miles by rail NW. of Ancona. It was founded by the Senonian Gauls, and colonised by the Romans 289 B.C. There are a cathedral (1787) and a ducal palace. Pius IX. was a native. Pop. 9602.

Sinope (*See-no'peh*; Turk. *Sinub*), a town of Asiatic Turkey, stands on a rock projecting into the Black Sea, 220 miles W. by N. of Trebizond. One of its two harbours is the best on the N. coast of Asia Minor; and it has ancient Byzantine walls and a ruined castle. Pop. 8000.

Sion (*See-on"*; Ger. *Sitten*), capital of the Swiss canton of Valais, in the valley of the Rhone, 16 miles NE. of Martigny by the Simplon Railway. It has three ruined castles perched on the crags above, and a 6th-century cathedral. Pop. 6447.

Sion House. See ISLEWORTH.

Siout, or ASIOOT (anc. *Lycopolis*), the chief city of Upper Egypt, stands near the Nile's west bank, 200 miles by rail south of Cairo. It has several mosques, a government palace, and an American mission school. Pop. 42,000.

Sioux City (*Soo*), capital of Woodbury county, Iowa, on the east bank of the Missouri River (here crossed by a bridge 2000 feet long), 128 miles (by rail) above Omaha and 512 W. by N. of Chicago. It has stockyards and packing-houses, railway-shops, planing and spice mills, and manufactures of linseed-oil, vinegar, flour, doors, &c. Pop. 35,000.

Sioux Falls (*Soo*), capital of Minnehaha county, South Dakota, and the largest town in the state, is on the Big Sioux River (which here falls 90 feet), 241 miles by rail SW. of St Paul. Its leading industry is the quarrying, shaping, and polish-

ing of granite. Here are the state penitentiary and school for deaf mutes, and four denominational colleges. Pop. 12,000.

Sipontum. See MANFREDONIA.

Sirajganj (*Seerajgunj*), a town in Pabna district, Bengal, near the main branch of the Brahmaputra, 150 miles NE. of Calcutta. Pop. 23,267.

Sir-daria. See JAXARTES.

Sirhind, the north-eastern part of the plain in the Punjab, between the Jumna and the Sutlej, watered by the Sirhind Canal (main branch finished in 1882) and its branches.

Sir-i-kol, a great lake of the Pamir (q.v.).

Sir-i-pul (*Seer-ee-pool'*), a river and a city (75 miles NE. of Maimana; pop. 15,000) in Afghan Turkestan.

Sis'tova, a town of Bulgaria, on the Danube's S. bank, 35 miles above Rustchuk. Pop. 12,482.

Sitapur (*Seetapoor*), a town and cantonment in Oudh, 52 miles NW. of Lucknow. Pop. 21,380.

Sitka, the capital of Alaska, is on the west coast of Baranof Island, a deep harbour dotted with islands in front, and snow-clad mountains rising behind. Pop. 1400, of whom about 400 are whites.

Sittingbourne, a brick-making market-town of Kent, on Milton Creek, 11 miles ESE. of Chatham and 45 of London. In olden days it was a great halting-place for Canterbury pilgrims and for kings and others on their way to the Continent. Pop. 9100.

Sivas (*Seevas;* anc. *Sebastcia*), a city of Asiatic Turkey, on the Kizil Irmak (anc. *Halys*), 170 miles SW. of Trebizond. Pop. 40,000.

Siwalik Hills. See HIMALAYA.

Siwash, or PUTRID SEA. See CRIMEA.

Skagen (*Skäh-gen, g* hard), CAPE, or THE SKAW, the most northerly point of Jutland, Denmark.

Skager-Rak, an arm of the North Sea, between Denmark and Norway.

Skagway, a port (settled in 1897) of southern Alaska, at the mouth of a river falling into the Lynn Canal. It is the terminus of the White Pass and Yukon railway. Pop. 5000.

Skaptá. See ICELAND.

Skegness, a watering-place of Lincolnshire, 22 miles NE. of Boston by rail. Pop. 2140.

Skelligs, three rocky islands on the south-west coast of Ireland, 10 miles SW. of Valentia. On one of the rocks is a lighthouse, and on Great Skellig (710 feet high) a ruined monastery.

Skelmanthorpe, a town of Yorkshire, 6 miles SE. of Huddersfield. Pop. 3332.

Skelmersdale, a town of Lancashire, 4½ miles from Ormskirk. Pop. 6000.

Skel'morlie, a watering-place of N. Ayrshire, on the Firth of Clyde, S. of Wemyss Bay, and 31 miles W. of Glasgow. Pop. 1100.

Skelton, a town in the North Riding of Yorkshire, 3 miles NE. of Guisborough. Pop. 13,240.

Skene, LOCH. See DUMFRIESSHIRE.

Skerries, a name applied to various groups of rocky islets round the British coasts, especially one 2 miles off the NW. coast of Anglesey, with a lighthouse. See also PENTLAND FIRTH.

Skerries, an Irish seaport, 18 miles N. by E. of Dublin. Pop. 1720.

Skerryvore', the chief rock of a reef which lies 10 miles SW. of Tyree and 24 W. of Iona. This reef, stretching 8 miles WSW., caused the loss of one ship annually in 1804–44. In 1838–44 a lighthouse, 138½ feet high, was built here.

Skibbereen', a market-town, 54 miles SW. of Cork. Pop. 3200.

Skid'daw, a mountain (3054 feet) of Cumberland, flanking Bassenthwaite Water on the E., 5½ miles NNW. of Derwentwater and Keswick.

Skien, a port of Norway, 62 miles SW. of Christiania, Ibsen's birthplace, with a brisk trade. It was burnt down in 1886. Pop. 12,000.

Skipton, a market-town in the West Riding of Yorkshire, in the broad and fertile valley of the Aire, 26 miles NW. of Leeds. The capital of Craven, it is a gray-looking place, with manufactures of cotton and woollen goods, and is an important station on the Midland line. The castle, once the chief seat of the Cliffords, is of two periods, the reigns of Edward II. and Henry VIII., and is partly a ruin, partly inhabited. The church has some interesting monuments; and there are also a public hall (1861), a grammar-school (1548; rebuilt 1876–77 at a cost of £12,000), and a saline spring. Bolton Abbey (q.v.) is 6 miles distant. Pop. (1851) 4962; (1901) 11,986. See Dawson's *History of Skipton* (1882).

Skowhe'gan, a town of Maine, capital of Somerset county, on the Kennebec (which here has a fall of 28 feet), 37 miles by rail NNE. of Augusta. It manufactures flour, oil-cloth, axes, paper, woollens, leather, &c. Pop. 5068.

Skye, an island of Inverness-shire, the second largest of the Hebrides, is separated from the mainland by Kyle Rhea, a channel ¼ mile wide at the narrowest. Its length is 49 miles, its breadth varies from 7 to 25 miles; but on account of inlets no point is above 4 miles from the sea. Area, 643 sq. m.; pop. (1841) 23,082; (1901) 13,883. Skye is for the most part mountainous and moory, but it contains some arable and pasture land, and one considerable plain, formerly the bed of a lake, in Kilmuir parish. The principal mountains are the serrated Coolin (not Cuchullin) Hills, which stretch irregularly north-eastward, terminating in the sharp peak of Sgurr-nan-Gillean (3167 feet) above Sligachan. Another peak, Sgurr Dearg, is actually higher (3234 feet). The most famous scene in this region is Coruisk (1½ × ¼ mile), the 'stern, dread lake' of Scott's *Lord of the Isles*. Glen Sligachan ascends 5½ miles from the head of Loch Sligachan. The fantastic Quiraing (1779 feet) and the Storr (2360), in the north of the island, are remarkable rocks, and at many points along the coast are columnar basalt formations and cliffs 1000 feet high, whose bases are frequently worn into deep caves. One cave, near Portree, afforded a refuge to Prince Charles Edward; another, on the west coast, was the temporary prison of Lady Grange. The largest arms of the sea are Lochs Bracadale, Dunvegan, and Snizort. The coasts abound in fish—herring, salmon, cod, and ling, besides oysters. Salmon and sea-trout are got in some of the streams, and trout in most of the fresh-water lochs. Deer are not numerous, nor grouse. West Highland cattle are reared, but sheep-farming predominates. The rainfall averages 65 inches, but the climate is mild and healthy. The inhabitants are for the most part poor and ill-housed, but well-behaved and intelligent. At one time they contributed largely to the British army—not fewer than 10,000 privates during the long war with France. The population is chiefly Celtic, with, however, a considerable Norse admixture. Gaelic is gradually giving place to English. The chief proprietors

are still, as of old, Lord Macdonald, whose beautiful seat is Armadale Castle in Sleat, and MacLeod of MacLeod, in whose ancient castle of Dunvegan, perched on a headland, Dr Johnson 'tasted lotus' (1773) and Scott slept in the 'Fairy Room' (1814). The principal port of Skye is Portree, a picturesquely situated village of 750 inhabitants, at which steamers call regularly. Other villages are Broadford, Dunvegan, and Kyleakin ('Hakon's strait'), the last on Kyleakin strait, ½ mile broad, opposite the terminus of the Dingwall and Skye Railway, as extended since 1895 from Strome Ferry. 'Talisker' whisky is made at Carabost, at the head of Loch Bracadale. The inhabitants are mostly adherents of the Free Church. See Alex. Smith's *Summer in Skye* (1865), and R. Buchanan's *Hebrid Isles* (1883).

Skyros, or Scyro, an island of the Grecian Archipelago, the largest of the northern Sporades, 24 miles NE. of Eubœa. It is 17 miles long, and 79 sq. m. in area. The south is mountainous and wooded; the northern part, though hilly, has fertile plains. The only town is Skyro, or St George, on the east coast. Pop. 3550.

Slaithwaite, a Yorkshire market-town, 4 miles WSW. of Huddersfield, with mineral baths and cotton and woollen manufactures. Pop. 4770.

Slaney, a river of Leinster, flowing 60 miles SW. and S. to Wexford Harbour.

Slateford, a village 2 miles SW. of Edinburgh. Pop. 576.

Slatwoods. See Cowes.

Slave Coast, a division of the coast of Upper Guinea, Africa, extending eastwards from the Gold Coast (q.v.) as far as the river Benin, is divided between Germany, Dahomey, France, and Great Britain. The British portion is treated under Lagos (q.v.), the German under Togo (q.v.), and the French under Senegambia (q.v.).

Slavonia. See Croatia.

Sleaford, a town of Lincolnshire, on the right bank of the Slea, a branch of the Witham, 17 miles SSE. of Lincoln. It has a fine church (1271), a grammar-school (1624), and a monumental cross (1850). King John was struck with his last illness (1216) in the old castle, now almost wholly disappeared. Pop. 5750.

Sleswick (Danish *Slesvig*; Ger. *Schleswig*) forms, united with the former duchies of Holstein and Lauenburg, a province of Prussia, just south of Denmark. Area, 7273 sq. m.; pop. (1900) 1,387,968, nearly all Low Germans, except in the north of Sleswick, where there are 140,000 Danes. Sleswick belongs to the alluvial peninsula of Jutland, its eastern half being an undulating plain and its western a series of low-lying but very fertile marsh-lands, protected from the ocean by sea-banks. The eastern coast (230 miles) is deeply indented by several long narrow arms of the sea, some of which make excellent harbours, and alongside it lie the islands of Fehmern and Alsen. The low western coast is protected by a string of low islands and sandbanks from the waves of the North Sea. The Elbe (on the S. border) and the Eider are the great rivers; and the province is crossed by the Baltic Ship Canal (in Holstein, 61 miles long), the Eider Canal, Stecknitz Canal, &c. Nearly 87 per cent. of the area is cultivated; fishing is also carried on. Flensburg is the chief seaport.

At the dawn of history Sleswick was inhabited by the Cimbri, who were succeeded by the Angles, Jutes, and Frisians; but the greater part of the Angles crossed over into England, and their place was taken by the Danes. Successively Danish and German, or sometimes independent, for more than a thousand years, Sleswick-Holstein was the scene of an unsuccessful rebellion against Denmark in 1848–50, but in 1864 was wrested therefrom by Prussia and Austria. The dissensions between these powers led to the Austro-Prussian war of 1866, and to the ultimate incorporation of the duchies with Prussia.

Slieve-Donard. See Ireland, p. 362.

Sligo, a maritime county of Connaught, is bounded by the Atlantic, the Bay of Donegal, Leitrim, Roscommon, and Mayo. It is 41 miles E. to W., and 38 N. to S.; area, 442,205 acres. Pop. (1841) 180,886; (1901) 84,083, of whom 76,146 were Catholics. The coast-line is indented with Killala Bay, Sligo Bay, &c. The surface rises gradually from the coast as far as the Slieve Gamph and the Ox Mountains (1778 feet). Sligo contains some picturesque lakes. Iron is abundant and copper occurs, but neither is worked. The climate is moist, mild, and healthy. The chief occupation is agriculture, especially the feeding of cattle, nearly one-half of the total area being under grass. Coarse woollens and linens are manufactured; and fishing is prosecuted. The county forms two parliamentary divisions. The principal towns are Sligo, Ballina, Ballymote, and Tobercurry. Sligo was anciently the seat of the O'Connors. It contains a group of cromlechs near Sligo, a round tower at Drumcliff, a ruined abbey at Ballysadare, besides raths, cromlechs, and ancient caverns.

Sligo, the county town, stands at the mouth of the Garvogue, 137 miles NW. of Dublin by rail. Pop. (1861) 13,361; (1901) 10,870. Sligo had its origin in a 13th-century Dominican abbey, now in ruins; it was walled and defended by a castle (1242), of which no vestiges are left. There are a Roman Catholic cathedral, a modern town-hall, a lunatic asylum, &c. The harbour exports cattle, corn, butter, and provisions. Sligo was disfranchised in 1870. See county histories by O'Rorke (1889) and Wood-Martin (3 vols. 1890–93).

Slitrig. See Hawick.

Slivno, Sliven, or Selimnia, a town of East Roumelia, at the base of the Balkans, 70 miles N. by E. of Adrianople. Pop. 23,210.

Slonim, a town of Russia, 75 miles SE. of Grodno. Pop. 22,275.

Sloperton Cottage, Wiltshire, 4 miles SE. of Chippenham, the residence of Thomas Moore.

Slough (*slow*, *ow* as in *now*), a town of Buckinghamshire, 18½ miles W. of London and 2½ NNE. of Windsor. It has grown from a mere village since the railway epoch, and is a well-built place, the seat since 1863 of the British Orphan Asylum; but it will always be chiefly remembered as the home of Sir William Herschel from 1786 till his death, and thereafter till 1840 of his son, Sir John. Stoke Poges and the Burnham Beeches, both noticed separately, are near. Pop. (1861) 3425; (1901) 11,461. See Phipps's *History of Upton-cum-Chalvey* (Slough, 1886), the parish in which Slough is chiefly situated.

Slutsk, a town or large agricultural village of Russia, 60 miles S. of Minsk. Pop. 19,208.

Sluys (*Slois*), a town of Holland, province Zealand, on a bay of the North Sea, 6 miles NE. of Bruges; in the middle ages a great seaport. It is celebrated for the naval battle fought off the shore between the English and the French on 24th June 1340, in which Edward III. won a complete victory. Pop. 2631.

Smailholm (*Smail'om*), a Roxburghshire peel-tower, 6 miles W. by N. of Kelso. Near it, at Sandyknowe farm, Scott passed five years of childhood.

Smalcald. See SCHMALKALDEN.

Smeinogorsk. See ZMEINOGORSK.

Smeru, or SEMIRU, the highest mountain of Java, near the eastern end of the island. It is 12,240 feet high, and is an active volcano.

Smer'wick, a peninsula and bay in County Kerry, Ireland, where in 1579 600 Italian and Spanish soldiers were put to the sword by Lord-deputy Grey and young Walter Raleigh.

Smethwick, a western suburb of Birmingham.

Smithfield, a village (pop. 1280) of Virginia, 24 miles WNW. of Norfolk. St Luke's Episcopal church (built in 1632 of imported brick) is the oldest Protestant building in America.

Smith's Sound, one of the northern channels which connect Baffin Bay with the Arctic Ocean.

Smolensk', a town of Russia, is situated on steep declivities overlooking the Dnieper, 244 miles by rail W. by S. of Moscow. It was a place of note in the 9th century, is surrounded by ruinous walls, has a cathedral of the 17th and 18th centuries, and was from the 14th century a powerful fortress. Here the Russians were repulsed by Napoleon in 1812. Pop. 46,950.—Area of *government*, 21,632 sq. m.; pop. 1,551,068.

Smyrna, the most important seaport of Asia Minor, stands at the head of the Gulf of Smyrna, which penetrates 46 miles inland from the Ægean Sea. The city climbs up the slopes and nestles at the foot of a steep hill at the SE. corner of the gulf. The Frankish quarter, which faces the quays (2 miles long) and harbour, is lighted both with gas and the electric light. The drainage is bad; the climate uncertain, but intensely hot in summer; and there were great earthquakes in 178 A.D., 1688, 1768, and 1880. Traces of the ancient walls, the stadium, theatre, and some temples can still be discerned. Smyrna is the seat of Roman Catholic, Greek, and Armenian archbishops. Carpets are manufactured, as well as pottery, cottons, and woollens. Two lines of railway run 300 and 170 miles eastwards up the Mæander and Hermus valleys; and iron-foundries and machine-shops have been established. About 700 B.C. Smyrna was one of the principal trading-centres for Asia Minor; and now it has as a seaport the lion's share of the Asia Minor trade with Europe. The harbour is large, safe, and easily accessible, but is in imminent danger of silting up. The principal exports are raisins, valonia, figs, and opium, besides barley, carpets, sponges, liquorice, wool, olive-oil, tobacco, &c. The imports are textiles, timber, and iron and hardware, besides groceries, railway plant, leather, butter, glass, petroleum, coal, cheese, matches, paper, &c. Estimated population, 250,000, of whom 130,000 are Greeks (more than the pop. of Athens), 23,000 Jews, 12,000 Armenians, 12,700 Europeans, and the rest Turks. Smyrna was originally a city of Greek Æolic immigrants, but before 688 B.C. had become Ionian. It was finally captured by the Turks under Murad II. in 1424. See a work by Rougon (Paris, 1892).

Snaith, a town of Yorkshire, on the Aire, 7 miles W. by S. of Goole. Pop. 1647.

Snake River, the largest affluent of the Columbia River, rises among the Rocky Mountains near the western border of Wyoming, sweeps through southern Idaho, forming here the famous Shoshone Falls (q.v.), and, turning north, divides Idaho from Oregon and Washington. At Lewiston it turns westward, and in southern Washington, as the Lewis River or Fork, joins the Columbia, after a course of 1050 miles. It traverses a mountainous country, in deep, lava-walled cañons, and is navigable for steamboats only to Lewiston (160 miles).

Sneek (*Snayk*), a town in the Netherlands, 13 miles SW. of Leeuwarden. Pop. 12,465.

Snehætten. See DOVREFJELD.

Sniatyn, a town of Austrian Galicia, on the Pruth, 25 miles NW. of Carlowitz. Pop. 10,832.

Snizort (*Snee'zort*), LOCH, a large inlet in the north-west of Skye, which narrows from 9 to 3¾ miles, and is 8½ miles long.

Snowdon, a mountain-range in Carnarvonshire, North Wales, stretches NNE. from a point 5 miles N. of Criccieth, near the head of Cardigan Bay, to near Conway, but is broken up into five distinct summits, the chief of which, Moel-y-Wyddfa ('conspicuous peak'), the highest mountain in south Britain, was shown by the new Ordnance map of 1889 to rise only 3560 (not 3571) feet above sea-level, and is crowned by two huts, the 'Hotel.' Its ascent is effected from Llanberis (on the north), Beddgelert (on the south), Snowdon Ranges station (on the west), and Capel Curig (on the east). 'Snowdonia' was made a royal forest by Edward I. of England, but was disafforested in 1649. In July 1889 Snowdon was purchased for £5750 by Sir Edward Watkin, Bart. See Huson's *Round about Snowdon* (1893). See also STIRLING.

Soar, a midland river, flowing 40 miles to the Trent, 12 miles SE. of Derby.

Sobat, a tributary of the Nile (q.v.).

Sobral, a town of Brazil, in the province of Ceara, on the Aracaty, 78 miles by rail SSW. of the seaport Camossin. Pop. 10,500.

Sobraon (*Sobrah'on*), a village of the Punjab, on the Sutlej, opposite which was fought, on 10th February 1846, an obstinate battle between the British under Sir Hugh Gough and the Sikhs, which put an end to the first Sikh war. Pop. 4000.

Society Islands. See TAHITI.

Soc'otra, an island in the Indian Ocean, 150 miles E. by N. from Cape Guardafui, and 220 from the southern coast of Arabia. It is 70 miles long, 20 broad, and 1380 sq. m. in area, with a pop. of 10,000. The interior embraces numerous barren plateaus (1500 to 2000 feet), with several well-wooded mountains, rising to 4500 feet; there are fertile valleys between the ranges and belts of rich soil along the coasts. The climate is moist and warm, but healthy. Aloes and dragon's blood are products. After being occupied by Britain in 1835–39, it was taken under British protection in 1876 and formally annexed in 1886. The chief town is Tamarida on the north coast.

Sodbury. See CHIPPING SODBURY.

Söderhamn, a Swedish seaport, on the Gulf of Bothnia, 13 miles N. of Gefle. Pop. 11,500.

Sodom and Gomorrah, two ancient cities, forming with Admah, Zeboiim, and other towns the 'cities of the plain.'. See DEAD SEA.

Sodor and Man. See MAN.

Soest (nearly *Sust*), a town of Westphalia, 37 miles SE. of Münster, was once a Hanse town, with a pop. of 30,000; now it has only 17,500. The Gothic 'Meadow Church' was built in 1314; and there is also a R. C. cathedral.

Sofala (*Sofah'la*), the name given to that portion of the south-east coast of Africa which extends

from the Zambesi as far south as Delagoa Bay. Sofala was described by the old geographers as a gold-producing country, the Ophir, perhaps, of Solomon. Manicaland and Mashonaland (q.v.) inland are certainly auriferous. The Portuguese established themselves here in 1505. Their headquarters, Sofala, once a large commercial town, is now a wretched place of 1000 inhabitants.

Sofia (*Sofee'a*), the capital since 1878 of Bulgaria, stands in a broad valley of the Balkans, on the railway from Constantinople to Belgrade and Vienna. The city since 1891 has undergone reconstruction, most of the crooked dirty streets, with their tumble-down houses and ruinous mosques, being demolished to make way for broad tree-planted streets, with paved side-walks and electric-light posts, new French-looking houses, shops and hotels, and large public buildings (baths, national library, banks, post-office, &c.). For centuries the place has been renowned for its hot mineral springs (117° F.). Sofia is the seat of a Greek metropolitan, and of the national university. It trades in hides, spirits, maize, and wheat. Pop. (1870) 19,000; (1900) 67,920. Sofia is the *Serdica* of the Romans, and was the seat of a famous church council in 343. Attila plundered it; and it was captured by the Turks in 1382.

Sogdiana, anciently a province of Persia, corresponded to the modern territories of Samarcand and Bokhara and the valley of the Zerafshan.

Sognefjord. See NORWAY.

Soham, a small market-town of Cambridgeshire, with a fine church, 5 miles SE. of Ely. Pop. of parish, 4000.

Sohar, a seaport of Oman in Arabia, stands on the Gulf of Oman, 130 miles NW. of Muscat. The Portuguese occupied it in 1508–1650. Pop. 5000.

Soignies (*Swan-yee'*), a Belgian town, 22 miles by rail S. by W. of Brussels. Pop. 9683.

Soissons (*Swasson'*), a fortified town of France, dep. Aisne, on the river Aisne, 65 miles NE. of Paris by rail, the key of Paris for an army invading France from the Netherlands. The cathedral dates from the 12th century; and there are remains of the great castellated abbey (1076), where Becket found refuge. Near Soissons is a deaf-mute institute, on the site of the famous abbey (560) of St Médard. Pop. 11,352. *Augusta Suessionum* was long the most important Roman town in northern Gaul. Near it Clovis overthrew Syagrius, the Roman commander, in 486. The same prince made Soissons the seat of the Frankish monarchy of Neustria. It has been repeatedly captured—e.g. six times during the Hundred Years' War, by the Armagnac party in 1414, by Charles V. (1544), the Huguenots (1565), three times in 1814, and by the Germans in 1870.

Sok'oto, a Central African state, bounded by the Sahara, the rivers Niger and the Benuwé, and Bornu. Since 1900 Sokoto has been included in the northern part of the British protectorate of Nigeria; the area is about 200,000 sq. m., and the pop. some 11,000,000. There are large deposits of good iron. The ruling race are the Mohammedan Fulahs, whose subjects are Haussa and various Negro tribes, mainly pagans. In 1885 the sultan of Sokoto granted to the (British) Royal Niger Company a monopoly of the trade. —The *town* of Sokoto was the old historic capital; Kano is the trading centre. See the travels of Barth (1853), Rohlfs (1866), Flegel (1880), and J. Thomson (1885), and books on Nigeria by Robinson (1900) and Lady Lugard (1905).

Solebay. See SOUTHWOLD.

So'lent, the western portion of the strait that intervenes between the Isle of Wight and the mainland of England. It is 17 miles long, and about 3 in average breadth, but contracts to ¾ mile at Hurst Castle (1535), built by Henry VIII.; and here the tide flows very rapidly.

Solesmes, (1) a great Benedictine abbey (12th century), in the French dep. of Sarthe, 32 miles SW. of Le Mons; (2) a town in the dep. of Nord, with manufactures of sugar. Pop. 5973.

Soleure (*Solehr;* Ger. *Solothurn*), a Swiss canton, bounded W. and S. by Bern, and N. and E. by Basel and Aargau. Area, 306 sq. m.; the population, 101,000 in number, mostly Catholic and German-speaking.—The *capital*, Soleure, lies on the Aar, 18 miles NNE. of Bern by rail. The cathedral of St Ursus was built in 1762–63 on the site of an older church (1050); and there are an old clock tower, an arsenal, &c. Cottons, clocks, and cement are manufactured. Pop. 10,050. Soleure (*Salodurum*) was a place of consequence in Roman times. Close by are the baths of Weissenstein, with a celebrated 'whey-cure.'

Solferi'no (*i* as *ee*), a village (pop. 1284) of N. Italy, 19 miles NW. of Mantua, stands on a hill, whence the whole plain of Lombardy may be seen. Here, on June 24, 1859, the Austrians were defeated by the allied French and Piedmontese.

Solingen (*Zo'ling-en*), a town of Prussia, 13 miles E. of Düsseldorf and not far from the river Wupper. Ever since the 12th or 13th c. it has been famous for its steel and iron ware—sword-blades, helmets, cuirasses, knives, surgical instruments, &c. It has also iron-foundries, cigar-factories, &c. Pop. (1875) 14,040; (1900) 45,260.

Solofra, a city of Southern Italy, 31 miles by rail E. of Naples. Pop. 5178.

Solomon Islands, an archipelago in the western Pacific, since 1899 all British except Bougainville and a few smaller islands, which are German. The islands lie 500 miles E. of New Guinea, and stretch 600 miles SE. in two parallel chains. The north-eastern chain embraces Bougainville, Choiseul, Ysabel, and Malaita; the south-western Vella Lavella, Kulambangra, New Georgia, Guadalcanar, and San Cristoval. Besides these, which are 70 to 110 miles long, and 20 to 30 wide, there are many smaller ones. They have a total area of 15,000 sq. m. (of which 8357 sq. m. are British), are nearly all volcanic, and are densely wooded to the highest summits (10,000 feet in Bougainville, 8000 in Guadalcanar, 4100 in San Cristoval). There is an extraordinarily heavy annual rainfall, estimated at 500 inches on the mountains, and 150 on the coasts. The temperature ranges from 75° to 95° F. The people, 176,000 Papuans or Melanesians, are divided into a great number of tribes, constantly at war with one another, but their head-hunting and other savage and cannibal habits are now on the wane. This group was discovered by the Spaniard Mendaña in 1567; but was rediscovered (1767–88) by Carteret, Bougainville, Surville, and Shortland. See works by Guppy (2 vols. 1887) and Woodford (1890).

Solor Islands. See TIMOR.

Solothurn. See SOLEURE.

Solovetsk, a great monastery on an island of the White Sea, bombarded by the British in 1854.

Solway Firth—in its upper part best regarded as the estuary of the river Esk, in its lower as an inlet of the Irish Sea—separates Cumberland from the south of Scotland. Its entire length, until

lost off Balcarry Point in the Irish Sea, is 36 miles; its breadth for the upper 13 varies from 1½ to 8½ miles, but afterwards it gradually, although irregularly, increases to 22. The principal rivers flowing into it, besides the Esk, are the Annan, Nith, Dee, and Urr from the Scottish side, and the Eden and Derwent from the English. Its most striking feature is the 'bore,' which in spring-tides rushes in from 3 to 6 feet high, and at the rate of 8 to 10 miles an hour, occasionally inflicting serious damage on the shipping; while after it has retreated great stretches of the bed of the firth are left bare, and in some places one can even cross over from the English to the Scottish shore. The salmon-fisheries are valuable. Near Annan the Solway is spanned by a railway viaduct, 1960 yards long, which, originally constructed in 1866–69 at a cost of £100,000, was almost destroyed by floating ice in January 1881, but was reopened to traffic in 1884. Scott paints the scenery of the Solway Firth in both *Guy Mannering* and *Redgauntlet*.

The *Solway Moss* is a district of Cumberland about 7 miles in circumference, lying west of Longtown, and immediately adjoining Scotland. As its name implies, it was once a bog, but is now drained and cultivated. Here, in November 1542, a Scottish host was routed by a handful of English borderers. In 1771 the boggy ground, swelling after heavy rains, burst like a torrent and destroyed some thirty small villages.

Somali-land (*Somâh-lee*), an eastern projection of Africa, between the Gulf of Aden and the Indian Ocean. The Juba, its southern frontier, is the chief river. The country is an undulating plateau, in very many places parched and barren; though in the rainy seasons swampy in parts. Game and wild animals—elephant, hippopotamus, lion, leopard, crocodile, antelopes—abound. The Somal are mostly a warlike and pastoral people of the Hamitic stock, akin to the Gallas (but with Arab and Negro admixture), and Moslems. The western and central portions belong to Abyssinia; the remainder falls into three sections: British Somali-land, with a coast-line of about 450 miles on the Gulf of Aden, extending south to lat. 8° N., has an area of 68,000 sq. m. and a pop. of 300,000. It was created a British protectorate in 1884; the chief towns are Berbera, Zeyla, and Bulhar. The French Somali Coast protectorate, including Obock, situated round the Bay of Tajura, has an area of 46,000 sq. m. and a pop. of 200,000. Its railway from Jiboutil to Harar (1902) has absorbed much of the traffic that used to penetrate from Aden into the interior by way of Zeyla. Italian Somali-land, on the coast of the Indian Ocean, extends from Cape Guardafui to the equator, with an area of 100,000 sq. m. and a population of 400,000. See works by James (1888), and Lord Wolverton (1894).

Somersby, a pretty Lincolnshire village, on the Wolds, 7 miles E. by N. of Horncastle. Tennyson was born in the rectory. Pop. 40.

Somersetshire, an important maritime county in the south-west of England, is bounded NW. by the Bristol Channel, and elsewhere by Gloucestershire, Wiltshire, Dorset, and Devon. In form oblong, with a length of some 80 miles and a breadth of 36, it has an area of 1640 sq. m. Pop. (1801) 273,577; (1841) 435,599; (1901) 508,104. The surface is exceedingly diversified, with every variation from lofty hills and barren moors to rich vales and wide marshy levels, whence the sea is banked out by an elaborate system of dykes and sluices. Ranges of hills, running east and west, give the county its leading physical characters. Chief of these is the Mendips (q.v.), which stretch from near Wells to the coast at Brean Down. South of the Mendips lies the great alluvial plain of central Somerset, broken by the line of the Polden Hills, which rise some 300 feet from the marshy levels like a long, low island. Still farther south, beyond Taunton, are the Blackdown Hills, about twice as high, and continuing eastward into the broken upland which once formed part of the ancient forest of Selwood, where Somerset, Wilts, and Dorset meet. NW. of Taunton, bordering Bridgwater Bay, are the Quantock Hills, rising at Will's Neck to 1262 feet; and W., again, is the wild district of Exmoor Forest (q.v.), partly in Devon, but mainly in Somerset. The Bristol Avon, which forms the boundary of the county for many miles, rises near Badminton in Wilts, and enters Somerset near Bath. The Parret rises near South Perrot in Dorset, and drains the middle of the county: it is tidal to beyond Bridgwater, and is one of the streams possessing a tidal 'bore.' Other streams are the Axe, Brue, Yeo, Exe, and Devonshire Axe. Coal, limestone, and Bath building-stone are worked, as well as lead and iron ores. The agriculture is mainly pastoral, the proportion of tillage to grazing and dairy-farming being small, though the low lands generally are exceedingly fertile. The orchards of Somerset are second only to those of Devon in area and importance, and cider is largely made; while Cheddar cheese has a national reputation. The bone-caves of the Mendips show traces of neolithic if not of palæolithic man; and there are important hill fortresses (Hamdon Castle, Nerochie, Dolbury, Maesbury, Worlebury, Cadbury), and megalithic circles and other remains at Stanton Drew. Roman remains are plentiful, and under the Saxons the district became known as the home of the Sumersætan, and took its present name. Somerset was the last home of Saxon freedom when Alfred took refuge at Athelney. At Wedmore he made his treaty with Guthrum, but the claims of Edington to be the Æthandune where he won his most memorable victory are doubtful. In the Wars of the Roses, Somerset was in the main Lancastrian; in the wars of the Commonwealth it was chiefly parliamentarian, and the stout defence of Taunton first made famous the name of Admiral Blake. The county was also the centre of Monmouth's operations; and it was chiefly Somerset men who fell at Sedgemoor (1685). The county has two cities—Bath and Wells; parliamentary boroughs in Bath and Taunton; an important manufacturing port in Bridgwater; one of the finest watering-places on the western coast in Weston-super-Mare; manufacturing towns in Frome, Yeovil, Shepton Mallet, and Wellington; and seven county parliamentary divisions. See Worth's *Somersetshire* (3d ed. 1888), and other works there cited.

Somersham, a market-town of Hunts, 5½ miles NNE. of St Ives. Pop. 1381.

Somers' Islands. See BERMUDAS.

Somersworth, a town of New Hampshire, 48 miles SW. of Portland. Pop. 7050.

Somerton, a town of Somerset, on the Cary, 5 miles ENE. of Langport. Pop. of parish, 1962.

Somerville, a city of Massachusetts, a suburb of Boston, 2 miles from the central station. It contains tube-works, bleach-fields, slaughter-houses, &c. Pop. (1880) 24,933; (1900) 61,643.

Somme, a river of northern France, rises not far from St Quentin in the dep. of Aisne, and flows 150 miles SW. and NW. to the English Channel near St Valéry. It is navigable for vessels of 300 tons up to Abbeville (q.v.), and its upper course is canalised.—The *dep.* of Somme, formerly part of Picardy, touches the English Channel on the north-west. Area, 2378 sq. m. There are the five arrondissements of Abbeville, Amiens (the capital), Doullens, Montdidier, and Péronne. Pop. (1872) 557,015; (1901) 537,848.

Somnath (*Somnaut*), a town of Gujarat, India, on the SW. coast of the peninsula of Kathiawar, containing many ruins and memorials of Krishna. From the Hindu temple of the idol Somnath, now in ruins, Mahmud of Ghazni (1025) is said to have carried off the wonderful temple gates, which, or some other gates, Lord Ellenborough triumphantly brought back from Afghanistan in 1842, and deposited in a lumber-room at Agra. Pop. 6644.

Son, an affluent of the middle Ganges on the right, flowing 450 miles from Central India.

Sonderburg. See Alsen.

Sondershausen (*Zon'ders-how'zen*), the chief town of the German principality of Schwarzburg-Sondershausen (q.v.), on the Wipper, 34 miles N. of Erfurt. It has a large castle. Pop. 7200.

Sondrio, an Italian town, on the Adda, 25 miles E. of Lake Como. Pop. 3989.

Songhay, or Sonrhai, a former kingdom of Africa, on both sides of the Niger below its great bend. The capital was Garo.

Song-ka, the chief river of Tong-king (q.v.).

Sonmiáni (*Sonmiah'nee*), a port of Beluchistan, 52 miles NW. of Kurrachee. Pop. 400.

Sonnblick, a summit (10,277 feet) of the Salzburg Mountains, with a meteorological observatory and a shelter built in 1886.

Sonoma, a chief seat of the Californian wine-culture, 50 miles N. of San Francisco.

Sono'ra, a state of NW. Mexico, on the Gulf of California. Area, 77,526 sq. m.; population, 230,000. Capital, Hermosillo; port, Guaymas.

Sonsonate (*Sonsonah'tay*), a town of Salvador, on the Rio Grande, 15 miles by rail N. of Acajutla. It was founded in 1524. Pop. 17,000.

Soochoo, or Suchau, formerly one of the largest cities in China, on the Imperial Canal, 50 miles WNW. of Shanghai. It stands on numerous islands separated by canals, and has long been a noted centre of the silk manufacture and of the printing of cheap Chinese classics. Captured by the Taipings, but recovered by Gordon (1863), it is now a treaty port. Pop. 500,000.

Sooloo Islands. See Sulu Islands.

Sora, a city of Italy, on the Garigliano, 55 miles E. by S. of Rome. Pop. 5411.

Sorata (*Sorâh'ta*), a volcanic peak (21,470 feet) of the Bolivian Andes, E. of Lake Titicaca.

Sorau (*Zo-row*), a town of Prussia, 60 miles by rail SSE. of Frankfort-on-the-Oder. Pop. 15,950.

Sorel, a town of Quebec, on the St Lawrence, at the mouth of the Richelieu River, 45 miles (by rail 78) NE. of Montreal. It manufactures machinery, leather, and bricks. Pop. 7060.

Soresi'na (*i* as *ee*), a town of Northern Italy, 16 miles by rail NW. of Cremona. Pop. 8765.

Sorrento (Lat. *Surrentum*), a cathedral city of Italy, on the SE. side of the Bay of Naples, 7 miles SW. of Castellamare. It is celebrated for its mild climate. Tasso was a native. Pop. 6089.

Sotteville-les-Rouen (*Sot'veel-leh-Roo-on'*), a town of France, dep. Seine-Inférieure, 4 miles by rail S. of Rouen. Pop. 13,628.

Soudan, or Sudan (*Soo-dan'*; Arabic *Beled es-Sudan*, 'Land of the Blacks'), a term, which in its widest sense embraces the vast region stretching from the Atlantic to the Red Sea and the Abyssinian highlands, and from the Sahara and Egypt proper in the north to the Gulf of Guinea, the central equatorial regions, and the Albert and Victoria Nyanzas in the south. This is the home of the true Negro race, though there are other elements in the population, mainly Hamitic and Semitic (Arab). The Soudan in this sense falls naturally into three divisions: (1) *Western Soudan*, comprising the basins of the Senegal, Niger, Benue, and other rivers draining to the Atlantic; (2) *Central Soudan*, including the basins of the rivers draining into Lake Chad, and covering the countries of Bornu, Bagirmi, Kanem, Wadai; (3) *Eastern* or *Egyptian Soudan*, mainly the basin of the Middle and Upper Nile. Except Portuguese Guinea and German Togo and Kamerun, the whole Soudan is now under French or English control. The western portion of what was once called French Soudan has been absorbed by Senegal, French Guinea, the Ivory Coast, and Dahomey; the remainder, constituting three military territories, includes Bagirmi and Wadai. Britain controls Gambia, Sierra Leone, the Gold Coast, and Nigeria; Britain and Egypt, the Egyptian Soudan, which has of late largely monopolised the name of Soudan. Until 1882 the Egyptian Soudan formed one ill-organised province, with its capital at Khartoum. All the regions watered by the Nile and its tributaries possess highly fertile soil, capable of yielding immense quantities of cotton, durra, indigo, sugar, rice, maize, tobacco, fruits; while Kordofan and Dar-Fûr are bare and waterless, except in the rainy season. The Egyptians, established at Khartoum in 1819, gradually extended their power W. and S. Insurrections in Dar-Fûr and in the Bahr-el-Ghazal province (1877–79) were crushed by Gordon and Gessi. But in 1882 the Mahdi annihilated the Egyptian forces led by Hicks Pasha, isolated Emin Pasha in the Equatorial Province, captured Khartoum, and slew Gordon. In 1898 Kitchener re-conquered the Soudan, totally defeating the Khalifa's forces at Omdurman; and since 1899 the Anglo-Egyptian Soudan extends southwards from the frontier of Egypt to Uganda and the Belgian Congo, a distance of about 1200 miles, with an area of about 950,000 sq. m. and a pop. estimated at 2,000,000. The chief towns are Khartoum (8000), the capital, Omdurman (48,000), Halfa, Merowe, Berber, El Damer, Suakin, Kassala, and El Obeid. It is divided into twelve provinces, each with a British officer as governor—Khartoum, Blue Nile, Dongola, Berber, Kassala, Sennaar, Kordofan, White Nile, Bahr-el-Ghazal, Halfa, Suakin, and Upper Nile. Dar-Fûr pays tribute, but is managed by its own sultan. Khartoum has railway and telegraph to Cairo, and by Atbara junction, near Berber (which is the seat of the Gordon College for the education of natives), to the Red Sea (1906). Prosperity has been steadily advanced, and irrigation promises great results for a large area.

See works by Schweinfurth (1874), Nachtigal (1879–89), James (1884), Felkin and Wilson (1881), Junker (1890–91), Wingate (1891), H. Russell (1892), Ohrwalder (1893), Robinson (1896), Sidney Peel (1904), and Lady Lugard (1905), and the articles on the chief Soudanese states.

Söul. See Seoul.

Soulouque. See Hayti.

Sound (A.S. and Ger. *Sund*), the strait which leads from the Cattegat into the Baltic Sea, having Sweden on the east and the Danish island of Zealand on the west. It forms the usual passage to the Baltic, and is 50 miles long and nearly 3 wide at the narrowest, between Helsingborg and Elsinore. Its passage, defended by the strong Danish fortress of Kronborg, was forced by Nelson in 1801. From the 15th c. till 1857 ships using this channel were charged toll.

South Africa. See Cape Colony.

Southam, a Warwickshire town, 7½ miles ESE. of Leamington. Pop. 1840.

South America. See America.

Southamp'ton, a municipal, parliamentary, and county borough and seaport in the south of Hampshire (which is sometimes called Southamptonshire), 12½ miles SSW. of Winchester, 23½ NW. of Portsmouth, and 79 SW. of London by the London and South-western Railway (1840). It occupies a peninsula at the head of Southampton Water, and between the estuary of the Test on the west and south and the mouth of the Itchen on the east. There are remains of the 14th-century town-walls, and four out of seven gates, the Norman Bargate being much the finest, though shorn of its effigies of Sir Bevis of Hampton and the giant Ascapard. Southampton has the Watts Memorial Hall (1876), a grammar-school (1553; rebuilt and reorganised 1872–75), the Hartley Institution (1862), and the headquarters of the Ordnance Survey (1857). St Mary's Church (1879), by Street, is a memorial to Bishop Wilberforce. St Michael's Church, the oldest in the borough, retains Norman tower arches, and several of the private houses are of Norman architecture. The *Domus Dei*, or God's House (12th c.), is one of the earliest hospitals in England; in its chapel (now used for French service) are buried the Earl of Cambridge, Lord Scrope, and Sir Thomas Grey, executed by Henry V. for treason in 1415. The docks, first opened in 1842, can float the largest steamers, and have been greatly extended and improved. A new tidal dock, 18 acres in extent, and having a minimum depth of 26 feet at low-water spring-tides, was opened by Queen Victoria on 26th July 1890; its cost was £300,000. Southampton is the place of departure and arrival of the West India and Brazil and the South African mail steam-packets. There is considerable traffic with the Channel Islands and French coast, and also a large cattle-trade with Spain and Portugal. Yacht and shipbuilding and engine-making are actively carried on. Incorporated as a borough by Henry I., Southampton returns two members. Pop. (1801) 7913; (1851) 45,305; (1881) 60,051; (1901) 104,911. Southampton supplanted the Roman station of *Clausentum*, 1 mile NE., and its foundation is ascribed to the Anglo-Saxons. It is called Hamtune and Suth-Hamtun in the Saxon Chronicle, and Hantune in the Domesday Book. A great part of it was burned by the combined French, Spanish, and Genoese fleets in 1338, and in the following year its defences were strengthened. Southampton is the birthplace of Isaac Watts (to whom in 1861 a monument was erected in the West Park), of Thomas Dibdin, and of Sir J. E. Millais.

Southampton Water is a fine inlet, stretching 11 miles NW. from the point at which the Solent and Spithead unite, and nearly 2 miles wide. The Isle of Wight forms a magnificent natural breakwater, and occasions a second high-water two hours after the first. Southampton Water receives the Test or Anton, Itchen, and Hamble. See works by J. Silvester Davies (1883) and F. M'Fadden (1891).

South Australia, inclusive of its Northern Territory, crosses the continent between 129° and 141° E., being 1850 miles in length. The present area is 903,690 sq. m. (of which the Northern Territory contains 523,620), or more than fifteen times the size of England and Wales. Less barren than Western Australia, it has not the fertility of the eastern colonies, from want of sufficient rain. Two dry peninsulas, Yorke and Lincoln, or Eyria, point southward, enclosing two great inlets—Spencer's Gulf and Gulf St Vincent. A chain of mountains runs from the south-east up to the Lake District depression; ranges, with outliers, are seen right across to, and through, the Northern Territory; but few points rise to 3000 feet. The Murray River has its mouth in South Australia. The Torrens and a few other short streams reach the sea. The Macarthur, Roper, Victoria, and Liverpool enter the Indian Ocean. Salt lakes, as Torrens, Gairdner, and Eyre, are inland; Victoria, Albert, and the Coorong are near the Murray outlet. Adelaide, the capital, is in 34° S. lat. The area of settlement is mainly in the south-east corner of the colony. In 1835 a grant of land was made to the South Australian Association; the first party landed on Kangaroo Island in July 1836; and in 1841 South Australia became a Crown colony. Progress was established by the Burra Burra copper-mine in 1845, and the cultivation of large areas of corn. South Australia is geologically more recent than Eastern or Western Australia. Near the Victorian border lies the charming and productive Mount Gambier district, with its extinct craters, subterranean rivers, native wells, stalactitic caverns, and luxuriant vegetation. Generally speaking, the climate is both dry and warm, and varies less over its vast area than might have been expected. Travellers in the central desert complain of piercing cold, even to ice formation, in the early hours, though followed after sunrise by a temperature of from 80° to 100° in the shade; 175° in the sun and 135° in the shade have been recorded. Adelaide itself, in 34° S., has known 120° in the shade; its winter is superior to the Riviera or Algiers in uniform mildness and absence of frost. The north hot wind is trying to the weak. During the short rainy season the northern shore may have three to four times the rainfall experienced in Adelaide. The Great Austral Plains know but few and slight showers, with excessive evaporation. Yet, though the grass fails under the dryness, abundant shrubs give sustenance to live-stock, and artesian wells can draw a constant supply from subterranean streams. Droughts are often produced by the failure of the monsoon to come far enough south. Many consumptives have gained strength in South Australia. Marsupial animals predominate; birds are numerous, and so are insects, with 42 genera of fish. The mulberry is cultivated for silkworms. In spite of frequent droughts, bread-stuffs head the export list. Potatoes are raised in the moister south-eastern quarter, and vines are successful. In favourable seasons the drier interior can furnish good wheat. The railways are 1880 miles long, and good roads nearly 5000. The Northern Territory, being mostly tropical, could, with coloured labour, produce rice, spice, and sugar. Olives and

fruits are raised in abundance, and Adelaide now ships apples (as well as raisins and currants) to London. The first lead-mine was opened in 1841; the first copper in 1843; the first gold in 1846. Tin, bismuth, and precious stones have been obtained. The best gold workings are in the Northern Territory. The Barrier silver-mines are just over the New South Wales border. There are no coal beds. In 1855 the pop. was 163,452; in 1881, 279,865; in 1901, 362,604 (4096 in the Northern Territory), including 3890 aborigines and 2570 Chinese. State education is free. The university was established in 1872. The governor is appointed by the crown. The Legislature consists of a Legislative Council (18) and a House of Assembly (42), the former elected on a property qualification, the latter on adult suffrage, both including women. In 1901 South Australia joined with the other Australian colonies in forming the Australian Commonwealth, and sends 6 members to the Federal Senate and 7 to the House of Representatives. The revenue, about £2,500,000, has generally more than covered the expenditure. The public debt, over £29,300,000 in 1905, was mostly incurred for railways and other public works. The total imports (the chief item drapery goods) range from £6,000,000 in annual value; the exports (mainly wool, wheat, and copper ore), to about the same amount. There are 1890 miles of railway; telegraph and telephone lines are 5600 miles in length; and Port Darwin in the extreme north is connected by telegraph with the southern ports. See works on South Australia by Harcus (1876), Newland (Adelaide, 1887), Hodder (2 vols. 1893), Dutton, Bonwick, &c.; besides official publications.

South Bend, capital of St Joseph county, Indiana, on the St Joseph River, 86 miles ESE. of Chicago. It has a R. C. university, and manufactures wagons, furniture, woollens, paper, flour, &c. Pop. 42,000.

Southborough, a town of Kent, 2 miles N. of Tunbridge Wells. Pop. 6977.

Southbridge, a town of Massachusetts, on the Quinebaug River, 70 miles SW. of Boston. It manufactures cottons, woollens, &c. Pop. 12,000.

South Carolina, one of the original states of the American Union, with an area of 30,570 sq. m., including 400 sq. m. of water-surface, is nearly triangular in outline, and is bounded by North Carolina, the Atlantic Ocean, and Georgia. Numerous islands of the southern part of the coast are separated from the mainland and from each other by shallow sounds and inlets. For 100 miles inland the land is generally low and level, much of it still covered with pine forests. West of this alluvial plain is a range of undulating sandhills about 60 miles in width. Farther west the 'ridge-country' rises, generally abruptly, from the Savannah to the Broad River on the north, presenting a region of rare beauty and fertility; its average elevation is 2000 feet, and several peaks of the Blue Ridge range, in the NW., rise to about 4000 feet. Most of the rivers—the largest the Santee—are navigable by steamboats nearly to the foot-slope of the ridge region, where they supply abundant water-power. The state is rich in mineral products. There are gold-mines in York, Lancaster, Chesterfield, and Spartanburg counties. Granite is abundant in several counties; itacolumite is quarried for grindstones; and superior kaolin, used for artificial teeth, is obtained. But the most important mineral product of South Carolina is its famous deposit of phosphate rock, extending about 70 miles by 30 parallel with the coast N. of Charleston. Gray iron ore (magnetite) is found; great wealth of phosphates (for fertilisers); also copper pyrites, galena, limonite, malachite, pyrolusite, and pyromorphite, or phosphate of lead. Deer, wild turkeys, racoons, foxes, squirrels, and other small game are still numerous in the forests; and the rivers, sounds, and inlets are stocked with fish. Alligators inhabit the tidal rivers. The most important agricultural products are cotton, of which nearly 900,000 bales are harvested yearly, maize, oats, wheat, peas, hay and forage.

South Carolina, called the Palmetto State from the growth of the cabbage-tree (*Sabal palmetto*) near the coast, had in 1880 a pop. of 995,557, in 1900 of 1,340,316, comprising 782,321 coloured persons. There are 16 towns of over 4000 inhabitants. Charleston has a pop. of 57,000, and Columbia, the capital, of 25,000. The mild climate is salubrious except in the rice-lands. The low islands along the coast afford summer-resorts, as well as the western mountain-region known as 'the land of the sky.' The average rainfall in the E. is from 42 to 44 inches. On the coast cyclones are often destructive. On the night of August 31, 1886, Charleston was nearly destroyed by an earthquake.

In 1562 a party of French Protestants built a fort on an island in the harbour of Port Royal, and named it *Arx Carolina*, in honour of Charles IX., but soon returned to France. In 1630 Sir Robert Heath obtained a grant from Charles I. of a vast territory, to be called *Carolana*, reaching to the Gulf of Mexico, but failure to colonise forfeited the title. In 1662 Charles II. granted to Lord Clarendon and seven associates all the territory from the Atlantic to the Pacific lying between 31° and 36° N. (later to 36° 30′ N.). In 1670 three ship-loads of English settlers under William Sayle landed near Port Royal, and in 1680 settled on the site of Charleston. The proprietary government under the 'model Constitution,' drawn up by John Locke (see NORTH CAROLINA), lasted till 1729, when George II. bought out the proprietors and divided Carolina into two royal provinces. Many French Huguenots came to South Carolina, one of the most flourishing of the British colonies, after the revocation of the edict of Nantes in 1685. In 1671 Sir John Yeamans, the governor, brought from Barbadoes 200 negro slaves; the blacks in a few years nearly equalled the whites, and since 1820 have been more numerous. South Carolina was the first to ratify the Articles of Confederation in 1788, and the first to secede from the Union in 1860, being re-admitted in 1865.

South Dakota, a north central state of the American Union, surrounded by North Dakota, Minnesota, Iowa, Nebraska, Wyoming, and Montana. The area, 77,650 sq. m., is one and a half times that of England without Wales. Most of the surface is undulating plain, which shows evidence of having in Silurian times been covered by a shallow sea or salt lake. In the W. are the Black Hills, a rugged and mountainous region (3200 sq. m.), whose highest point, Harney Peak, reaches 8200 feet. The 'Bad Lands,' or Mauvaises Terres, between the north fork of the Platte river in Nebraska and Wyoming, and the south fork of the Cheyenne in this state are covered with rocks of the most fantastic shapes, probably due to the spontaneous firing of large beds of lignite. The Black Hills afford much gold and silver, also tin (the only tin of importance worked in the U.S.), antimony, lead, copper, and other useful minerals, with thermal springs. The

winters are cold and dry, with occasional blizzards; in summer the days are hot, the nights usually cool. The rainfall is small, but suffices for the ordinary crops; and pastures are extensive, and even the Bad Lands are found admirable for cattle-raising. The Missouri, with its tributaries the Cheyenne, White River, and Dakota, is the great river of the country. The population, 98,268 in 1880, was, in 1900, 401,570, including 20,000 Indians on reservations. Sioux Falls is the largest town (10,266). Lead City, Yankton, Aberdeen, and Mitchell have over 5000 inhabitants. Pierre is the capital.

South Downs. See DOWNS.

South Easton, a borough of Pennsylvania, at the Lehigh River's mouth, opposite Easton, to which it has been annexed since 1900.

Southend-on-Sea, an Essex watering-place, at the mouth of the Thames estuary, 42 miles E. of London. Dating from a visit here of Queen Caroline and the Princess Charlotte in 1804, it was in great part built by Sir S. Morton Peto (1809–89), and has good level sands, a public hall (1872), and a pier, over a mile in length, undertaken in 1888, with electric tramway and concert pavilion. It was made a municipal borough in 1892. Pop. (1851) 2462; (1901) 28,857.

Southgate, a town of Middlesex, 9 miles N. of St Paul's. Pop. (1901) 14,993.

South Georgia, a group of islands, uninhabited, and almost perpetually ice-bound, in 54° 30′ S. lat. and 36°—38° W. long., nearly 800 miles E. by S. of the Falkland Isles, of which they are a dependency. Area, 1000 sq. m. Discovered in 1675, they were taken possession of by Captain Cook in 1775; and here in 1882–83 lived the German expedition for observing the transit of Venus.

South Island, the southern of the two larger islands of New Zealand (q.v.).

South Kensington. See KENSINGTON.

South Molton, a municipal borough (1590) of Devon, on the Mole, 10 miles ESE. of Barnstaple. It has a fine church, a market-house (1864), and some woollen manufactures. Pop. 2850.

Southowram, a SE. suburb of Halifax, York.

Southport, a watering-place of Lancashire, at the mouth of the Ribble estuary, 18 miles N. of Liverpool, 37 WNW. of Manchester, and 19 S. by W. of Preston. The first house was a wooden inn built from a wreck here in 1792, on what then was a sandy waste; since about 1830 the place has grown more and more popular, enjoying as it does a mild climate, and having broad level sands. The esplanade (3 miles long) commands views of the Welsh and Cumberland mountains, and from it projects a pier (1465 yards) constructed in 1859–68 at a cost of £25,000, with a steam tramway running along it. Other features of Southport, with date and cost, are the Pavilion and Winter Gardens (1874; £140,000), comprising a theatre, concert-hall, aquaria, &c.; opera-house (1891; seating 2000); the Cambridge Hall (1874; £25,000), with a clock-tower 127 feet high; the Victoria Baths (1871; £45,000); the Atkinson Public Library and Art Gallery (1878; nearly £15,000); the Grecian town-hall (1853); the market-hall (1881; £40,000); the Victoria Schools of Science and Art (1887); the convalescent hospital (founded 1806; present building 1854–87); the Hesketh Public Park of 30 acres (1868); and a marine park and lake (1887; £13,000) on the foreshore fronting the town. Nathaniel Hawthorne, then United States consul at Liverpool, describes Southport as it was in 1856 in his *English Notebooks* (1870). It was made a municipal borough in 1867, the boundary being extended in 1875. Pop. (1851) 4765; (1871) 18,085; (1881) 32,206; (1901) 48,083.

Southsea, a south-eastern suburb of Portsmouth, is a fashionable watering-place of recent growth, with two piers, a fine esplanade 2 miles long, a canoe lake, a common, a modernised castle of 1540, and other fortifications, barracks, &c.

South Shetlands, a group of islands in the South Atlantic, lying on the lines of 60° S. lat. and 60° W. long., and covered ever with ice and snow.

South Shields. See SHIELDS.

Southwark (*Suth'ark; th* as in *this*), or 'The Borough,' on the Surrey side of the Thames, was annexed to the City in 1327, and is now a metropolitan borough. Pop. (1901) 206,180.

Southwell (locally *Suth'l;* soft *th*), a city of Nottinghamshire, on the ancient Ermine Street, 7 miles W. by S. of Newark and 12 NE. of Nottingham. A church was founded here by Paulinus about 630; but the stately cruciform minster, which with its three towers resembles York on a smaller scale, is wholly of post-Conquest date, comprising Norman nave and transepts (1110), Early English choir (1250), and Early Decorated chapter-house (1300). It measures 306 feet by 123 across the transepts, and the lantern tower is 105 feet high. A collegiate church until 1841, it became in 1884 the cathedral of a new diocese including the counties of Notts and Derbyshire, and taken from Lincoln and Lichfield; in 1888 it was reopened after restoration. Its eagle lectern originally belonged to Newstead priory, having been fished out of the lake there about 1750. In the old 'Saracen's Head' Charles I. surrendered to the Scots commissioners (1646); Byron's mother occupied Burgage Manor House (1804–7); and there are picturesque ruins of the palace of the Archbishops of York (*c.* 1360; much altered and enlarged by Wolsey). The collegiate grammar-school was refounded in Henry VIII.'s time; and there are a literary institute and free library. Pop. (1851) 3516; (1881) 2866; (1901) 3161. See works by Rastall (1787, 1801), Shilton (1818), Dimock (1884), Livett (1883), and Leach (1890).

Southwick, a NW. suburb of Sunderland.

Southwold (*South'old*), a Suffolk watering-place, 41 miles by a small branch-line NE. of Ipswich. A municipal borough since 1489, it was almost destroyed by fire in 1659, but retained its fine Perpendicular church (1460), 144 feet long. In Southwold or Sole Bay a bloody but indecisive sea-fight was fought between the English and the Dutch on 28th May 1672. Pop. 2800.

Soutra (*Soo'tra*), a hospice (*c.* 1164) in Midlothian, on Soutra Hill (1209 feet), 17 miles SE. of Edinburgh. See a work by J. Hunter (1892).

Sow, a Staffordshire river, flowing 18 miles to the Trent, near Tixall.

Sowerby Bridge, a manufacturing town in the West Riding of Yorkshire, on the Calder, 3 miles SW. of Halifax. It has a town-hall (1857) and manufactures of worsted and cotton, oilcloth, chemicals, iron, &c. Tillotson was a native of the parish. Pop. (1851) 4365; (1901) 11,477.

Spa, a watering-place of Belgium, stands amid wooded and romantic hills, 20 miles by rail SE. of Liége, near the Prussian frontier. The springs, all chalybeate and alkaline, are cold, bright, and sparkling, and efficacious in anæmic complaints, nervous diseases, &c. Fancy wooden lacquered

ware is manufactured. Pop. 8200. The number of visitors during the season (May–October) is about 15,000. The place was particularly famous as a fashionable resort in the 16th and 18th centuries, and derived great profit from its public gaming-tables, suppressed in 1872.

Spaccaforno, a town of SE. Sicily, 30 miles SW. of Syracuse. Near it are 'Troglodyte' caves, ranged tier upon tier. Pop. 10,620.

Spain (Span. *España*), occupying the larger part of the south-western peninsula of Europe, lies in 43° 45′—36° 1′ N. lat., and 3° 20′ E.—9° 39′ W. long., and is bounded by the Bay of Biscay, the Pyrenees, the Mediterranean, the Atlantic, and Portugal. From Fuenterrabía in the N. to Cape Tarifa in the S. is 560, from Cape Finisterre in the NW. to Cape Creux in the NE. is 650 miles. Area, 191,367 sq. m.; pop. (1877) 16,634,345; (1887) 17,565,632; (1900, estimated) 18,618,086. The country, including the Balearic and Canary Isles, was divided in 1834 into forty-nine provinces, mostly named after the great towns; but the names of the fourteen more ancient kingdoms, states, and provinces are still in use (Old Castile, New Castile, La Mancha, Leon, Asturias, Galicia, Estremadura, Andalusia, Murcia, Valencia, Aragon, Catalonia, and the Basque Provinces). The Balearic Islands and the Canaries are reckoned to the mother country, not to the colonies. Of the remainder of the once great colonies of Spain, Cuba was relinquished, and the Philippines, Porto Rico, and Guam, the largest of the Ladrones, were ceded to the United States after the war of 1898. The rest of the Ladrones, with the Caroline and Pelew Islands, were ceded to Germany in 1899. The colonies were thus reduced to the African holdings:

	Area in sq. miles.	Population.
Rio de Oro, Adrar	70,000	130,000
Rio Muni, Cape San Juan	9,800	140,000
Fernando Po, Annobon	780	21,950
Total	80,580	291,950

Though Spain is almost a peninsula, the uniform character of the coast-line and the great elevation of its central plateau—the greater part of the surface being a tableland 2000–3000 feet above sea-level—give Spain a more continental character in its extreme range of temperature than any of the other peninsulas of Europe. Outside the plateau lie the highest summits of the whole country, the Pic de Néthou in the Pyrenees (11,151 feet), and the Pic de Velate in the Sierra Nevada (11,670), while the Picos de Europa in the Cantabrian Range attain over 8000 feet. The plateau itself is traversed by four mountain-ranges, which separate the valley of the Ebro from that of the Douro; and the whole of it has a general slight inclination from east or north-east to south-west. Hence all the considerable rivers except the Ebro flow westward to the Atlantic. The configuration of the country renders the climate very varied. In parts of the north-west the rainfall is among the heaviest in Europe. In the east and south-east occasionally no rain falls in the whole year. The rainfall in the Western Pyrenees is very great, yet on the northern slope of the valley of the Ebro there are districts almost rainless. The western side of the great plateau, speaking generally, is more humid and much colder than the eastern, where irrigation is necessary for successful cultivation. Galicia is almost a cattle country; Estremadura possesses vast flocks of sheep and herds of swine. The vegetable productions of Galicia and the Asturias are almost those of Devonshire and of south-west Ireland. Till the 18th century cider was the great beverage in the north; but in the basin of the Minho, in the Riojas on the Ebro, in Navarre, Aragon, and Catalonia strong red wines are grown in abundance. The productions of Catalonia and Tarragona are almost those of Provence and the Riviera. The plains of Leon and of Old and New Castile are excellent corn-growing regions. From Valencia southwards the products are semi-tropical; the climate is almost more tropical than that of the opposite coast of Africa. Fruits of all kinds, luscious or fiery wines, oil, rice, esparto grass, and sugar are common along the coast. No other part of the soil of Europe is so rich in varied produce. Large tracts of Spain once cultivated in Roman or in Moorish times now lie abandoned and unproductive; 46 per cent. of the whole is uncultivated.

For a moment in the 16th century Spain was the most important country in Europe; but the population was unequal to the drain upon it caused by constant warfare, emigration, and adverse economical and industrial conditions. Thus a pop. of over 10 millions at the end of the 15th and beginning of the 16th centuries fell to little more than 6 millions in the 17th; the numbers then slowly rose: (1768) 9,307,804; (1857) 15,464,340; (1897) 18,089,500. In 1905 there were two cities with over 400,000 inhabitants, Madrid and Barcelona; one of 225,000, Valencia; three of between 150,000 and 100,000, Seville, Malaga, and Murcia. The densest population is in Madrid, Barcelona, Pontevedra, and the Basque Provinces. Emigration (to South America, Algeria, and elsewhere) is steadily on the increase. Some 60 or 70 per cent. of the population are engaged in agriculture, and 10 or 11 per cent. in mining or manufacturing and trade. Since the sale of church, crown, and much of the municipal property during the 19th century the land has become much divided; it is estimated that there are about 3½ millions of holdings, of which ¾ million are occupied by tenants, the rest by proprietors. The seat of the manufacturing industries—mainly cotton—is chiefly Catalonia; and the manufacture of corks (30,000 tons yearly) employs over 8000 men in that province. The mineral wealth is more widely distributed—iron in Biscay and the province of Huelva; copper at Huelva, in the Rio Tinto and Tharsis mines; lead at Linares; quicksilver at Almaden; coal chiefly in the Asturias; salt in Catalonia, and by evaporation near Cadiz. The annual produce of iron ore is from 7,000,000 to 8,000,000 tons (seven-eighths of which is exported); of copper, 2,700,000; of coal, 2,600,000 tons. A considerable proportion of iron, lead, copper, zinc, and quicksilver is smelted or prepared in the country. The total value of metallurgical products in one year may be from £6,000,000 to £7,000,000. Until lately the only religion tolerated was that of the state, the Roman Catholic; now a certain toleration is allowed to other denominations. In the large towns and in some of the provinces a great effort is made to keep the higher and the technical schools on a level with the best in other European countries. In other parts the neglect of education is very great. There are nine universities in Spain—Madrid, Barcelona, Granada, Salamanca, Seville, Santiago, Valencia, Valladolid, and Saragossa: the number of students is about 16,000. In the episcopal seminaries and religious schools about 9000 are educated. Many of the primary schools in the provinces are in a wretched condition, the salary of the teachers

being only about £5 per annum. The great fault of the higher Spanish education is in the numbers who press into professional, literary, and political careers in comparison with those who dedicate themselves to commercial, industrial, or agricultural pursuits. By reason of this Spain loses great part of the advantages of her natural wealth. All her principal mines are worked, her railways built, schemes of irrigation carried out with foreign capital, and in spite of the excellence of her labourers the higher employees are often foreigners. The imports in 1877 amounted to £16,340,000, and the exports to £18,175,000; in 1903 they had increased to £25,070,120 and £24,318,865 respectively (taking the peseta at its actual value = 7½d.). The recent increase is chiefly due to the export of wine to France and to the imports from that country. The exports to France have a total value of something over £5,780,000, and the imports from France of about £4,434,750. The total exports from Spain to Great Britain are about £9,500,000, and the imports £5,500,000. There are 8520 miles of railway and 21,000 miles of telegraph.

The government of Spain is a hereditary monarchy. The Cortes consists of two bodies—the Senate (partly hereditary, nominated, and elected) and the Chamber of Deputies, elected by universal suffrage. The public debt of Spain is about £386,713,590, and the annual charge £15,859,470. The revenue and expenditure, nominally nearly balanced, rose from £31,000,000 in 1881 to £38,500,000 in 1905. The navy of Spain consists of 7 ships of different ratings, 6 torpedo destroyers and 7 torpedo gunboats, and 2 cruisers building. A large proportion of the navy was lost in the war with the United States in 1898. The army on a peace footing is 95,000, not including the *Guardia civil*, or gendarmes, the *Carabineros*, and other active or reserve forces.

Spain was originally occupied by Iberian tribes (akin to the present Basque inhabitants of the north), who were partially overlaid by invading Celts. The Carthaginians established themselves in the south of Spain in the 3d century B.C. The Romans appeared in force in the next century, but it was not till after a fierce and prolonged resistance from Iberians and Celtiberians that, under Augustus, the Roman conquest was complete. Soon Spain, thoroughly Romanised, was contributing largely to Latin literature and Roman culture. The Germanic invaders from the north, Suevi, Vandals, and Visigoths, crushed the Roman power in the 5th century A.D., and Spain became a province of the Visigothic kingdom (573 A.D.). The Moorish conquest was very rapid (714–732) and complete, except in the north and north-west. The several Christian kingdoms of Spain—Castile, Leon, Navarre, Aragon, &c., as well as Portugal—were formed by the gradual depression of the Moors; but Moorish Granada was not conquered till 1492, and Spain was not united under one rule till 1512. Spain became a European state with the union of Ferdinand of Aragon and Isabella of Castile in 1469, and the New World was discovered for them; under their son, the Emperor Charles V., Spain was in the forefront of European history, and Flanders and the two Sicilies Spanish provinces. With Philip II., Charles's son, the decline of Spain set in, though now for sixty years Portugal was under the Spanish crown. The Bourbon dynasty brought complication in the wars of Louis XIV., and little advantage from the recovery of Naples and Sicily. The nadir of Spanish history is in the time of Napoleon, when Spain, in spite of some national efforts, was nominally a kingdom, but really a mere province of the French empire. In spite of the valiant patriotism shown in resisting the French, and the ultimate recovery of national independence (by English help) through the overthrow of Napoleon, the history of Spain in the 19th century was in the main inglorious, the disastrous war with the United States at its close leading to the loss of the greater colonies. The language, in various dialects, is a typical Romance tongue, save in the Basque provinces, where the non-Aryan Basque tongue survives.

See Ford's *Handbook*, Hare's *Wanderings*, and books by Mrs Harvey (1875), Rose (1875), Campion (1876), Wentworth-Webster (1881), Gallenga (1883), H. E. Watts (1893), Ulick Burke (1900), and Martin Hume (1899–1902), with Butler Clarke's *Spanish Literature* (1893).

Spa'lato (less correctly *Spalatro*; Slav. *Split*), the busiest town of Dalmatia, stands on a promontory on the east side of the Adriatic, 160 miles SE. of Fiume, and with a branch-line to the Bosnian railway (1894–1900). Here, in a beautiful situation on the seashore, the Emperor Diocletian built for himself a colossal palace (*Salonæ Palatium*, whence, or from its Greek equivalent, comes the name Spalato), to which he retired when he abdicated the throne in 305. The massive walls were from 570 to 700 feet long and 50 to 70 feet high, and enclosed an area of 9½ acres. This gigantic palace, square, like a Roman camp, with a gate in the middle of each side, is still standing in a fairly good state of preservation, its temple being the present Christian Cathedral; but the interior was converted into a town in 639 by the citizens of the adjoining city of Savona who escaped the Avars, and it has been so occupied ever since. The existing city of Spalato, lying more than half of it outside the palace walls, is one of the principal ports for Bosnia and Herzegovina, and manufactures liqueurs (rosolio and maraschino), bricks, ropes, &c. Pop. 26,000. See Freeman's *Historical Essays* (3d series, 1879); and T. G. Jackson's *Dalmatia* (vol. ii. 1887).

Spalding, a Dutch-looking town on the Welland in Lincolnshire, 14 miles SW. of Boston, with a fine church (Decorated and Perpendicular), built in 1284 and restored by Sir G. Scott, who also planned two of the other three churches in the town. The grammar-school, of which Bentley was master in 1682, was founded in 1568; new school buildings were erected in 1881. This town had, prior to the Conquest, a castle and a monastery; the latter eventually became a priory (1051), attached as a cell to Crowland. The river is navigable for vessels of 70 tons. Spalding is a railway centre, and trades in agricultural produce. Pop. 9500.

Spandau (*au* as *ow* in *now*), a town and first-class fortress of Prussia, at the confluence of the Havel and the Spree, 8 miles by rail W. by N. of Berlin. The principal defence of the capital on that side, it has very strong fortifications. In the 'Julius tower' of the citadel is preserved in gold the Imperial War-fund of £6,000,000 (mainly derived from the French war indemnity) that the government, since 1871, keeps in reserve for a great war. Spandau is the seat of an arsenal, large government cannon-foundries, and factories for making gunpowder and other munitions of war. Pop. (1875) 27,630; (1900) 65,030, including a garrison of nearly 4000 men.

Spanish Main (i.e. *main-land*), a name formerly given to the Spanish provinces on those coasts of South and Central America, which are contiguous

to the Caribbean Sea. The name, however, is often applied to that sea itself.

Spanish Town. See JAMAICA.

Sparta, or LACEDÆMON, ancient capital of Laconia, and most famous city of the Peloponnesus, was situated on the right bank of the Eurotas, 20 miles from the sea, in a plain shut in by mountains, of which that on the west side, Mount Taygetus, rises to 8000 feet. The growth of the town of Misthra, 2 miles SW. of Sparta, in the 14th and 15th centuries A.D., led to the total desertion of the more ancient city; but the modern town of *Sparti* (pop. 5000), founded in 1836, occupies part of the site of old Sparta, and is again capital of the province of Laconia.

Spartanburg, a town of South Carolina, 93 miles by rail NNW. of Columbia. Here is the Wofford (Methodist; 1853) College. Pop. 11,400.

Spean (*Spane*), a river of Inverness-shire, running 20½ miles W. to the Lochy.

Speier. See SPIRES.

Spencer, a town of Massachusetts, 64 miles W. by S. of Boston, with manufactures of boots and woollens. Pop. 7747.

Spencer Gulf, a deep inlet (180 long by 90 wide) on the coast of South Australia, between Eyre's Peninsula and Yorke Peninsula.

Spennymoor, a town of Durham, 4 miles NE. of Bishop Auckland, with iron-foundries and coal-pits. Pop. 17,000.

Spey (*Spay*), a river of Scotland, rising at an altitude of 1500 feet above sea-level and running 107 miles NE. through or along the boundary of Inverness, Elgin, and Banff shires, until it falls into the Moray Firth at Kingston between Lossiemouth and Portknockie. The Dulnain and Avon are its principal tributaries. The salmon-fisheries, belonging to the Duke of Richmond, at its mouth, above which comparatively few fish penetrate, have a yearly worth of from £8000 to £10,000; else the Spey is almost without value, nor can it generally be called a picturesque stream. It has the swiftest current of all the large rivers in Britain, and is subject to sudden and violent freshets, resulting at times in disastrous inundations. See Sir Thomas Dick Lauder's *Moray Floods* (1830); and A. E. Knox, *Autumns on the Spey* (1882).

Speyer. See SPIRES.

Spezzia (Ital. *Spezia;* pron. *Spet'sia*), the principal naval port of Italy, stands near the head of a deep and commodious bay, 56 miles SE. of Genoa by rail. A breakwater (1860), 2400 feet long, covers the entrance; whilst formidable batteries (supplemented by torpedo appliances) bristle on the hills that overlook the bay and on the island of Palmeria, which guards its entrance. At this great national arsenal the Italians have built their large warships, and have their ship-repairing yards and docks, naval victualling yards, and store-houses (partly also at San Bartolomeo, on the opposite shore of the bay). There are also large barracks, a military hospital, schools of navigation, an iron-foundry, and manufactures of cables, sail-cloth, and white-lead. The beauty of the bay and the lovely climate cause Spezzia to be much frequented as a seaside-resort. It was on the shores of its bay that Shelley spent his last months, and here Charles Lever was consul for ten years. Pop. 65,620.

Spezzia (or *Spetsai;* anc. *Pityussa*), a Greek island at the entrance to the Gulf of Nauplia. Area, 6½ sq. m.; pop. 6899—6494 in the town of Spezzia, which has a good harbour.

Spice Islands. See MOLUCCAS.

Spicheren (*Spihh'er-en*), or SPEICHERN, a village on the frontiers of Prussia and Lorraine, 2 miles S. of Saarbrück. Here on 6th August 1870 the Germans defeated the French.

Spielberg. See BRÜNN.

Spilsby, a market-town of Lincolnshire, 19 miles by rail NE. of Boston, stands on the edge of the Wolds. The church contains interesting monuments of the Willoughby family (1348–1610), and the market-place has a bronze statue of Sir John Franklin, a native of the town. Pop. 1497.

Spinazzola (*Spinat'sola*), a city of Southern Italy, 30 miles SW. of Bari. Pop. 11,353.

Spires (Ger. *Speier*), the capital of the Bavarian Palatinate, stands on the left bank of the Rhine, 19 miles S. of Mannheim. The red sandstone Romanesque cathedral was begun by Conrad II. in 1030 and finished in 1061; it suffered from fire in the 12th, 13th, and 16th centuries, and in 1689 was stripped to the bare walls and even set fire to by the French, who also exhumed and scattered the bones of eight German emperors. Reconstructed in 1782, it was again desecrated by the French in 1794, but was once more rebuilt in 1797–1822. The interior walls are covered with more than thirty large frescoes; and statues of the eight emperors (1858) adorn the vestibule. The town itself was also demolished by the French in 1689, and having been rebuilt since then, has broad though irregular streets, with very few ancient buildings, except the gateway or clock-tower, dating from before 1246, and a few fragments of the imperial palace, in which several diets were held—one that of 1529, at which the Reformers first became known as Protestants. There is some industry in cloth, paper, tobacco, sugar, &c. Pop. 21,000. The *Augusta Nemetum* and *Noviomagus* of the Romans, but renamed *Spira* from the 7th c., Spires in the 13th became a free imperial city. Between 1801 and 1814 it was the capital of a dep. of France, and in 1815 it passed to Bavaria.

Spitalfields, a poor district of north-east London, in the Tower Hamlets, derives its name from the hospital of St Mary, founded there in 1197. The manufacture of silk was established in Spitalfields by emigrants from France after the revocation of the Edict of Nantes (1685).

Spithead, a celebrated roadstead on the south coast of England, and a favourite rendezvous of the British navy, is the eastern division—the Solent (q.v.) being the western—of the strait that separates the Isle of Wight from the mainland. Protected from all winds except those from the south-east, it receives its name from the 'Spit,' a sandbank stretching south from the Hampshire shore for 3 miles; and it is 14 miles long by 4 miles in average breadth. Here in 1797 the sailors of the Channel Fleet mutinied for more liberal pay and allowances, which were granted to them. Spithead has been strongly defended since 1864 by fortifications completing those of Portsmouth (q.v.).

Spittal. See BERWICK-ON-TWEED.

Spitzbergen (*g* hard), a group of Arctic islands, lying 400 miles N. of Norway, and consisting of West Spitzbergen (15,260 sq. m.), North-east Land (4040 sq. m.), Stans Foreland (2210 sq. m.), the three islands called King Charles Land or Wiche Island (also identified with Gillis Land), Barents Land, Prince Charles Foreland, and several smaller islands and clusters of islets. The whole is icebound, and there are magnificent glaciers

on the eastern shores, especially Dickson's glacier on North-east Land, 150 miles long. A thick ice-sheet covers the interior of the larger islands; but several sharp peaks—whence the name (meaning 'needle-mountains')—project above it and are nearly 2000 feet high; others on Prince Charles Foreland are almost 5000 feet. The shores of West Spitzbergen are deeply indented with fjords, two of which almost cut the island in two. The north-west shores of North-east Land are also very much broken. The vegetation is very scanty; except for the polar willow and a couple of berry-bushes, it consists principally of saxifrages and mosses, on which feed large herds of reindeer. The arctic fox and polar bear are the only other land animals, though there are vast swarms of sea-fowl. In the 16th and 17th centuries large fleets of whalers used to come hither in summer, but the whales have been almost exterminated, and the seals will soon be. There are no permanent inhabitants. The islands were discovered by Barents in 1596. See works by Lord Dufferin (1857), Lamont (1876), Conway (1897), and, in German, by Hafter (1900).

Splügen (nearly *Splee-gen*, *g* hard), a pass (6946 feet) in the Swiss Grisons, connects the valley of the Farther Rhine with that of a tributary of the Adda. The existing road, 24 miles long, was made by the Austrian government in 1812–22.

Spokane (*Spokan'*), the third city of Washington, on the Spokane River, by the Union Pacific 481 miles NE. of Portland, Oregon, with a great lumber trade. A fire in August 1889 did $6,000,000 damage. Pop. (1880) 350; (1900) 36,850.

Spoleto (*Spolay'to*; Lat. *Spoletium*), an archiepiscopal city of ancient Umbria in the middle of Italy, is situated on a rocky hill, 75 miles by rail N. by E. of Rome. It has a citadel, dating from the days of the Goths, a Victor Emanuel monument (1892), and a fine cathedral, with frescoes by Lippo Lippi. Water is brought in by a 7th-century aqueduct, 270 feet high and 680 long. Pop. 7696.

Spondinig. See STELVIO.

Spottsylvania Courthouse, a small village of Virginia, 55 miles N. by W. of Richmond, the scene during May 10–12, 1864, of a desperate but indecisive battle in the civil war.

Spree (*Spray*), a sluggish river of Prussia, rises in the east of Saxony, on the Bohemian border, and winds 227 miles N. and W. to the Havel at Spandau, passing Bautzen, Kottbus, and Berlin.

Springfield. See GRETNA.

Springfield, (1) the capital of Illinois, 185 miles by rail SW. of Chicago, at the meeting-point of seven railways. It possesses a handsome federal building, a state arsenal, two colleges, and one of the largest state capitols in the Union (of marble, 385 feet long by 296 wide; cost $5,000,000). It has coal-mines, iron-rolling mills and foundries, a watch-factory, and flour, woollen, paper, and planing mills. Springfield, which became the capital in 1837, was the home of Abraham Lincoln, who is buried in the beautiful Oak Ridge cemetery, in the crypt of a granite obelisk (1874), which cost $264,000. Pop. (1880) 19,746; (1900) 34,160.—(2) A thriving city of Massachusetts, capital of Hampden county, on the Connecticut River's left bank, 99 miles by rail W. by S. of Boston and 25 N. of Hartford. The river is crossed by five bridges to West Springfield (pop. 5075), and four railways meet here. The public buildings include a cathedral, city hall, granite court-house, and a railway station which cost $700,000. Among the factories are the U. S. Armoury (since 1794), foundries, car-works, and manufactories of cottons and woollens, paper, machinery, furniture, trunks, buttons, needles, spectacles, locks, pistols, skates, picture-frames, organs, and jewellery. The town was settled in 1635. Pop. (1880) 33,340; (1900) 62,060. —(3) Capital of Greene county, Missouri, 232 miles by rail WSW. of St Louis, with machine-shops, car-works, and large cotton and woollen factories. Here is Drury College (Congregational; 1873). Near Springfield was fought the battle of Wilson's Creek, 10th August 1861. Pop (1880) 6522; (1900) 23,267.—(4) Capital of Clark county, Ohio, on Lagonda Creek and Mad River, 80 miles by rail NE. of Cincinnati. Six railways meet here. The city contains the Wittenberg College (Lutheran; 1845), and handsome county and municipal buildings. It manufactures farm machinery, bicycles, sewing-machines, iron fences, paper, &c. Pop. (1880) 20,730; (1900) 38,253.

Spurn Head, a promontory stretching 2½ miles into the mouth of the Humber (q.v.), and forming the south-eastern extremity of Yorkshire. It has two lighthouses. Between 1771, when Smeaton's small lighthouse was built, and 1863 the sea gained 280 yards here, but since the erection of groynes in 1864 the land has gained. See Boyle's *Lost Towns of the Humber* (1889).

Squillace (*Skwillah'tchay*), a small cathedral town (pop. 2700) of Calabria, on the site of the anc. *Scylacium*, 12 miles SW. of Catanzaro by rail, and 3 miles inland from the Gulf of Squillace.

Srinagar (*Sreenagur'*), or CASHMERE, (q.v.) the capital of the native state of Cashmere (q.v.) in Northern India, stands in a lovely valley of the Himalayas on the Jhelum, at an elevation of 5276 feet. Pop. (1901) 122,618.

Srirangam. See SERINGHAM.

Srivillipatur, a town in the NW. of Tinnevelli district, in South India. Pop. 26,400.

Staaten Island. See STATEN ISLAND.

Stade (*Shtâh'deh*), an ancient town of Hanover, 22 miles W. by N. of Hamburg. Pop. 10,580.

Staffa (Scand., 'pillar-island'), a celebrated islet on the west of Scotland, lies 4 miles SW. of Ulva, 6 N. by E. of Iona, and 54 W. of Oban. It forms an oval uneven tableland, rising at its highest to 144 feet above the water, 1½ mile in circumference, and 71 acres in area. In the north-east is a landing-place; but elsewhere the coast is girt with cliffs 84 to 112 feet high. The most remarkable feature of the island is Fingal's or the Great Cave, the entrance to which is formed by columnar basaltic ranges, supporting a lofty arch. The entrance is 42 feet wide, and 66 feet high, and the length of the cave is 227 feet. The floor of this marvellous chamber is the sea. First described (in Pennant's *Tour*) by Sir Joseph Banks, after a visit in 1772, Staffa has since been frequently visited—among others by Wordsworth, Keats, Scott, Mendelssohn, Tennyson, and, on 19th August 1847, Queen Victoria.

Stafford, the county town of Staffordshire, on the left bank of the Sow, 3 miles above its junction with the Trent, and 25 miles SSE. of Crewe, 29 NNW. of Birmingham, and 133 NW. of London. St Mary's Church, formerly collegiate, is a good cruciform structure, with an octagonal tower. Transition Norman to Decorated in style, it was restored by Scott in 1844–47 at a cost of £30,000, and in 1878 received a bust of Stafford's chief worthy, Izaak Walton, who was baptised in its font. St Chad's, Norman, was very thoroughly

restored during 1855–85; and there are also King Edward's grammar-school (1550; rebuilt 1862), the town-hall (1798), a free library (1882), the William Salt Library (1874), the Clement Wragge Museum, the infirmary (1766), the county lunatic asylum (1818), &c. Stafford Castle, finely situated on an eminence outside the town, which commands a magnificent view, is an unfinished castellated pile. It was built by Sir G. Jerningham in 1810–15, successor to a Saxon fortress of the Princess Ethelfleda, and to a later Norman stronghold, which was finally taken by the parliamentarians in 1643, and demolished. Boot and shoe making is the staple industry, and Stafford is an important railway centre. Chartered by King John, it returned two members from Edward I.'s reign till 1885, when the representation was reduced to one and the parliamentary boundary extended. Pop. (1851) 11,829; (1871) 14,437; (1901) 20,894. See works by Masfen (1852) and Cherry (1890).

Staffordshire, a west midland county of England, bounded by the counties of Cheshire, Derby, Leicester, Warwick, Worcester, and Salop. Measuring 54 by 35 miles, it has an area of 1169 sq. m. or 748,433 acres. The only hilly district is in the north, where the wild 'Moorlands,' the southern extremity of the Pennine range, extend from NW. to SE. in long ridges, separated by deeply-cut valleys, and subside as they near the valley of the Trent. Several points exceed 1500 feet above sea-level, but Axe Edge Hill (1756), falls just within Derbyshire. The rest of the county is gently undulating, with the low upland of Cannock Chase in the centre. The Trent, flowing first south-eastward through the interior, and then north-eastward along the Derbyshire border, is the chief river, and receives the Sow, Tame, Blythe, and Dove. In the north and south are the Pottery and Dudley coalfields, which, besides containing nearly 600 collieries, yield also (especially the northern one) vast quantities of ironstone. The climate is cold and humid; and, though more than four-fifths of the area is arable, much of the soil is cold and clayey, and agriculture is in rather a backward condition. In the 'Potteries' of North Staffordshire, embracing Stoke-upon-Trent, Etruria, Hanley, Burslem, &c., most extensive manufactures of china and earthenware are carried on; and in the 'Black Country' in the south, with Wolverhampton and Walsall, iron is very largely manufactured. The Burton breweries are world-famous. There is a perfect network of railways and canals. Staffordshire, which is mainly in the diocese of Lichfield, contains five hundreds and 247 parishes. It has been divided since 1885 into seven divisions, each returning one member —Leek, Burton, West, North-west, Lichfield, Kingswinford, and Handsworth. The thirteen municipal boroughs are Burslem, Burton-on-Trent, Hanley, Lichfield, Longton, Newcastle-under-Lyme, Stafford, Stoke-upon-Trent, Tamworth, Walsall, Wednesbury, West Bromwich, and Wolverhampton. Pop. (1801) 242,693; (1841) 509,472; (1881) 981,009; (1901) 1,234,382. Staffordshire has no great wealth of antiquities, and has been the scene of no battles more important than Blore Heath (1459) and Hopton Heath (1643). Among its natives have been Lord Anson, Ashmole, Dr Johnson, Thomas Newton, Cardinal Pole, Earl St Vincent, Izaak Walton, and Josiah Wedgwood.

See county histories by Plot (1686), Erdeswick (1717; 4th ed. 1844), Shaw (1798–1801), and Garner (1844–60); the *Proceedings* of the William Salt Archæological Society (1880 *et seq.*); and other works cited in Simms's *Staffordshire Bibliography* (Lichfield, 1892).

Staines, a picturesque town of Middlesex, on the left bank of the Thames, 6 miles SE. of Windsor and 19 WSW. of London (35½ by river). Named from the 'London Stone' (1280) at the county boundary, Staines has vast water-works, and a granite bridge by Rennie (1832); and near it are Runnimede, Egham, and Cooper's Hill. Pop. (1851) 2430; (1901) 6688.

Stair, an Ayrshire parish, 6½ miles ENE. of Ayr, gives the title of Earl to the Dalrymples.

Staithes, a Yorkshire coast-village, 10 miles NW. of Whitby. Captain Cook lived here as a boy.

Stalbridge, a Dorset town, 6 miles E. by N. of Sherborne. Pop. 1705.

Stalybridge, a cotton town of Cheshire, occupying a hilly site on both banks of the Tame, 7½ miles E. by N. of Manchester. Dating only from 1776, it has huge factories for the spinning of cotton yarns and calico-weaving, iron-foundries, and machine-shops, a town-hall (1831), market-buildings (1867), a mechanics' institute (1861), an Oddfellows' hall (1878), and, between it and Ashton-under-Lyne to the west, the Stamford Park (1873). It was made a municipal borough in 1857, a parliamentary borough (partly in Lancashire) in 1867. Pop. of the former (1851) 20,760; (1901) 27,674; of the latter (1901) 46,558.

Stamboul (*Stambool'*). See CONSTANTINOPLE.

Stamford, a municipal borough chiefly in Lincolnshire, but partly also in Northamptonshire, on the Welland, 12 miles WNW. of Peterborough. Hengist is said to have here defeated the Picts and Scots in 449, and Stamford thereafter is notable as one of the Danish 'five boroughs,' as having been visited by at least thirteen sovereigns (from Edward the Elder in 922 to Queen Victoria in 1844), for the persecution of its Jews (1190), as having between 1266 and 1334 only missed becoming a rival to Oxford, for its colony of Flemish Protestants (1572), as the birthplace of the earliest provincial newspaper, the *Stamford Mercury* (1695), and for its famous bull-running on 13th November from King John's time until 1839. It has lost ten of its sixteen churches, an Eleanor cross, two castles, six religious houses, and two hospitals. Existing edifices are St Mary's, with a fine spire, All Saints, with a fine tower and steeple, St Martin's with Lord Burghley's grave and, in the churchyard, Daniel Lambert's, a town-hall (1777), corn exchange (1859), literary institute (1842), bridge (1849), Browne's Hospital (15th century), and boys' and girls' high schools (1874–76). Burghley House (q.v.) stands close 'by Stamford town.' The trade and industries are mainly agricultural. Chartered by Edgar in 972, and afterwards by Edward IV., Stamford was a parliamentary borough, but lost one of its two members in 1867 and the other in 1885. For good services rendered by the inhabitants at the battle of Loose-coat-field (1469) the town seal bears the royal arms. Pop. (1851) 8933; (1901) 8229. See works by Butcher (1646), Howgrave (1726), Peck (1727; new ed. 1785), Drakard (1822), Sharp (1847), Walcott (1867), and Nevinson (1879).

Stamford, a town of Connecticut, on Long Island Sound, 33 miles by rail NE. of New York. It has a handsome town-hall; and the hills around are embellished with the summer residences of well-to-do New Yorkers. Settled in 1641, it has iron and bronze foundries, and manufactories of

hats, drugs, sashes, and Yale locks. Pop. (1880) 11,297; (1900) 15,997.

Stamford Bridge, a Yorkshire village, on the Derwent, 9¼ miles NE. of York. Here Harold routed Harold Haarfager (1066).

Standerton, capital of a district in the Transvaal, 110 miles SE. of Pretoria, with two bridges across the Vaal. Pop. 4500.

Stanhope, a town on the Wear, 26 miles W. of Durham by rail. Its rectory, once known as the 'golden rectory,' was held by Bishop Butler (1725–40). The famous lead-mines are now much less profitable than of old. Pop. 1964.

Stanislawow (*w's* as *v's*), or STANISLAU, an Austrian town in Galicia, 87 miles SE. of Lemberg. Pop. 30,000 (10,000 Jews).

Stanley, a town 8 miles W. of Durham, pop. 13,500; (2) another is partly in Wakefield (q.v.); (3) another is 7 miles NW. of Perth.

Stanley Pool, a lake-like expansion of the Congo (q.v.), 25 miles long by 16 wide, and 1142 feet above sea-level.

Stanovoi Mountains. See SIBERIA.

Stanton Drew, a Somerset parish, 7 miles S. of Bristol, with prehistoric stone circles.

Stanton Harcourt, the ancient seat of the Harcourts, 6 miles W. of Oxford, with a curious kitchen and memories of Pope.

Stapleford, a market-town of Notts, 6 miles W. of Nottingham. Pop. of parish, 5770.

Staraya-Russa (*Star'a-Roossa*), a town of Russia, 62 miles S. of Novgorod by rail round Lake Ilmen, with salt springs. Pop. 13,537.

Starbuck. See MANIHIKI ISLANDS.

Starcross, a Devon watering-place, on the Exe estuary, 8 miles SSE. of Exeter. Pop. 978.

Stargard, the chief town of Further Pomerania, Prussia, on the Ihna, 22 miles by rail E. by S. of Stettin. Pop. 26,860.

Starodoub (*ou* as *oo*), an Ukraine town, Russia, 120 miles NE. of Tchernigoff. Pop. 20,388.

Start Point, a projection of the coast of Devon, 8 miles S. of Dartmouth, forming the south-eastern extremity of the county. It is crowned by a lighthouse (92 feet), visible for 20 miles.

Stassfurt, a town of Prussian Saxony, 20 miles SSW. of Magdeburg, with enormous stores of salt and kainite (whence the main potash supplies of the world are derived). It has also machine-shops, boiler-works, and other industrial enterprises. Pop. 21,500.

Staten Island (*Stat'ten*), (1) separated from Long Island by the Narrows and from New Jersey by the Kill van Kull and Staten Island Sound, constitutes the borough of Richmond, New York city. Area, 55 sq. m.; pop. (1900) 67,021.—(2) An Argentinian island separated from Tierra del Fuego by Le Maire Strait. Long (45 miles) and narrow, it has steep coasts penetrated by deep fiords, and rises to 3000 feet. Snow covers it most of the year. It was named in 1616 after the States-general of Holland.

Staubbach, FALL OF. See LAUTERBRUNNEN.

Staunton, capital of Augusta county, Virginia, in the Shenandoah valley, 136 miles by rail WNW. of Richmond. Here are the state lunatic, deaf-mute, and blind asylums, large iron-works, and flour and planing mills. Pop. 7300.

Stavanger (*Stah'vang-er*), the chief town of SW. Norway, on the S. side of Bukken Fjord, 100 miles S. of Bergen. It has two harbours, and derives its importance from the fisheries of the adjacent coast. Dating back to the 9th c. at least, it has been often destroyed by fire and is now quite a modern place. The Gothic cathedral was founded by an English bishop (Reinald) in the 11th century. Of late years Stavanger has become a favourite tourists' rendezvous, 3500 stopping here in 1890. Pop. (1900) 30,620.

Staveley, a Derbyshire township, 4 miles NE. of Chesterfield. Pop. 9363.

Stavro'pol, a town on the northern slopes of the Caucasus. Pop. 41,621.—Area of *government*, 26,492 sq. m.; pop. 912,650.

Stawell, a town of Victoria, Western Australia, 125 miles WNW. of Melbourne, with gold-mines. Pop. 5500.

Steelton, a borough of Pennsylvania, on the Susquehanna, 4 miles SE. of Harrisburg, with steel-works. Pop. (1880) 2447; (1900) 12,086.

Steinkerk, or STEENKERKE (*Stine-kerk* or *Stayn-ker-keh*), a Belgian village (pop. 860), 5 miles N. of Soignies. William III. was defeated here by the French on 3d August 1692.

Stellaland, a short-lived South African republic, formed in 1882 by Boer adventurers. In 1885 the British government incorporated it in Bechuanaland (q.v.).

Stellenbosch, a South African town (pop. 6000), in a fertile vine-clad valley, 25 miles E. of Capetown by rail, with an important college affiliated to Capetown University.

Stelvio, PASS OF THE (Ger. *Stilfserjoch*), the highest carriage-road across the Alps (9042 feet), in the Austrian Tyrol, forming part of the great road (1825) between Milan and Innsbruck.

Stendal, a town of Prussian Saxony, 36 miles NNE. of Magdeburg, has a Gothic cathedral (1420–24), a statue of Winckelmann (a native), railway workshops, &c. Pop. 22,100.

Stenhousemuir, a town of Stirlingshire, 3 miles NNW. of Falkirk. Pop. 5436.

Stennis, a parish in Orkney, 4 miles NE. of Stromness, with a sea-loch of that name, and two celebrated stone circles, the larger 340 feet in diameter, with stones 3 to 14½ feet high.

Stepney, a London metropolitan borough; pop. (1901) 298,600. It is also one of the parliamentary divisions of Tower Hamlets.

Sterling, a city of Illinois, on Rock River, 109 miles W. of Chicago. It has factories, which produce iron, farm implements, barbed wire, pumps, windmills, wagons, paper, &c. Pop. 6310.

Sternberg, a town of Austria, 12 miles by rail N. of Olmütz. Pop. 15,200.

Stettin (*Stet-teen'*), capital of the Prussian province of Pomerania, and a busy port, stands on the Oder, 30 miles from the Baltic and 60 by rail (120 by river and canal) NE. of Berlin. Among its buildings are the Gothic church of St Peter (founded 1124), the large church of St James (14th century), the royal palace (1575), two ornamental arches, a hospital, town-house, theatre, &c. The strong fortifications were removed in 1874; since then the ground on which they stood has been rapidly built over, so that Stettin now forms virtually one large town with Bredow, Grabow, and Züllchow. The population rose from 17,154 in 1871 to 116,139 in 1890, and—with the suburbs—to 215,000 in 1905. Its industries include shipbuilding, oil-refining, and the manufacture of cement, sugar, paper, spirits, soap and candles, matches, chemicals, flour, sewing-machines, &c. Stettin was the seat of a princely

dynasty, 1107–1637; was occupied by Sweden, 1648–1720; by the French, 1806–13.

Steubenville (*Stew'ben-vil*), capital of Jefferson county, Ohio, on the Ohio River, 68 miles below Pittsburgh (by railway 43), with blast-furnaces, rolling-mills, machine and railway shops, and manufactories of white-lead, paper, glass, woollens, flour, beer, &c. There are coal-mines near by, and natural gas is plentiful. Fort Steuben was built here in 1787. Pop. 15,250.

Stevenage, a town of Hertfordshire, 4 miles SE. of Hitchin by rail, with an old parish church and a grammar-school (1558). Straw-plait is manufactured. Pop. 4000.

Stevenson's Road. See LIVINGSTONIA, TANGANYIKA.

Stevens Point, a town of Wisconsin, on the Wisconsin River, 161 miles by rail NW. of Milwaukee, with mills and a lumber trade. Pop. 9800.

Stevenston, a town of Ayrshire, ¾ mile inland, and 28 miles SW. of Glasgow. Cotton and silk weaving used to be the staple industries, but it now depends on the neighbouring collieries, ironworks, chemical works, and Nobel's explosives factory. Pop. 7000.

Stewart Island. See NEW ZEALAND.

Stewarton, a town of Ayrshire, on Annick Water, 5½ miles N. by W. of Kilmarnock. Its specialty is the Scotch bonnet manufacture; but it also carries on carpet-weaving, spindle-making, &c. Pop. 3000.

Stewartstown, a Tyrone market-town, 7 miles NE. of Dungannon. Pop. 670.

Steyer (*Stī'er*), a town of Upper Austria, at the confluence of the Steyer and Enns, 36 miles by rail S. by E. of Linz, is the chief seat of the iron and steel manufactures of Austria, turning out firearms, cutlery, &c. Pop. 17,199.

Steyning (*Stain'ing*), a Sussex town, 1 mile W. of the river Adur and 4½ miles N. of Shoreham. Till 1832 it returned two members. Pop. 1705.

Stillorgan, a village, 5 miles SE. of Dublin.

Stillwater, capital of Washington county, Minnesota, on the navigable St Croix River (which here expands into a narrow lake), 18 miles by rail NE. of St Paul. It has a large lumber trade, and contains sawmills, a foundry, and flour-mills. Pop. 13,500.

Stilton, a parish (pop. 650) of N. Huntingdonshire, 6 miles SW. of Peterborough. It gives name to the well-known cheese, most of which now is of course manufactured elsewhere.

Stinchar (*Stin'shar*), an Ayrshire stream, flowing 30 miles to the sea at Ballantrae.

Stirling, the county town of Stirlingshire, stands on the south bank of the winding Forth, 36 miles NW. of Edinburgh and 29 NNE. of Glasgow. Like Edinburgh, to which in its main features it bears a striking resemblance, it no doubt owes its origin to the strong natural fortress of its Castle Hill, which rises gradually from the east to a height of 420 feet above the sea or 340 above the plain, and fronts the west with a steep precipitous wall of basaltic rock. The Castle, which commands magnificent views of the Grampians, the Ochils, and the 'Links of Forth,' dates from immemorial antiquity, though few, if any, of the existing buildings are earlier than the days of the Stewart sovereigns, who often kept court here. These include the Douglas room (where the Earl of Douglas was stabbed by James II., 1452), James III.'s parliament-hall (now a barrack-room), James V.'s palace, and James VI.'s chapel (now a store-room). Stirling has many other objects of interest, as Argyll's Lodging (1630, since 1799 a military hospital); ruined Mar's Work (*c.* 1570); the parish church (in 1656 divided into two); the colossal statue of Bruce (1877); the new cemetery, with half-a-dozen statues of Reformers and Covenanters and a marble group of the Wigtown martyrs; Cowane's Hospital or the Guildhall (1637); the King's Knot and King's Park; the Mote or Heading Hill; the old four-arch bridge (*c.* 1400 —the 'key of the Highlands'); Robert Stevenson's new bridge (1832); and the Smith Institute (1874), with picture-gallery, reading-room, library, and museum, where now is preserved the 'Stirling Jug' (1497), the standard of the old Scots pint. Other modern edifices are the County Buildings (1875), the public hall (1883), and the High School (1855–89). In the neighbourhood are Bannockburn (q.v.), the ruins of Cambuskenneth Abbey (q.v.), and the Abbey Craig (q.v.). Stirling manufactures tartans, tweeds, carpets, agricultural implements, &c. A royal burgh as early as 1119, it unites with Dunfermline, Culross, Inverkeithing, and Queensferry to return one member. Pop. (1851) 12,837; (1901) 18,403. Stirling (formerly *Stryvelyne* or *Estrivelin*, and also *Snowdoun*) has a wealth of historic memories —the death of Alexander I. and William the Lion; Wallace's victory of Stirling Bridge (1297); the great siege of the castle by Edward I. (1304); the birth of James III.; the coronation of Queen Mary; the baptism and coronation of James VI.; the slaughter of the Regent Lennox (1571); the birth of Prince Henry (1594); the capture of the castle by Monk (1651); and its unsuccessful siege by the Jacobites (1746). See *History of the Chapel Royal of Stirling* (Grampian Club, 1882), and *Charters of Stirling* (Glasgow, 1884).

Stirlingshire, a midland county of Scotland, forming the border-land between Highlands and Lowlands, is bounded by Perth, Clackmannan, Linlithgow, Lanark, and Dumbarton shires. With a maximum length and breadth of 46 and 22 miles, it has an area of 467 sq. m., or 298,579 acres, of which 3294 are foreshore and 8946 water. The Forth traces much of the northern and all the north-eastern boundary; on the western lies Loch Lomond; and other lakes and streams belonging partly or wholly to Stirlingshire are Lochs Katrine and Arklet, and the Avon, Carron, Bannock, Endrick, and Blane. Ben Lomond, in the north-west, attains 3192 feet; and lesser elevations are the Gargunnock Hills (1591 feet), Kilsyth Hills (1393), Campsie Fells (1894), and Fintry Hills (1676). A considerable part of Stirlingshire is occupied by the carses of Stirling and Falkirk, which have in great measure been reclaimed from unproductive moss. About 40 per cent. of the whole area of the county is in cultivation; woods cover 14,241 acres. Coal and ironstone are largely mined; and there are the great ironworks of Carron and Falkirk, besides manufactures of woollens, cotton, chemicals, &c. The chief towns are Stirling, Falkirk, Kilsyth, Denny, and Grangemouth. The county returns one member. Pop. (1801) 50,825; (1841) 82,057; (1901) 142,291. Battles were fought at Stirling Bridge, Falkirk (1298 and 1745), Bannockburn, Sauchieburn, and Kilsyth.

Stobs, an estate in Roxburgh, 5 miles S. of Hawick, bought by government in 1900 for a camp. At Stobs Castle Lord Heathfield was born.

Stockbridge, a Hampshire market-town, on the Anton or Test, 8 miles W. by S. of Andover.

Till 1832 it returned two members; Steele at one time was its representative. It has a well-known racecourse and training stables. Pop. 860.

Stockholm (*l* pronounced), the capital of Sweden, stands on several islands and the adjacent mainland, between a bay of the Baltic and Lake Mälar, in a situation that is accounted one of the most picturesque in Europe. Its nucleus is an island in mid-channel called 'the Town;' on it stand the imposing royal palace (1697–1754); the chief church (St Nicholas), in which the kings are crowned; the House of the Nobles (1648–70); the town-house; the ministries of the kingdom; and the principal wharf, a magnificent granite quay, fronting east. Immediately W. of the central island lies the Knights' Island (*Riddarholm*); it is almost entirely occupied with public buildings, as the Houses of Parliament; the old Franciscan church, in which all the later sovereigns of Sweden have been buried; the royal archives; and the chief law-courts. N. of these two islands lie the handsomely built districts of Norrmalm, separated from them by a narrow channel, in which is an islet with the royal stables. In Norrmalm are the National Museum (1850–65), with valuable prehistoric collections, coins, paintings, sculptures; the principal theatres; the Academy of Fine Arts (1735); the barracks; the Hop Garden, with the Royal Library (1870–76), 250,000 vols. and 8000 MSS., and with the statue (1885) of Linnæus; the Academy of Sciences (1739); the Museum of Northern Antiquities (1873); the Observatory, &c. Ship Island (*Skeppsholm*), immediately east of 'the Town' island, is the headquarters of the Swedish navy, and is connected with a smaller island on the south-east, that is crowned with a citadel. Beyond these again, and farther to the east, lies the beautiful island of the Zoological Gardens. Immediately south of 'the Town' island is the extensive district of Södermalm, the houses of which climb up the steep slopes that rise from the water's edge. Handsome bridges connect the central islands with the northern and southern districts; quick little steamboats go to the beautiful islands in Lake Mälar on the west, and eastward towards the Baltic Sea (40 miles distant). Sugar, tobacco, silks and ribbons, candles, linen, cotton, and leather are produced, and there are large iron-foundries and machine-shops. Though the water approaches are frozen up during winter, Stockholm imports wheat and rye, rice, flour, herrings, oils and oilcake, wine and spirits, &c., and exports iron and steel, oats, and tar. Stockholm was founded by Birger Jarl in 1255, and grew to be the capital only in modern times. Pop. (1800) 75,500; (1850) 93,000; (1878) 156,677; (1900) 300,624. The principal events in the history of the city have been the sieges by Queen Margaret of Denmark (1389), battles in the vicinity against the Danes, the capture of the place by Christian II. of Denmark in 1520, and his 'Blood Bath' of nobles and chief citizens.

Stockport, a parliamentary, municipal, and county borough of East Cheshire, 6 miles SSE. of Manchester and 37 E. of Liverpool. It is built on the slopes of a narrow gorge, where the Tame and the Goyt unite to form the Mersey, which is spanned by the viaduct (1840) of the London and North-western Railway, 111 feet high, and 625 yards long, as well as by several bridges. St Mary's Church was rebuilt in 1817, with the exception of its 14th-century chancel; and Stockport has also a market-hall (1851–61), mechanics' institute (1862), free library (1875), fine technical school (1890), huge Union Sunday-school (1806), grammar-school (1487; rebuilt 1832), infirmary (1832), the Vernon Park (1858), containing a museum, and, in St Peter's Square, a statue (1886) of Richard Cobden, who represented the borough from 1841 to 1847. Stockport was the site of a Roman station, and afterwards of a Norman castle, held till 1327 by the Earls of Chester, and taken by Prince Rupert in 1644, soon after which it was demolished by the parliament. In 1745 Prince Charles Edward passed through Stockport, which Bishop Pococke six years later describes as having 'a little manufacture of the Manchester linen, some woollen and ribands, and two silk-mills like those of Derby.' Since then it has grown to be a most important seat of the cotton industry, in spite of the machinery disturbances (1810–20), the strike of 1828–29, when the military were called out, and many persons wounded, the 'Plug Riots' (1840), and the cotton-famine (1861–64). Felt hats are also manufactured, and there are iron and brass foundries, engine and machine shops, breweries, &c. Stockport was constituted a parliamentary borough (returning two members) in 1832, a municipal borough in 1835, and a county borough in 1888. Pop. (1851) 53,835; (1881) 59,553; (1901) 78,871. See works by Butterworth (1827–28), Earwaker (*East Cheshire*, 1877), and Heginbotham (1877–78).

Stocksbridge, a town in the West Riding of Yorkshire, 7½ miles NW. of Sheffield. Pop. 6570.

Stockton, capital of San Joaquin county, California, on a creek connected with the San Joaquin River, 103 miles E. by N. of San Francisco. It contains the state lunatic asylum, and manufactures ironware, paper, woollens, flour, soap, &c. Pop. 18,500.

Stockton-on-Tees, an important municipal and parliamentary borough and seaport in Durham, situate on the north side of the Tees, 4 miles from its mouth and 11 ENE. of Darlington, 4 WSW. of Middlesborough, and 236 NNW. of London. The broad and handsome High Street is nearly a mile in length; and a new town, South Stockton or Thornaby-on-Tees (q.v.), included within the parliamentary boundary, in Yorkshire, has sprung up on the south bank of the river, the two being connected by an iron bridge of three arches (1887), which superseded a five-arch stone bridge of 1771, and cost over £80,000. The town has six churches, a Roman Catholic chapel (1842–70) by the elder Pugin, a town-hall, borough-hall (1852), an exchange, a theatre, large recreation grounds, and a public park opened by the Duke of York in October 1893. The Stockton Races, of some mark in the sporting world, are held annually in August. Shipbuilding, chiefly in iron and steel, is busily carried on; and blast-furnaces, foundries, engine-works, and extensive potteries and ironworks are in operation. Sail-cloth, ropes, linen, and diapers were at one time the staple industry; but their manufacture has been discontinued; and there are breweries, corn-mills, and spinning-mills. The exports are chiefly iron and earthenware; the imports corn, timber in deals, spars, &c., and bark. At Stockton the Tees is navigable for vessels of large tonnage; the navigation of the river has been much improved. Pop. of the municipal borough (1891) 49,708; (1901) 51,476; of parliamentary borough, including Thornaby, (1901) 71,815. Stockton suffered severely from the incursions of the Scots in the early part of the 14th century. Its moated castle was taken for the Parliament in 1644, and 'slighted and dismantled' in 1652,

almost the last vestige being removed in 1865. At the Restoration it had only 120 houses, mostly built of clay. Since 1867 it sends one member to parliament. Ritson was a native. See Darlington, and works by J. Brewster (1829), H. Heavisides (1865), and T. Richmond (1868).

Stoke-Poges (*Pogis*), a village of Buckinghamshire, 2 miles N. of Slough station. Gray's mother settled here in 1742; the beautiful churchyard is the scene of his *Elegy*, and in that churchyard he is buried. Pop. of parish, 1400.

Stokesley, a Yorkshire town, on the Leven, 9 miles SE. of Stockton-on-Tees. Pop. 1650.

Stoke-upon-Trent, a manufacturing town of Staffordshire, the capital of the 'Potteries,' on the Trent and the Trent-and-Mersey Canal, 15 miles SE. of Crewe, 2 E. of Newcastle-under-Lyme, and 16 N. of Stafford. It is a modern place, dating only from the last quarter of the 18th century, and has a parish church with Wedgwood's grave, a town-hall (1835), a market-hall (1883), a free library (1878), the Minton memorial building (1858), the Hartshill Infirmary (1868), public baths, and statues of Wedgwood, Minton, and Colin Minton Campbell. Its factories of porcelain, earthenware, encaustic tiles, and tesselated pavements are among the largest in the world; and the industries also include coal-mining, brick-making, and the manufacture of iron, engines, machinery, &c. Mrs Craik (Miss Mulock) was a native. The parliamentary borough, constituted in 1832, was much curtailed in 1885 and lost one of its two members; the municipal borough was incorporated in 1874. Pop. (1871) 15,144; (1881) 19,261; (1901) 30,458; of parliamentary borough (1901) 89,015. See John Ward's *Borough of Stoke-upon-Trent* (1843).

Stolberg, (1) a mining and manufacturing town of Rhenish Prussia, 10 miles by rail E. of Aix-la-Chapelle. It manufactures brass, iron, zinc, glass, &c. Pop. 15,250.—(2) A town at the S. base of the Harz Mountains, the centre of an old countship; pop. 2311.

Stolp, a Prussian town in Pomerania, on the river Stolp, 85 miles W. by N. of Danzig. It has a castle, iron-foundries, and machinery and amber manufactures. Pop. 28,500.

Stone, a Staffordshire town, on the Trent's left bank, 7 miles NNW. of Stafford and 7 S. of Stoke-upon-Trent. It has a town-hall (1869), a market-hall (1868), Alleyne's school (1558), remains of an Augustinian monastery, two modern convents, and manufactures of earthenware, boots, beer, leather, &c. Peter de Wint was a native. Pop. 5750.

Stonebyres Linn. See Clyde.

Stonefield, an industrial town of Lanarkshire, 2½ miles NW. of Hamilton and 8 SE. of Glasgow. It was the scene of riots in February 1887. Pop. 7500.

Stoneham, a town of Massachusetts, 9 miles N. of Boston. It has boot-factories. Pop. 6190.

Stonehaven (locally *Stanchive'*), a seaport and (since 1607) the county town of Kincardineshire, 16 miles SSW. of Aberdeen, is situated on a rocky bay at the mouth of Carron Water, which divides it into an Old and New Town. The harbour, formed since 1826, admits only small vessels; but the town (constituted a police-burgh in 1889) has herring and haddock fisheries. Population, 4600. See Dunnottar.

Stonehenge (Saxon *Stanhengist*, 'the hanging stones'), in Wiltshire, on Salisbury Plain, 9 miles N. of Salisbury and 2 W. of Amesbury, is a circular group of gigantic standing stones, situated in the midst of a number of prehistoric barrows of the bronze age. The circle, which is 97·7 feet in diameter, occupies the central portion of an area of 360 feet in diameter, enclosed within an earthen rampart and ditch. It consists of two concentric circles enclosing two ellipses. The exterior circle, which is composed of pillar-stones of Tertiary sandstone, locally called 'sarsens,' set up at pretty regular intervals of about 4 feet apart, has been surmounted by a continuous line of imposts closely fitted to each other at the extremities, and having mortise-holes in their under sides, which receive tenons on the tops of the pillar-stones. The pillar-stones show generally about 13 feet of height above the ground, and the imposts are about 10 feet long, 3½ feet wide, and 2 feet 8 inches deep. Of this circle seventeen pillar-stones and six imposts retain their original position. About 9 feet within the exterior circle are the remains of a second circle of smaller undressed blocks or boulders of primitive rock, locally known as 'blue stones.' Within this inner circle, and separated from it by about the same distance, is an incomplete ellipse, nearly of horse-shoe form, with the open end facing the north-east, formed of five trilithons or groups of two immense pillar-stones supporting an impost. The central trilithon facing the open end of the ellipse is the largest, the pillar-stones being 22½ feet in height above ground, and the added height of the impost making the whole height of the trilithon 26½ feet. The other four, which stood facing each other, two and two on opposite sides of the ellipse, are somewhat smaller, and only two are now perfect. Within this ellipse is a smaller ellipse of the same form, but composed, like the second circle, of irregularly-shaped 'blue stones' without imposts, varying from 6 to 8 feet in height, and set at intervals of 5 to 6 feet. Though not mentioned by any Roman writer, or noticed by Gildas, Nennius, or Bede, Stonehenge, in the 12th c., is chronicled by Henry of Huntingdon as one of the four wonders of England, the other three being merely natural phenomena. It has been variously attributed to the Phœnicians, the Belgæ, the Druids, the Saxons, and the Danes. It has been called a temple of the sun, and of serpent-worship, a shrine of Buddha, a planetarium, &c. Avebury assigns it to the bronze age, the inner circle of small unwrought 'blue stones' being oldest. One of the uprights was blown down in 1900, and re-erected (in cement) next year. The whole is now fenced in, and looked after, as private property. See Lady Antrobus, *Guide to Amesbury and Stonehenge* (1901); and Lockyer's articles in *Nature* (1904).

Stonehouse, a town of Lanarkshire, on Avon Water, 7¼ miles SSE. of Hamilton. Pop. 2968.

Stonehouse. See Devonport.

Stone River. See Murfreesborough.

Stonington, a port of Connecticut, on the Atlantic, 14 miles E. of New London. It has a foundry, and tin-factories. Pop. 8550.

Stonyhurst, a great Roman Catholic college, in NE. Lancashire, 4 miles SW. of Clitheroe. The old home of the Shireburnes, it passed by marriage in 1754 to the Welds of Lulworth, and by them was granted in 1794 to the Jesuit seminary founded at St Omer in 1592 by Father Parsons, and thence transferred in 1762 to Bruges, in 1772 to Liége. The fine old house, dating from 1594, was much extended during 1810–78, the chapel being built in 1835. There are an

observatory, a library of 40,000 vols., &c. Affiliated in 1840 to the University of London, Stonyhurst has now some 300 boys. See works by Hewitson (2d ed. 1878), an anonymous writer (1881), Rimmer (1884), Halt (1886), Shawcross (1894), and Father Gerard (1894).

Stony Stratford, a market-town of Bucks, on Watling Street and the Ouse, 8 miles NE. of Buckingham. It had an Eleanor cross till 1646, and suffered from fire in 1742. Pop. 2019.

Stormont. See PERTHSHIRE.

Stormontfield, a Tayside village, 4½ miles N. of Perth, with salmon-breeding ponds (1853).

Stor'noway, a seaport and important fishery-station in Lewis, the chief town of the Outer Hebrides, near the head of a spacious sea-loch, 59 miles N. by W. of Portree in Skye and 180 of Oban. The principal feature is Stornoway Castle, completed in 1870 by Sir James Matheson (1796–1878), at a cost, with the grounds, of £89,000. Pop. 3900.

Stour, (1) a river flowing 47 miles E. along the Suffolk and Essex boundary to the sea at Harwich. —(2) A river of Kent, flowing 40 miles, past Ashford and Canterbury to Pegwell Bay.—(3) A river of Oxford and Warwick shires, flowing 20 miles to the Avon, near Stratford-on-Avon.—(4) A river of Somerset, Dorset, and Hants, flowing 55 miles to the Avon at Christchurch.

Stourbridge, a market-town of Worcestershire, on the Stour, at the border of Staffordshire and the Black Country, 4½ miles S. by W. of Dudley and 12 W. by S. of Birmingham. The famous fireclay is said to have been discovered about 1555 by wandering glassmakers from Lorraine; and Stourbridge now has glass, earthenware, and firebrick works, besides manufactures of iron, nails, chains, leather, &c. The grammar-school (1552), at which Samuel Johnson passed a twelvemonth, was rebuilt in 1862; and there are also a corn exchange (1854), county court (1864), and mechanics' institute. Pop. (1851) 7847; (1881) 9737; (1901, urban district) 16,302.

Stourport, a town of Worcestershire, at the Stour's influx to the Severn, and the terminus of the Staffordshire and Worcestershire Canal, 14 miles by rail N. by W. of Worcester and 4 SSW. of Kidderminster. Dating from 1770, it is a clean, neat place, with manufactures of carpets, iron, glass, &c. Pop. 4600.

Stow, a Midlothian village, on the Gala's left bank, 6¾ miles N. of Galashiels. Pop. 560.

Stowe House, 3 miles NNW. of Buckingham, the seat of the Duke of Buckingham, and residence of the exiled Orleans family.

Stowey, NETHER, a Somerset village, 7½ miles WNW. of Bridgwater, with memories of Thomas Poole and Coleridge.

Stowmarket, a Suffolk market-town, on the Gipping, 12 miles NW. of Ipswich. It has a fine flint-work church (chiefly Decorated), with a tower and spire 120 feet high, an iron-foundry, malting, stay-making, and chemical and gun-cotton works—a disastrous explosion here in August 1871 cost 23 lives. Pop. (1801) 1761; (1901) 4162. For its memories of Milton, Burkitt, Crabbe, and Godwin, see Hollingsworth's *History of Stowmarket* (1844).

Stow-on-the-Wold, a Gloucestershire town, 4¼ miles SSW. of Moreton-in-the-Marsh. Pop. 1370.

Strabane (*Stra-bâhn'*), a Tyrone market-town, on the Mourne, 14 miles by rail S. by W. of Londonderry. It has fine R. C. (1892–95), Episcopalian, and Presbyterian churches; a large convent on the hill behind, and celebrated flax and grain markets. Pop. 5033.

Stradbroke, a Suffolk town, Bishop Grosseteste's birthplace, 5½ miles E. of Eye. Pop. 1069.

Straits Settlements, a British colony in the East Indies, consists (since 1867) of settlements on the Straits of Malacca, or rather on the Malay Peninsula—viz. Singapore, Malacca, Penang, Keeling Islands (since 1886), and Christmas Island (since 1889). For particulars of these, see the respective articles. The total area is 1542 sq. m. and the total pop. (1881) 423,384; (1905) 575,000, of whom 281,000 are Chinese, and 58,000 natives of India. The principal products are tin, gambier, tapioca, rice, sugar, pepper, and other spices. The trade is largely a transit one; and the exports approximate an annual value of £26,000,000, the imports of £35,000,000. There are a number of native dependent states, the salient particulars regarding which are given here:

State.	British Protectorate in	Area, sq. m.	Pop. (1901).
Perak	1874	10,000	329,665
Selangor	1874	3,500	168,789
Sungei Ujong	1885	1,600 }	96,028
Negri Sembilan	1889	1,800 }	
Pahang	1888	10,000	84,113
	Total	26,960	678,595

The more notable products of these states are tin, rice, coffee, sugar, tea, cinchona. Tin is chiefly mined in Perak by Chinese, and worked at the mines, and at Singapore and Penang.

Stralsund (*Stral-soont'*), a seaport of Prussia, on the narrow Strela Sound, which divides the mainland from the island of Rügen, 67 miles by rail NW. from Stettin. It forms an island, connected with the mainland by bridges, and down to 1873 it was a fortress of the first-class. Many of the houses are finely gabled; and the most interesting building is the town-house (1306). The manufactures include leather, sugar, starch, oil, and cards. Pop. 32,500. Founded in 1209, Stralsund became one of the most important members of the Hansa. It withstood a terrible siege (1628) by Wallenstein, but in 1678 capitulated to the Great Elector after a furious bombardment. It again opened its gates to Prussia in 1715, to the French in 1807, and to the Danes in 1809. The town was held by the Swedes from 1628 to 1814; in 1815 Denmark gave it up to Prussia.

Strangford, a Down seaport, on the W. shore of the entrance to Lough Strangford, opposite Portaferry, and 8 miles NE. of Downpatrick.—Lough Strangford measures 16 by 5 miles, and its entrance 6 miles by 1 mile.

Stranorlar, a Donegal village, on the Finn, 29 miles SW. of Londonderry.

Stranraer (*Stran-rahr'*), a royal burgh and seaport of Wigtownshire, beautifully situated at the head of Loch Ryan, 73 miles WSW. of Dumfries by rail. It has a 16th-century castle, with memories of Claverhouse, a town-hall and court-house (1872–73), and a 'short-sea passage' to Larne in Ireland. Pop. (1841) 4889; (1881) 6415; (1901) 6036. Till 1885 Stranraer returned one member with Wigtown (q.v.).

Strasburg (Ger. *Strassburg*, Fr. *Strasbourg*), the capital formerly of the French dep. of Bas-Rhin, but since 1871 of the German imperial territory of Alsace-Lorraine, stands on the river Ill and the canals connecting the Rhine with the Rhone and Marne, 2 miles from the Rhine's left

bank and 300 E. of Paris. The citadel, originally built by Vauban (1682–84), was demolished by the Germans during the bombardment of 1870, but they have since rebuilt it and erected detached forts on the adjacent heights, so that Strasburg now ranks as a first-class fortress. Its position near the borders of France, Germany, and Switzerland gives it both commercial and strategic importance. The most celebrated building is the cathedral or minster, founded in 1015 or in 1179, but principally built between 1277 and 1439; some of the oldest parts are Romanesque, but the church as a whole is one of the sublimest specimens of Gothic architecture. Only one of the two towers was completed, with a spire of open stone-work (1439); it is 466 feet high. The minster has a remarkable clock (1838–42); in it are portions of an older one made in 1571, but there was a remarkable clock here in the 14th century. Here also are a magnificent rose-window (42 feet across), a fine pulpit, and grand stained glass. The damage done to the structure during the siege of 1870 was carefully repaired. Other notable buildings are the Protestant church of St Thomas, with the tomb of Marshal Saxe, the imperial palace, the library (formerly the castle, and then the episcopal palace), the new university, and the arsenal. Founded in 1621, the university became specially famous in the branches of medicine and philology, but was broken up during the Revolution. The university was completely reorganised as a German institution in 1872, is equipped with new university buildings (1884), magnificent laboratories, &c., and has more than 120 teachers and 850 students. The famous library, with nearly 200,000 volumes and precious *Incunabula* was entirely destroyed by fire during the bombardment in 1870, but was replaced by a new collection that has now swelled to 700,000 volumes. The trade, especially the transit trade, is very extensive; and the manufactures are very various —beer, patés de foie gras, leather, cutlery, engines, musical instruments, jewellery, tobacco, furniture, chemicals, &c. Pop. (1880) 104,471; (1890) 123,500; (1900) 151,041.

Strasburg, the *Argentoratum* of the Romans, was colonised by them during the reign of Augustus; the name *Stratisburgum* first appears in the 6th c. It became a free town of the German empire in the 13th c.; in 1681 it was seized by Louis XIV. in a time of profound peace, and was confirmed to him by the treaty of Ryswick. On September 28, 1870, after a seven weeks' siege, it surrendered to the Germans.

Strata Florida. See CARDIGANSHIRE.

Stratfieldsaye. See STRATHFIELDSAYE.

Stratford, a thriving town of Essex, on the Lea, 4 miles ENE. of London. It had a Cistercian abbey (1134) and the Empress Matilda's three-arched, bow-shaped bridge (removed in 1839). Now part of the borough of West Ham, it has a handsome town-hall (1869), and is the seat of extensive manufactures. On the opposite side of the Lea is the parish of Bow, or Stratford-le-Bow, now in the met. borough of Poplar.

Stratford, a port of entry and capital of Perth county, Ontario, on the Avon, 88 miles by rail W. of Toronto, with railway-shops, woollen-mills, and manufactories of machinery, farming implements, boots and shoes, &c. Pop. 10,250.

Stratford-on-Avon, Shakespeare's birthplace, is a pleasant town of Warwickshire, 8 miles SW. of Warwick, 22 SSE. of Birmingham, and 110 NW. of London. It stands on the right bank of the quiet Avon, which here is spanned by the 'great and sumptuous bridge' of fourteen pointed arches, 376 yards long, that was built by the Lord Mayor of London, Sir Hugh Clopton, who died in 1496. 'Shakespeare's House,' where the poet was born on 23d April 1564, in Henley Street, is national property, having been bought for £3000 in 1847, and restored in 1858–59; here are a Shakespeare museum, the 'Stratford portrait,' and the signatures of Byron, Scott, Tennyson, Thackeray, Dickens, &c. King Edward VI.'s grammar-school, where Shakespeare was educated, was founded in the reign of Edward IV.; it occupies the upper story of the old guildhall, and was restored in 1892. The 'New Place,' built by Sir Hugh Clopton, was purchased by Shakespeare in 1597, and here he died on 23d April 1616; here, too, Queen Henrietta Maria stayed in 1643. It (or rather its successor, 1703) was wantonly razed in 1759 by the Rev. F. Gastrell, who also felled the poet's mulberry, beneath which Garrick was regaled in 1742; but its site has also become national property since 1861. And lastly, uprearing its spire above the lime-trees, there is the beautiful cruciform church, Early English to Perpendicular in style, having been gradually rebuilt between 1332 and 1500. In the chancel, whose two years' restoration was completed in 1892, is Shakespeare's grave, with the portrait bust (1616) by Gerard Janssen or Johnson, Anne Hathaway's grave, and the American stained-glass window of the 'Seven Ages.' The Shakespeare Fountain (1887) was also erected by an American, Mr George W. Childs; the red-brick Shakespeare Memorial Theatre, seating 800 spectators, was built in 1877–79 at a cost of £30,000. In the neighbourhood are Shottery, with Anne Hathaway's cottage (purchased for the nation in 1892 for £3000); Luddington, where tradition says she was married; Charlecote, the seat of the Lucys; Clopton, with memories of the Gunpowder Plot; and Welcombe Hill, crowned by an obelisk (1876), 124 feet high, to a Manchester M.P. In Stratford itself still remain to be noticed the chapel of the Guild of the Holy Cross (13th century; the chancel rebuilt about 1450, and the rest by Sir Hugh Clopton); the half-timbered house of the Harvards (1596); the town-hall (1633; rebuilt 1768–1863), with Gainsborough's portrait of Garrick; the corn exchange (1850); the market-house (1821); the College school (1872); a Roman Catholic church by Pugin (1866); and a hospital (1884). Before 691 a Saxon monastery stood at Stratford-on-Avon, which was incorporated in 1553. It is an important agricultural centre; still, its chief prosperity depends on the pilgrims (20,000 or so annually) who visit it. Pop. (1851) 3372; (1901) 8310, an increase largely due to the extension of the borough boundary in 1879. See works by Washington Irving (1821), Hawthorne (1863), Wheeler (1806), J. O. Halliwell-Phillips (1863–85), S. L. Lee (1884), and C. S. Ribton Turner (1893).

Strathaven (locally *Straven*), a town of Lanarkshire, 1 mile W. of Avon Water and 16 miles SSE. of Glasgow. On the north side is the picturesque ruin of Avondale Castle, and 5 to 7 miles south-west are the battlefields of Drumclog and Loudoun Hill. Pop. (1851) 4274; (1901) 4076. See Gebbie's *Sketches of Avondale* (1880).

Strathclyde'. In the 8th c. the ancient confederacy of the Britons was broken up into Wales and Cumbria. Scottish Cumbria, or Strathclyde, thenceforth formed a little kingdom, comprising

the country between Clyde and Solway, governed by princes of its own, and having the fortress-town of Alclyde or Dumbarton for its capital. In 954–1124 it became permanently united to the Scottish kingdom.

Strathcona, a village of Alberta, Canada, on the Canadian Pacific Railway, named from the Canadian magnate, Lord Strathcona. Pop. 1600.

Strathearn. See EARN.

Strathfieldsaye, a Hampshire estate, with a Queen Anne mansion, overlooking the Loddon, 7 miles NNE. of Basingstoke. Associated ere that with the name of Pitt, it was purchased by parliament in 1817 for £263,000, and presented to the Duke of Wellington. See SILCHESTER, and the Rev. Charles H. Griffith's *History of Strathfieldsaye* (1892).

Strathmore (Gael., 'Great Valley'), the most extensive plain in Scotland, is a low-lying tract extending NE. across the country from Dumbartonshire to Stonehaven in Kincardineshire, and bounded N. by the mountain-rampart of the Highlands, and S. by the Lennox, Ochil, and Sidlaw Hills. It is 100 miles long and 5 to 10 broad; but Strathmore proper extends only from Perth to near Brechin (about 40 miles).

Strathpeffer, a fashionable Scottish watering-place in Ross and Cromarty, to the south of Ben Wyvis (3429 feet), and 5 miles W. of Dingwall by rail, 215 NNW. of Edinburgh. Its sulphur and chalybeate springs are highly efficacious in digestive and rheumatic disorders. Pop. 354. See Dr Fortescue Fox's *Strathpeffer Spa* (1889).

Strathspey (*Strath-spay'*), the valley of the Spey (q.v.).

Stratton, a Cornish town, 16 miles NNW. of Launceston. Pop. with Bude (1901) 2308.

Straubing (*Strow'bing*), an old town of Lower Bavaria, on the Danube's right bank, 25 miles by rail SE. of Ratisbon. Pop. 17,550.

Strawberry Hill. See TWICKENHAM.

Streatham (*Stret'ham*), a suburban parish, 6½ miles SSW. of St Paul's. Pop. 88,130.

Streator, a mining-town of Illinois, 94 miles SW. of Chicago. Pop. 16,100.

Street, a town of Somersetshire, 2 miles SW. of Glastonbury. Pop. 4100.

Stretford, a town of Lancashire, 3½ miles SW. of Manchester. Pop. (1901) 30,436.

Stretinsk, or SRYETINSK, a town of Siberia, on the navigable Shilka, a tributary of the Amur. Pop. 10,000.

Strigau (*Stree-gow*), a town of Prussian Silesia, 25 miles SE. of Liegnitz. Pop. 12,860.

Strokestown, a market-town, 12 miles NE. of Roscommon. Pop. 810.

Strom'boli, one of the Lipari Islands (q.v.), with a volcano almost constantly active.

Strome Ferry, Ross-shire, on salt-water Loch Carron, 53 miles by rail WSW. of Dingwall.

Stromness, a seaport in Pomona, Orkney, on a beautiful bay, 15 miles W. by S. of Kirkwall. Gow, Scott's 'Pirate,' was born here. Pop. 2450.

Strone, an Argyllshire watering-place, at the headland between Loch Long and Holy Loch, 6½ miles WNW. of Greenock. Pop. 573.

Stronsay, one of the Orkney Islands, 12 miles NE. of Kirkwall. Area, 15 sq. m.; greatest height, 154 feet; pop. 1160.

Strontian (*Stron-tee'an*), an Argyllshire village, 24 miles SW. of Fort William, with former lead-mines, which yielded (1790) the mineral strontian.

Stroud, a manufacturing and market town of Gloucestershire, 10 miles SSE. of Gloucester, on an eminence in a valley sheltered by the Cotes-wolds, where the Frome and Slade rivulets unite to form the Stroud Water or Frome. The water of this stream being peculiarly adapted for use in dyeing scarlet and other grain colours, cloth-factories and dyeworks have been built along its banks for 20 miles; and Stroud itself is the centre of the woollen manufactures of Gloucestershire, and contains a number of cloth-mills. The parish church, St Lawrence, was rebuilt, with exception of the tower and spire, in 1866–68; the town-hall, incorporating an Elizabethan façade, in 1865; and there are also the Subscription-rooms (1830), the Lansdown Hall (1879), a hospital (1876), &c. From 1832 to 1885 Stroud, with twelve other parishes, formed a parliamentary borough, returning two members. Pop. (1881) 9535; (1901) 9153.

Stry (*Stree*), or STRYI, a town of Austrian Galicia, on a tributary of the Dniester, 45 miles by rail S. of Lemberg. It was almost wholly burned down in April 1886. Pop. 24,300.

Studley Royal. See RIPON.

Stuhlweissenburg (*Shtool-vice'en-boorg'*; Hung. *Székes Fehérvár*; Lat. *Alba Regia*), a royal free town of Hungary, and seat of a bishop, 39 miles SW. of Budapest. Here the kings of Hungary were crowned and buried (1027–1527). Pop. 30,960.

Sturminster Newton, a Dorset town, on the Stour, 8½ miles NW. of Blandford. Pop. 1863.

Stuttgart (*Shtoot'gart*), the capital of Würtemberg, stands in a natural basin (817 feet above sea-level) surrounded by hills, which are studded with villas, vineyards, and gardens, and crowned with woods, 2 miles from the Neckar, and 189 by rail WNW. of Munich, 127 SSE. of Frankfort. Except the churches, most of the public edifices date from the 19th century, and are chiefly built in the Renaissance style. On or near the central Palace Square stand the new royal palace (1746–1807), the old royal castle (16th century), two or three other palaces of the royal family, the Königsbau (shops, bourse, concert-rooms, &c.), the theatre, the railway station (one of the finest in all Germany), the post-office, the Akademie (formerly the Carl School; now library and guardhouse), the jubilee column (1841), and statues of Schiller and Duke Eberhard. The Collegiate Church, St Leonard's, and the Hospital Church date from the 15th century. The other chief public institutions of Stuttgart are its famous Polytechnic (with 250 students), the Conservatory of Music, the royal library (425,000 vols.), the museum and picture-gallery, &c. Stuttgart is a great centre of the German book-trade, manufactures textiles, beer, pianofortes, chemicals, chocolate, &c., and has celebrated fairs. NE. of the palace lies the picturesque royal park (with some good statuary), extending almost all the way to Cannstatt (q.v.). There are many royal seats in the vicinity. Hegel and Hauff were natives. Pop. (1875) 107,573; (1900) 176,699. Stuttgart owes its name and origin to a stud-farm of the early Counts of Würtemberg, and has been the capital since 1482.

Styria (Ger. *Steiermark*), a duchy of Austria, is bounded on the N. by Upper and Lower Austria, E. by Hungary, S. and W. by Carniola, Carinthia, and Salzburg. Its area is 8629 sq. m., and pop. (1880) 1,213,197; (1900) 1,356,494, of whom 67 per cent. are of German and 33 per cent. of Slavonic origin. Styria is a mountainous country, traversed by ramifications of the Alps. The Save and Drave water the southern districts;

the Mur, going S. to the Drave, flows through the middle of the duchy; while the Enns skirts the NW. boundary. Forests cover 51½ per cent. of the area; 25½ per cent. is pastures; and 22 per cent. is under cultivation. Styria's chief wealth lies in its mineral products, especially iron. It was made a separate margraviate in 1056, and in 1192 was joined to the Austrian crown.

Suabia. See SWABIA.

Suaheli. See SWAHILI COAST.

Suakin (*Soo-ăh'keen*), or more correctly SAWAKIN, a seaport of the Red Sea, stands on a small rocky island in a bay on its west side, and is the principal outlet for the commerce of Nubia and of the countries of the Sudan beyond. The island-town is connected with the settlement of El-Kelf on the adjacent mainland by a causeway. Port Soudan, 30 miles to the north, has a better and safer harbour and much less trying climate; and since the opening, in 1906, of the railway thence to Atbara and Berber (connecting there with the Khartoum and Cairo—ultimately the 'Cape to Cairo'—line), threatens to supersede Suakin. The more important exports of Suakin are silver ornaments, ivory, gums, millet, cattle, hides, and gold; the imports, durra, cottons, flour, sugar, rice, ghi, dates, and coal. Near it several battles were fought by Egyptians and English against the Mahdi's followers. Pop. 21,000. See works by E. G. Parry (1885) and W. Galloway (1888).

Subiaco (*Soobyăh'ko*; anc. *Sublaqueum*), a city of Italy, lies embosomed in hills beside the Teverone, 32 miles E. by N. of Rome. It was the cradle of the Benedictine order and the place where the printing-press was first set up in Italy (1464). Two monasteries date from the 6th century; one of them (Santa Scolastica) contains a small but valuable library, whilst the other was built near St Benedict's cave. Pop. 8500.

Suchau. See SOOCHOO.

Sucre. See CHUQUISACA.

Sudan. See SOUDAN.

Sud'bury, a municipal borough (till 1843 also parliamentary) of Suffolk, on the Stour at the Essex boundary, 16 miles S. of Bury St Edmunds and 58 NE. of London. It has three old churches, mainly Perpendicular in style, a town-hall (1828), grammar-school (1491; rebuilt 1857), corn exchange (1841), and manufactures of cocoa-nut matting, silk, bricks, &c.—the famous woollen industry of the Flemings, dating from the 14th century, having died out. Archbishop Theobald, beheaded by Tyler in 1381, and Gainsborough were natives. Pop. (1851) 6043; (1901) 7109.

Sudbury, a village of Ontario (pop. 2000), by rail 443 miles W. by N. of Montreal. Close by are immense deposits of copper and nickel.

Sudet'ic Mountains, a mountain-system of SE. Germany, dividing Prussian Silesia and Lusatia from Bohemia and Moravia, and connecting the Carpathians with the mountains of Franconia. It forms a continuous chain only in the middle—the Riesengebirge (q.v.) and Isergebirge.

Sudreys, or SUDOREYS. See MAN (ISLE OF).

Suevi. See SWABIA.

Suez (*Soo'ez*), a town of Egypt, is situated at the southern extremity of the Suez Canal and on the Gulf of Suez, a northern arm of the Red Sea. Close beside the town the Peninsular and Oriental Steamship Company have extensive store-houses, there is an English hospital, and the sweet-water canal terminates here. The railway from Ismailia runs through the town on to the spacious harbour 2 miles beyond. Suez has not a very large trade of its own (£800,000 to £900,000 annually); most of the commerce passes through it without making halt. Pop. (1897) 17,460. More than once in the past this place, the Arsinoe of the Ptolemies, the Colzum of the early Moslems, was the seat of a flourishing trade; from the 16th to the 18th century it formed an important *étape* in the European trade with India. It revived when the overland mail route to India was opened in 1837, and has prospered more since the completion of the canal. Rameses II. seems to have been the first to excavate a canal between the Nile delta and the Red Sea, which was reopened by Darius I. of Persia, and again by the Moslem conquerors of Egypt. Napoleon commissioned Lepère in 1798 to examine and report upon the plan of a ship-canal between the Mediterranean and the Red Sea. This expert's erroneous opinion, that the surface of the Red Sea was nearly 30 feet higher than that of the Mediterranean, put an end to the project. But the mistake having been corrected by English officers in 1841, Lesseps set himself (in 1849) to study the isthmus, and in 1854 he managed to enlist the interest of Said Pasha, khedive of Egypt, in his scheme. Two years later the Porte granted its permission and a company was formed. Half the capital was raised in Europe, chiefly in France; the other half by the khedive. In 1859, 25,000 to 30,000 men were at work excavating, and the canal was opened on the 16th November 1869. It had cost altogether about 24 million pounds. The total length is 100 miles; the width of the water-surface was at first 150 to 300 feet, the width at the bottom 72 feet, and the minimum depth 26 feet. At Port Said two strong breakwaters, 6940 and 6020 feet long respectively, were run out into the Mediterranean; at Suez another substantial mole was constructed. The canal crosses Lake Menzaleh (28 miles long), Lake Ballah, Lake Timsah (5 miles long), and the Bitter Lakes (23 miles). The highest point is but 50 feet above sea-level. At intervals of 5 or 6 miles side-basins are provided to enable vessels to pass one another. Erelong the traffic had increased so enormously that a second canal was talked about; and in 1886–90 the canal had been deepened to 28 feet, and widened in parts to 144 feet, and in some places to 213 feet. In 1870, 486 vessels of 654,915 tons passed through the canal; in 1903, 3761 of 11,907,288 net tons, of which 2278 vessels of 7,403,553 tons were British. The time required for passage has been shortened (by help of electric lights, &c.) from 36 hours to 24 hours. Lord Beaconsfield's government bought the khedive's shares (176,602 out of a total of 500,000) in 1875 for Britain. The total receipts exceed £4,000,000 annually. See works by Lesseps (1875 and 1881), his Life by G. B. Smith (1893), and the various periodic returns.

Suffolk (*Suf'fok*), the easternmost county of England, is bounded E. by the German Ocean, and elsewhere by Essex, Cambridgeshire, and Norfolk. Its length from E. to W. is 57 miles; its mean breadth from N. to S. about 30 miles; and its area, 1475 sq. m. Pop. (1801) 210,431; (1831) 296,317; (1861) 337,070; (1901) 384,198. Though no hills of any notable character rise within its confines, Suffolk is not by any means flat. The sea-coast is low and skirted by banks of shingle, except near Lowestoft and Southwold, and again at Dunwich and Felixstowe, which all rest on sandstone cliffs; beyond stretches an almost continuous series of light sandy heath-

lands, glorious in summer with gorse and heather; and inland the country is undulating, well watered, and for the most part well wooded, the scenery in places—e.g. at Yoxford ('the Garden of Suffolk'), and in the vale of the Gipping—being very picturesque. More than two-thirds of the county consists of heavy land, a stiff clay prevailing in Mid (or as it is locally termed 'High') Suffolk, whilst the western part lies upon chalk, terminating at its north-west corner with a tract of peaty fen-land. The Waveney, Alde, Deben, Orwell, and Stour, all flowing eastwards, are the principal rivers. Coprolites are raised in the region between Ipswich and Woodbridge, gun-flints at Brandon. Agriculture, despite the depression of late years, still forms the staple industry, 780,000 acres being under cultivation. The manufactures are noticed under Ipswich (the capital), Beccles, Stowmarket, and Sudbury, these being, with Bury St Edmunds, Lowestoft, and Woodbridge, the chief towns. Containing 21 hundreds and 517 civil parishes in the dioceses of Norwich and Ely, its parliamentary divisions are five in number, each returning one member, and it has two county councils, one for the eastern and the other for the western district. In antiquities the county is especially rich, and amongst them may be noted the ruins of the castles of Burgh (Roman), Framlingham, Orford, and Wingfield; the gatehouse of Butley Priory (Norman); earthworks at Fornham, Haughley, Nacton, and Snape; the fine flint-work churches; and the old halls (many of them moated) of Helmingham, Parham, Hengrave, Rushbrooke, Ickworth, Somerleyton, Giffords, and West Stow. Suffolk worthies (other than those named under Ipswich and Bury St Edmunds) have been Bishops Grosseteste, Aungerville, and Bale; Archbishop Sancroft; Chief-justices Glanvill and Cavendish; George Cavendish (Wolsey's biographer); Nash, Crabbe, and Robert Bloomfield (poets); Sir Simonds D'Ewes; the Earl of Arlington, Roger North; Gainsborough, Frost, Constable, and Bright (artists); Bunbury (caricaturist), Woolner (the sculptor), Lord Chancellor Thurlow, Arthur Young, Clara Reeve, Mrs Inchbald, Kirby (naturalist), John Hookham Frere, Crabb Robinson, Sir Philip Broke, John and Charles Austin, Admirals Fitzroy and Rous, Dr Routh, Professors Maurice and Cowell, Edward FitzGerald, Sir Henry Thompson, Agnes Strickland, and Miss Betham Edwards. See works by Kirby (2d ed. 1764), Cullum (1813), Gage (1838), Page (1844), Suckling (2 vols. 1846–48), Glyde (1858–66), Baynes (2 vols. 1873), Taylor (new ed. 1892), and White (new ed. 1891); also the *Quarterly* (April 1887).

Suhl (*Soole*), a town of Prussia, in a romantic Thuringian valley, 32 miles by rail SW. of Erfurt; celebrated for its firearms, as formerly for its swords and armour. Pop. 13,500.

Suilven. See Sutherland.

Suir (*Shure*), a river of Ireland, flowing 85 miles SW. and E., chiefly along the boundaries of Tipperary, Waterford, Kilkenny, and Wexford, past Clonmel, Carrick, and Waterford, till it meets the Barrow, and falls into Waterford Haven.

Sukhum Kale (*Sook'hoom Kah-leh*; anc. *Dioscurias*), a fortified seaport (Russian since 1877) of the Caucasus, on the E. coast of the Black Sea, 70 miles N. by W. of Poti. Pop. 8000.

Sukkur, a town on the Indus' right bank, 28 miles by rail SE. of Shikarpur; it is connected by rail also with Karachi, and is the terminus of the Bolan Pass Railway to Afghanistan. The river is crossed by a magnificent cantilever bridge (1889), or rather two bridges (one 820 feet in span), resting on Bukkur Island. New Sukkur grew up after the British occupied (1839) the fort on Bukkur. Pop. (1872) 13,318; (1901) 31,316. Near Old Sukkur, a mile away, are old tombs.

Sulgrave, a Northants parish, the Washingtons' ancestral seat, 6 miles NNW. of Brackley.

Suliman Hills (*Soo-lee-mâhn'*), a rocky, barren mountain-range running over 350 miles N. and S., between Afghanistan and the Punjab. The highest summit, Takht-i-Sulaiman (Solomon's Throne), 11,295 feet high, was first ascended by a European, Major Holdich, in 1883.

Sulina (*Soolee'na*), a lower branch of the Danube (q.v.). The Roumanian town of Sulina (pop. 5000) is on its S. bank, near the mouth.

Sulmo'na, or Solmona, a city of Italy, 80 miles by rail E. of Rome. It stands 1575 feet above sea-level, and has a cathedral (1119). Here were born Ovid and Pope Innocent VII. On a mountain close by stood until 1870 the 'mother monastery' of the Celestines. Pop. 18,000.

Sultanabad, a Persian town in the west of Irak-Ajemi, and capital of the province, with a famous carpet manufacture. Pop. 20,000.

Sulu Islands, an archipelago of 188 mountainous islands stretching from Borneo NE. to the Philippines, with a total area of 948 sq. m. and a pop. of 25,000. The Malay-Mohammedan inhabitants were, as bold pirates, the terror of the seas, until the Spaniards conquered them in 1876; in 1899 the sultan recognised the authority of the United States.

Sumatra (*Soo'matra*, usu. *Syoo-may'tra*; named from the ancient town of Samudera in the north) is after Borneo the largest island of the East Indian Archipelago or Indonesia, having an area not much less than that of Spain, calculated at 165,600 sq. m. Towards the middle it is crossed lengthwise by the equator; the greatest length is 1115 miles, the greatest breadth 275. An imposing mountain-system, consisting of several nearly parallel ranges (7000 to 10,000 feet high), with intervening plateaus and valleys—forms the framework of the island, which has a bold and frequently precipitous coast towards the west. Seven or eight volcanoes are still active, including Indrapura (the culminating peak of the island, 11,800 feet), Merapi (the most restless), Pasaman or Mount Ophir (which broke out in 1891), &c. Towards the west the rivers are of necessity short and rapid, but several of the eastward streams grow to imposing rivers in their passage through the plains. They are fed by an abundant rainfall (83 inches at Deli). The flora is exceptionally rich. Vast but too rapidly diminishing areas of the mountain regions are covered with virgin forest, a striking contrast to the wide alluvial prairies. The Dutch expedition of 1877–79 collected 400 varieties of timber. Rice, sugar, coffee, pepper, cocoa-nuts, sago, maize, sweet potatoes, yams, and of late excellent tobacco are cultivated. Gold and coal are worked, the latter especially at Ombilin, united with the west coast by railway in 1891. The petroleum found at Langkat and elsewhere is another source of wealth. Of 112 mammals, 45 are common to Borneo and 39 to Java. The birds and snakes are in the main Bornean. The Bornean forms, however, are almost entirely confined to the eastern side of the island. The Orang-outang and the *bru*, the true tiger, the Malay bear, the rusa deer, the Malay hog, the tapir, the two-horned Sumatran rhinoceros, and the Sumatran elephant are characteristic forms.

Among the birds are Argus pheasants, hornbills, goat-suckers, and grakles. Both the python (15 to 20 feet long) and the cobra are of frequent occurrence, and the crocodile swarms in many of the rivers. Sumatra is peopled in the main by tribes of the Malay stock, differing very markedly in degree of civilisation, custom, and language. An earlier non-Malay element is represented—the Kubus, a savage forest-dwelling race; the Battas; and the Redjangers. Hindu influences, which have left their mark in ruined temples, religious customs, language, alphabets, &c., began to tell on Sumatra prior to the 7th c. In the 13th Mohammedanism was introduced. The island became known in 1508 through Lopez de Figuera. The Portuguese were ousted by the Dutch towards the close of the 16th c.; though the permanent Dutch occupation was not completely carried out round the coast till 1881, and much of the interior is still semi-independent and unexplored. The Dutch possessions were in the hands of the British between 1811 and 1816, and portions down till 1825. Atjeh, Achin or Atcheen (q.v.), only subdued after a long war (1875–79) and not yet pacified in 1894, was formed into a government in 1881. The total pop. of Sumatra and the adjacent islands is estimated at 3,200,000 (Achin, 110,800; West Coast, 1,527,500; East Coast, 421,000; Bencoolen, 162,400, &c.). Chief centres of population are Padang (150,000), Achin (10,000), Bencoolen (12,000), and Palembang (43,000). See Marsden's History (1783), the memoir of Sir Stamford Raffles; Wallace's *Malay Archipelago* and *Australasia;* and Forbes, *A Naturalist's Wanderings* (1885).

Sumba'wa, one of the chain of the Sunda Islands, to the east of Java, lies between Lombok (on the west) and Flores (on the east), which yields rice, tobacco, cotton, sandalwood, &c. Area, 5192 sq. m.; pop. 150,000, all Malays and Mohammedans. The four native rulers owe allegiance to the Dutch governor of Celebes. In 1815 an eruption of Tambora, the loftiest peak, whereby its altitude was decreased from 14,000 to 7670 feet, cost 12,000 lives. Another eruption took place in 1836, and one of another peak, Gunong Api, in 1860.

Sumburgh Head, a bold headland, with a lighthouse, at the S. extremity of Shetland.

Summer Isles, a group of twenty rocky islets off the west coast of Scotland, near the entrance of Loch Broom, an inlet (7 miles long, and 12½ miles wide at the entrance) of NW. Ross-shire. The largest, Tanera, measuring 1¾ by 1½ mile, rises 406 feet, and has 120 inhabitants.

Sumy, a town of Russia, 125 miles by rail NW. of Kharkoff. Pop. 26,700.

Sunart (*Soo'nart*), Loch, a picturesque sea-inlet of W. Argyllshire, winding 19½ miles E.

Sunbury, a Middlesex village, on the Thames, 4¾ miles W. of Kingston. Pop. 4550.

Sunbury, capital of Northumberland county, Pennsylvania, on the Susquehanna, 53 miles by rail N. of Harrisburg. Pop. 10,200.

Sunda Islands (*Soon'da*), a name applied sometimes to the long chain of islands stretching SE. from the Malay Peninsula to the north coast of Australia. More properly it means the islands that lie between the E. end of Java and the N. side of Timor—Bali, Lombok, Sumbawa, Flores, Sandalwood Island, &c. (see separate articles). Sunda Strait is a passage, 70 to 90 miles broad, lying between Sumatra and Java and connecting the Indian Ocean with the Sunda Sea. Several islands stud its waters, as Krakatoa (q.v.), Princes Island, Steers, and Calmeijer.

Sundarbans (*Soon'derbuns*), or Sunderbunds, the lower portion of the delta of the Ganges, extending 165 miles eastward from the mouth of the Húgli to that of the Meghna, and stretching inland for 83 miles. The total area is estimated at 7550 sq. m. The region is entirely alluvial, with vast swamps and a network of streams. Next the sea is a wide belt of dense jungle, the haunt of wild beasts. Behind this belt the land is cultivated, the fields being enclosed with embankments. Rice is the staple crop.

Sunderland, a seaport, municipal, county, and parliamentary borough of Durham, at the mouth of the Wear, 13 miles NE. of the city of Durham and 12 SE. of Newcastle-upon-Tyne. The township of Sunderland, on the south side of the river, covers only 219½ acres; the municipal borough comprises also the townships of Bishopwearmouth, Monkwearmouth, and Monkwearmouth Shore. Monkwearmouth appears in history in 674 as the site of a monastery erected by Benedict Biscop; Bishopwearmouth in 930 was conferred by Athelstan on the monks of Lindisfarne then settled at Chester-le-Street. The earliest indubitable reference to Sunderland itself does not occur till 1311. Sunderland is a fine, well-built town, with broad, clean streets and pleasant suburbs. Till the beginning of the 19th c. it was a very inconsiderable place, but owing to the improvement of the harbour and the growth of the Durham coal trade, it has developed with great rapidity. The principal public buildings and institutions are the Italian Renaissance town-hall (1887–90); the Free Library, Museum, Art Gallery, and Winter Garden (1877–79); Sunderland Literary Society and Subscription Library (1878); the Theatre Royal (1853); the Avenue Theatre; the Victoria Hall (1872), the scene of the terrible disaster of June 16, 1883, in which 182 children lost their lives; the Assembly Hall; the Workmen's Hall (1868); the Liberal Club (1839); the County Constitutional Club (1890); the Infirmary (1865; enlarged 1879–87); the Orphan Asylum (1860). St Peter's, Monkwearmouth, retains in a part of the tower and west wall of the nave a remnant of the 7th-century building. The People's or Mowbray Park is an excellent recreation-ground. The portion south of the railway was purchased in 1854, and contains monuments of Havelock and Jack Crawford. The New or Extension Park, north of the railway, was purchased in 1866. Roker, a watering-place close to Monkwearmouth, has also a park of 17 acres, opened in 1880. Two single-arch iron bridges cross the Wear at a distance of 20 yards from each other. The older bridge (1793–96), 236 feet in span, was reconstructed and widened in 1858–59. The railway bridge was opened in 1879. The harbour is formed by two piers, the north one 617 yards long, the south 650. A new pier, starting from the south end of the terrace promenade at Roker, is over 2000 feet long. Two other piers protect the entrance to the south docks. There are four docks capable of accommodating the largest vessels—the North Dock (6 acres), the Hudson Dock, North (18 acres), the Hudson Dock, South (14 acres), the Hendon Dock (11 acres). The annual shipments of coal and coke exceed 4,000,000 tons. From the commissioners' staiths 15,000 tons can be shipped in a day. Other exports are bottles and glass, earthenware, lime, iron, chemicals, patent fuel, and cement. The

principal imports are timber, props, iron ores, chalk, loam, grain, flour, esparto grass, hay, straw, and tar. Sunderland is famous for its iron shipbuilding yards, of which there are thirteen. There are also extensive ironworks, forges, anchor and chain works, glass and bottle works, chemical works, roperies, paper-mills, breweries, and lime-kilns. In Monkwearmouth is the Pemberton coal-pit, 381 fathoms deep, and extending under the sea. Sunderland returns two members. Pop. of parl. borough (1851) 67,394; (1881) 124,760; (1901) 159,359, of whom 146,565 were in the municipal and county borough. Havelock was born at Ford Hall, Bishopwearmouth (1795); Jack Crawford, the hero of Camperdown (1775-1831), at Sunderland; other natives were Clarkson Stanfield, R.A., Tom Taylor, and Swan the electrician.

Sundsvall (*Soonds-val*), a Swedish seaport, on the Gulf of Bothnia, 80 miles N. by W. of Stockholm, and 290 by rail E. by S. of Trondhjem in Norway, has ironworks and sawmills. It was almost destroyed by fire in 1888. Pop. 15,200.

Sungei Ujong. See STRAITS SETTLEMENTS.

Sunium. See COLONNA.

Sunnyside. See TARRYTOWN.

Suona'da, or the Inland Sea of Japan, separates the islands of Kyushu and Shikoku from the main island, Honshu. It is 250 miles in length from the strait of Shimonoseki (q.v.) to Osaka, has a maximum breadth of 50 miles, and is studded with innumerable islets and rocks.

Superior, capital of Douglas county, Wisconsin, at the W. end of Lake Superior, and the mouth of the Nemadji River, 8 miles by rail SE. of Duluth. Grown up since 1880, it has a good harbour and steam sawmills. Pop. 31,600.

Superior, LAKE, the largest body of fresh water on the globe, is the highest and most western of the great lakes lying between Canada and the United States. It is bounded N. and E. by Ontario, S. by Michigan and Wisconsin, and NW. by Minnesota. Greatest length, 412 miles; greatest breadth, 167 miles; area, 31,200 sq. m.—nearly that of Ireland. The surface of the lake is 601⅞ feet above sea-level, and its mean depth 475 feet; its maximum depth is 1008 feet. Its surface has an elevation of 20½ feet above that of Lakes Huron and Michigan; this difference occurs in the rapids of St Mary's River, the only outlet (see SAULT STE MARIE). Lake Superior, being situated very near the watershed between Hudson Bay and the Mississippi, receives no rivers of importance, although hundreds of small rivers pour themselves into it, the largest the St Louis and the Nipigon. The bold and rocky northern coast is fringed with numerous islands of basalt and granite, some rising sharply from deep water to 1300 feet above the lake. The largest, Isle Royale, is 44 miles long. The southern shore is generally lower. Keweenaw Point (q.v.) projects far into the lake. At Grand Isle Bay, 100 miles W. of Sault Ste Marie, are the Pictured Rocks, cliffs of sandstone, 50 to 200 feet high, in many places presenting fantastic forms, and marked by vertical bands and blotches of red and yellow. The water is singularly pure and transparent. The lake never freezes over, but the shore ice prevents navigation in winter. It is subject also to very violent storms, with waves 15 to 18 feet high. It has the small tides common to the great lakes, and also the *seiches* seen in Swiss lakes —a regular series of small waves, or pulsations, at ten minutes' intervals. Towns on the Canadian side are Sault Ste Marie and Port Arthur, and on the American side Duluth, Superior, and Marquette. The Canadian Pacific Railway passes along the northern shore.

Surabaya (*Soorabī'ya*), a seaport and capital of a province on the N. coast of Java, opposite Madura Island. Here the Dutch have an arsenal, a mint, sugar and furniture factories, shipbuilding yards, and foundries. Sugar, coffee, hides, tobacco, rice, and cotton are exports; pop. 147,000.

Surakarta, a town in the centre of Java, connected by rail with Samarang on the N. and Surabaya on the E.; pop. 124,000.

Surat', a city of India, on the S. bank of the Tapti (crossed by a five-girder bridge), 14 miles from its mouth, and 160 by rail N. of Bombay. It stretches in a semicircle for more than a mile along the river, the quondam citadel (1540; government offices since 1862) forming the central feature. The chief buildings are four handsome mosques, two Parsee fire-temples, three Hindu temples, the old English and Dutch factories, and a clock-tower (80 feet high). The existing city in 1512, soon after its foundation, was burned by the Portuguese, as again in 1530 and 1531. In 1612 the English established themselves there, and shortly after they were followed by the Dutch. Surat then traded with Europe, Arabia, Persia, Ceylon, the East Indies, &c., and silk, cotton, and indigo were the most valuable exports. Here the Mohammedan pilgrims of India were wont to embark for Mecca. Shortly after 1650 the Mahrattas began to harass the city, and towards the end of the 17th century the commerce of Surat began to decline, Bombay gradually taking its place. The place came under British rule entirely in 1800, and for a time it had a revival of its old prosperity. But in 1837 it was almost wholly ruined by a disastrous fire followed by a great flood. It flourished once more during the American civil war, its chief export being cotton. Pop. (1811) 250,000; (1847) 80,000; (1881) 109,840; (1901) 119,306.

Surbiton. See KINGSTON-UPON-THAMES.

Surinam. See GUIANA (DUTCH).

Surrey, an inland county in the south of England, separated on the N. by the Thames from Middlesex, and bounded elsewhere by Kent, Sussex, Hants, and Berks. Its maximum length from E. to W. is 39 miles; its greatest breadth, 26 miles; and its area, 758 sq. m., or 485,129 acres. Pop. (1801) 269,043; (1831) 485,700; (1861) 831,093; (1901) 2,008,923. Far-famed for the beauty of its scenery, Surrey is traversed from east to west by the North Downs (see DOWNS), which, near Titsey on the Kentish border, rise to 880 feet. On the north side of this range the land slopes gradually to the Thames—though even there plenty of high ground is to be found, as Cooper's Hill, St George's Hill, Richmond Park, and Wimbledon Common—but on the south the descent is rugged and broken up before the level of the Weald is reached. South of the main range, and about 5 miles distant from Dorking, is Leith Hill (967 feet), the highest point in the county, whilst in the extreme southwest rises Hind Head (903 feet). From all these places, as also from many others, glorious views are to be obtained, a noticeable feature in the landscapes being the prevalence of commons and heath-lands—the latter chiefly in the west. Of rivers the most important are the Wey and the Mole, both tributaries of the Thames. Surrey is well wooded, box-trees especially growing in great profusion, and around Farnham some 2000 acres

are under hops. Croydon, Guildford, Kingston, and Reigate are—not reckoning the suburbs of London—the principal manufacturing centres and most important towns; near the last named also extensive beds of fuller's earth are found. The county is divided into fourteen hundreds, and since 1885 has returned six members to parliament. Between Kingston and Ockley traces of the old Roman road from London to Chichester are plainly visible, whilst on Wimbledon Common, Hascombe Hill, and near Aldershot are Roman encampments. The castles of Farnham and Guildford and the ruined abbeys of Newark and Waverley call for attention; at Claremont, Oatlands Park, and Sheen (now Richmond), were royal residences; and quaintly-timbered old houses—many of them moated—abound in the districts around Gomshall, Godalming, and Haslemere. Of Surrey worthies the best known are William of Ockham, Thomas Cromwell, Archbishops Abbot and Whately, Bishops Corbet and Wilberforce, Middleton and Oxenford (the dramatists), John Evelyn, Sir W. Temple, Bolingbroke, Rodney, Banks (the sculptor), Gibbon, Horne Tooke, Cobbett, Malthus, Herring (the animal painter), Faraday, Rennie, Sydney Herbert, Robert Browning, Hablot K. Browne, Albert Smith, Dr Jowett, Eliza Cook, Sant (the R.A.), Sir George Grove, Professors Cayley and Sidney Colvin, Dr Furnivall, Gilchrist (the biographer), and Miss Faithfull. See works by Manning (3 vols. 1804–14), Allen (2 vols. 1829–30), Brayley (5 vols. 1841–48), Bevan (Stanford's series, new ed. 1891), and Murray's *Handbook to Surrey and Hants* (new ed. 1888); also *On Surrey Hills* (1892).

Sus, (1) a river and district of Morocco between the Atlas and the Anti-Atlas.—(2) A port of Tunis, 75 miles SE. of the capital. Pop. 8000.

Susa (the *Shushan* of Daniel, Esther, &c.), a town of Persia, the ancient capital of Susiana (the *Elam* of Scripture, mod. *Khusistan*), and one of the most important cities of the old world. Its ruins cover 3 sq. m., and include four spacious platforms above 100 feet high. See books by Williams, Loftus, Churchill, and Dieulafoy.

Susa, a city of Northern Italy, on a tributary of the Po, at the foot of the Cottian Alps, 32 miles by rail W. of Turin. It has a cathedral (1029), and a triumphal arch (8 B.C.). Pop. 4960.

Susquehanna, an American river, the North Branch (350 miles) of which has its origin in Schuyler Lake, in Central New York, and the West Branch (250 miles) in the Alleghany Mountains. These two unite at Northumberland, Pennsylvania, and the river thence flows 150 miles S. and SE. to the N. end of Chesapeake Bay. It is a shallow, rapid, mountain river, with varied and romantic scenery, and is of use mainly for floating timber. On its banks Coleridge and Southey proposed to found their 'pantisocracy.'

Sussex, a maritime county in the south of England, washed on the SE. and S. for 91 miles by the English Channel, and elsewhere bounded by Hampshire, Surrey, and Kent. It has an extreme length from E. to W. of 76 miles, an extreme width of 27, and an area of 1464 sq. m., or 936,911 acres. From the Hampshire border, near Petersfield, to Beachy Head (q.v., 575 feet) the county is traversed by the chalky South Downs, whose highest point is Ditchling Beacon (858 feet), and whose northern escarpment is steep, but leads down to the fertile and richly wooded Weald. Beyond this again, in the north-east, is the Forest Ridge (804 feet). A very productive tract, 2 to 7 miles broad, extends westward from Brighton along the coast to the Hampshire boundary; in the south-east are rich marshlands, affording excellent pasture. The chief streams, all unimportant, are the Arun, Adur, Ouse, and Rother. Rather more than two-thirds of the entire area is in cultivation; and 177 sq. m. (second only to Yorkshire) are occupied by woods—in the Weald, St Leonards and Ashdown Forests, &c. The Downs (q.v.) are clothed with a short, fine, and delicate turf; and here and elsewhere more than half a million of the well-known Southdown sheep are grazed, the live-stock also including some 25,000 horses and 113,000 cattle. Sussex was once the chief seat of the iron trade, when wood was used for smelting, and its last furnace was not blown out till 1809; to-day the manufactures are unimportant. The county, which contains six 'rapes,' 68 hundreds, and 317 parishes, has since 1885 returned six members to parliament. Brighton and Hastings are parliamentary and Arundel, Chichester, Eastbourne, Lewes, Rye, Worthing, and Bexhill municipal boroughs; whilst Newhaven, Seaford, Littlehampton, and Bognor also deserve mention. Pop. (1841) 300,075; (1901) 605,052. Sussex contains the landing-place of Cæsar (55 B.C.); of Ælla (477 A.D.), from whose subjects, the South Saxons, the county derived its name; and of William the Conqueror (1066) at Pevensey, as well as the battlefields of Hastings and Lewes. The antiquities include a British camp at Cissbury, Roman remains at Pevensey and Bognor, Chichester cathedral (12th century), a dozen mediæval castles (Arundel, Bodiam, Hurstmonceaux, Hastings, Bramber, &c.), and nine or ten religious houses (Lewes, Battle, &c.). Cobden, Collins, Fletcher, Otway, Sackville, Selden, and Shelley have been among the eminent natives; and Sussex also has memories of Chillingworth, Lyell, Archdeacon Hare, John Sterling, Cardinal Manning, Titus Oates, and Lord Tennyson.

See works by T. W. Horsfield (1835), Lower (3 vols. 1865–70), Parish (1886), G. F. Chambers (3d ed. 1891), A. Hare (1894), and E. V. Lucas (*Highways and Byways in Sussex*, 1904).

Sutherland, a maritime county in the extreme north of Scotland, is bounded W. and N. by the Atlantic, E. by Caithness, SE. by the North Sea, and S. by the Dornoch Firth and by Ross and Cromarty. Measuring 63 by 59 miles, it has an area of 2126 sq. m., or 1,360,459 acres, of which 47,633 are water and 12,812 foreshore. The Atlantic coasts, deeply indented by sea-lochs, are bold and rock-bound, in Cape Wrath (q.v.) attaining 523 feet; the south-eastern seaboard is comparatively flat. On the Caithness boundary rise the Hill of Ord (1324 feet) and Cnoc an Eireannaich (1698); but the mountains of Sutherland are all in the west—Benmore Assynt (3273), Conival (3234), Ben Clibrick (3154), Ben Hope (3040), Foinaven (2980), Canisp (2779), and Suilven or the Sugar-loaf (2399). The Oykell, tracing the Rossshire boundary, and falling into the Dornoch Firth, is the longest stream (35 miles); and of over 300 lochs and tarns the largest are Lochs Shin (16 × 1½ miles) and Assynt (q.v., 6¾ × ¾). Coal has been mined at Brora off and on since 1573; and gold at Kildonan (q.v.). The total percentage of cultivated area is only 2·9, in spite of costly reclamations carried on by the third Duke of Sutherland (1828–92), by far the largest proprietor—so costly indeed that during 1853–82 the expenditure on his estates exceeded the income derived from them by nearly a quarter of a million

sterling. The live-stock includes over 10,000 cattle and 200,000 sheep; and the deer-forests, grouse-moors, and fishings (especially good for trout) attract many sportsmen. The climate varies much, like the rainfall, which increases westward from 32 to 60 inches. Sutherland returns one member; its county town is Dornoch (q.v.). Pop. (1801) 23,117; (1851) 25,793; (1881) 23,370; (1901) 21,440. The Northmen, who down to the 12th c. often descended on Sutherland and pillaged it, called it the 'Southern land,' as lying to the south of the Orkney and Shetland Islands. The 'Sutherland Clearances,' by which many small tenants were removed, took place in 1810–20. See works by Sir Robert Gordon (1813), Bishop Pococke (1888), St John (2 vols. 1849; new ed. 1884), A. Young (1880), A. Mackenzie (1883), and Edwards-Moss (1888).

Sutherland Falls. See NEW ZEALAND.

Sutlej, or SATLAJ (anc. *Hyphasis* or *Hesidrus*), the eastmost of the five rivers of the Punjab, rises in the sacred lakes of Manasarowar and Rakas-tal in Tibet, at a height of 15,200 feet, and near the sources of the Indus and Brahmaputra. It flows at first NW., but turns westward to cut its way through the Himalayas, during which passage it drops to 3000 feet. After entering British territory it pursues a SW. direction, and after flowing 900 miles in all joins the Indus at Mithankot, S. of Multan. It is crossed near Jullunder by a magnificent iron railway bridge, 2½ miles long, and by another near Bhawalpur, just before the influx of the Jhelum-Chenab.

Sutors of Cromarty. See CROMARTY.

Sutton, a town and urban district in Surrey, 11 miles from London. Pop. (1901) 17,224.

Sutton Bridge, a town of Lincolnshire, on the Nen, 7 miles N. of Wisbech. Pop. 2100.

Sutton Coldfield, a municipal borough of Warwickshire, 8 miles NE. of Birmingham, with an Early English church, extended in Henry VIII.'s reign and 1879. Henry VIII. gave a charter in 1529, and a new one was granted in 1885. Agriculture is the chief occupation of the neighbourhood; but the town itself is becoming a residential suburb of Birmingham. The picturesque Sutton Park (3500 acres) is a favourite picnic resort. Pop. (1851) 4574; (1901) 14,264.

Sutton-in-Ashfield, a town of Nottinghamshire, 3 miles SW. of Mansfield. It has a fine church (1390; restored 1868), hosiery manufactures, and neighbouring coal-pits and limeworks. Pop. (1881) 8523; (1901) 14,862.

Sutton-on-Sea, a Lincolnshire seaside-resort, 28 miles NE. of Boston by rail.

Suvalky, or SSUWALKI, a Polish town, 48 miles NW. of Grodno. Pop. 27,170.—Area of Suvalky *government*, 4846 sq. m.; pop. 605,000.

Suwanee River (*Soo-waw'nee*), rises in southern Georgia, in the Okefinokee Swamp, and winds SSW. through Florida to the Gulf of Mexico.

Suzdal (*Sooz'dal*), a Russian town, 12 miles N. of Vladimir. Pop. 7000.

Svanetia. See CAUCASUS.

Sveåborg (*Svay-aw-borg*). See HELSINGFORS.

Svendborg. See FÜNEN.

Svenigorodka, a town in the Russian province of Kieff, 100 miles S. of Kieff. Pop. 17,000.

Swabia (Ger. *Schwaben*), an ancient duchy of SW. Germany, stretching from Franconia to Helvetia (Switzerland) and from Burgundy and Lorraine to Bavaria, and mostly embraced since 1806 in Würtemberg (q.v.). It was named from the Germanic Suevi, who drove out its Celtic inhabitants in the 1st century B.C.

Swadlincote, a town of Derbyshire, 4 miles SE. of Burton-upon-Trent. Pop. of urb. dist. 18,000.

Swaffham, a town of Norfolk, 15 miles SE. of Lynn. It has a cruciform church (1474) of great beauty, a corn-hall (1858), and an ugly market-cross (1783). Pop. 3400.

Swahili Coast, the home of the Swahili race, on the east coast of Africa, opposite Zanzibar and extending northward to Vitu.

Swale, a river in the North Riding of Yorkshire, flowing 60 miles ESE., and near Aldborough uniting with the Ure to form the Ouse (q.v.). See also SHEPPEY.

Swallow Falls, a waterfall on the Llugwy, Carnarvonshire, 2½ miles NW. of Bettws-y-Coed.

Swanage, a pleasant little watering-place of Dorsetshire, in the 'Isle' of Purbeck, nestling in the southern curve of a lovely bay, 9½ miles SE. of Wareham, but 11 by a branch-line opened in 1885. In Swanage Bay, in 877, King Alfred won England's first naval victory—a defeat of the Danes. Population, 3400. See PURBECK, and J. Braye's *Swanage* (1890).

Swanee River. See SUWANEE.

Swanetia. See CAUCASUS.

Swan River. See WESTERN AUSTRALIA.

Swansea (Welsh *Abertawe*), a seaport of Glamorganshire, on the banks and at the mouth of the river Tawe, 45 miles WNW. of Cardiff and 216 W. of London. A municipal, parliamentary, and also (since 1888) county borough, it is the most important town in South Wales. Its rapid progress depends on the manufacture of tin-plate here and in the neighbourhood; on its harbour and docks; and on its position on a bay affording a spacious, sheltered, and safe anchorage. The Harbour Trust of Swansea, with a capital of £1,500,000 and an income of upwards of £100,000 per annum, possesses docks, constructed since 1847, covering an area of over 60 acres. There is annually manufactured in Swansea and the immediate neighbourhood upwards of two-thirds of the tin-plates manufactured in Britain, representing a value of over £5,000,000. The imports include copper, silver, lead, tin, nickel, iron and steel. The chief exports are tin, terne and black plates, coal and coke, copper, zinc, iron and steel, alkali, superphosphate, arsenic, &c. Pop. of municipal borough (1851) 31,461; (1881) 65,597; (1901) 94,514. Since 1885 Swansea, which has now a bishop-suffragan under St Davids, returns two members, one for the town and one for the district division (Aberavon, Kenfig, Loughor, and Neath). The charter dates from the days of King John and Henry III. The castle, of which a tower still remains, was founded in 1099 by the Earl of Warwick; in Edward IV.'s reign it passed by marriage from the Herberts to the Somerset family, and is still the property of the Dukes of Beaufort. The grammar-school dates from 1682.

See works by L. W. Dillwyn (1848), G. G. Francis (1849–67), P. Rogers (1878), L. C. Martin (1879), and F. Grant (1881).

Swatow, a Chinese seaport, opened to foreign trade since 1869, at the mouth of the Han, 225 miles E. of Canton. It is the seat of great sugar-refineries, and of bean-cake and grass-cloth manufactures. Pop. 40,000.

Swaziland (*Swáh'zee*), a South African native

state, lying W. of the Libomba Mountains, and intruding into the E. side of the Transvaal. Area, 6536 sq. m.; pop. 84,000 Swazis and 900 white men. Its trade, valued at £70,000, goes either through Natal or by way of Delagoa Bay. Its independence was recognised by the Transvaal and Britain in 1884; since 1904 it has been under the control of the British government. The Swazis, a Zulu-Kaffir race, smelt copper and iron, and are noted for their wood-carving.

Sweåborg. See HELSINGFORS.

Sweden (Swedish *Sverige*), a kingdom of northern Europe, occupying the eastern side of the Scandinavian peninsula, with which, from 1814 till the amicable but definitive separation in 1905, Norway (q.v.) was associated under one crown. Its greatest length, N. to S., is close on 1000 miles; its greatest breadth 300; its area 170,970 sq. m.; and its coast-line 1550 miles. Besides many skerry-islands, Sweden owns Gothland (q.v.) and Œland (q.v.). The country may be generally described as a broad plain sloping south-eastwards from the Kjölen Mountains to the Baltic. The only mountainous districts adjoin Norway; the peaks sink in altitude from 7000 feet in the north to 3800 in 61° 30′ N. lat. Immediately south of this point a subsidiary chain strikes off to the SE., and, threading the lake-region of central Sweden, swells out beyond into a tableland with a mean elevation of 850 feet and maximum of 1240 feet. Fully two-thirds of the entire surface lies lower than 800 feet, and one-third lower than 300 feet, above sea-level. Most of Sweden is built up of crystalline gneisses and granite, and of Lower Silurian limestones, sandstones, and slates; and there are extensive glacial deposits. The eastern or Bothnian coast, like the western coast of Norway, is gradually rising; whilst the coast of Scania, in the extreme south, tends to subside. The climate of Sweden is continental in the north, along the Norwegian frontier, and on the southern plateau. The lakes in the colder districts of the north are ice-bound for some 220 days in the year; in the south for only about 90 days. The rainfall is greatest on the coast of the Cattegat (30 inches).

Sweden is separated politically and geographically into three great divisions—Norrland, Svealand, and Gothland. Norrland in the north is a region of vast and lonely forests and rapid mountain-streams, often forming fine cascades and ribbon-like lakes ere they reach the Gulf of Bothnia. Besides the Lapps with their reindeer herds, and the Swedish wood-cutters and miners, the only denizens of these forest tracts are wild animals (reindeer, bears, wolves, lynxes, gluttons, foxes, lemmings), birds of prey, hares, game birds, and aquatic birds. This division is very rich in minerals, but iron is almost the only one extracted. The central division of Svealand, or Sweden proper, is a region of big lakes, and contains most of the mines. Lakes occupy nearly 14,000 sq. m., or 8·2 per cent. of the total area; several of the largest, as Vener, Vetter, Hjelmar, Mälar, are connected with one another and the sea by rivers and canals. Lake Mälar contains some 1300 islands, many beautifully wooded, with royal palaces or noblemen's castles; and its shores are studded with prosperous towns, castles, palaces, and factories. There is a pretty large area of forest in Svealand, which also possesses almost inexhaustible stores of iron and copper, and in less quantities silver, manganese, nickel, zinc, cobalt, &c. Gothland, the southern division, contains a much higher proportion of cultivated land, and its wide plains are all under agriculture. Iron occurs; and some 10,000 tons of coal are extracted annually.

In 1800 the population of Sweden numbered 2,347,303; in 1850, 3,482,541; in 1900, 5,136,441. By nationality the people are all Swedes, except some 19,500 Finns, 6850 Lapps, and 24,500 foreigners. Only 23 per cent. are counted as 'towns-folk.' In 1900 there were ten towns whose pop. exceeded 20,000—Stockholm (300,624), Gothenburg (130,619), Malmö (60,857), Norrköping, Gefle, Helsingborg, Karlskrona, Upsala, Jönköping, and Örebro; and twelve more exceeded 10,000. Between 10,000 and 20,000 persons emigrate every year, mostly to the United States. The state religion, that of the whole population but some 22,000 persons, is the Lutheran Church, with twelve bishops. Primary education is compulsory and free, and there are excellent elementary schools. The highest branches are provided for by the Medical Institution of Stockholm (270 pupils) and by the universities of Upsala (1500 students) and Lund (670). More than one-half of the population are dependent on agriculture. Between 7 and 8 per cent. only of the entire area is under cultivation, though in addition 4 per cent. is laid down as meadows. The principal crops are potatoes, oats, rye (yielding the ordinary bread of the peasantry), barley, and wheat, beet for sugar, and roots for fodder. Butter is one of the largest exports. The mines employ 31,000 persons, mainly 520 iron-mines (producing over 2,800,000 tons annually), copper, zinc, manganese, cobalt; nickel and silver are also produced. About 40 per cent. of the aggregate surface is forest, and of this again 60 per cent. is in Norrland. Only one-twelfth of the timber cut in Sweden is sent abroad, about one-half of it to Britain, chiefly in the form of pit-props. The most important industries are timber industries (1122 establishments, yielding an annual value of £4,890,000), flour-mills, ironworks, foundries, &c. (£2,950,000), sugar-refineries, cotton and wool spinning and weaving, margarine-factories, breweries, tobacco-factories, match-factories, tanneries, paper-mills and papier-maché works, distilleries, glass and porcelain works, and chemical works. The fisheries (both off the south and off the east coasts) are worth nearly half a million sterling annually. The foreign trade of the country averages annually from £23,000,000 to £28,000,000 for imports, and from £18,000,000 to £21,000,000 for exports. The imports from Great Britain average about £7,000,000, and the exports thither £8,000,000 or £9,000,000. The chief imports are textiles, groceries, minerals, machinery, grain and flour, hair, hides, horn, and animals and animal foods. Of the exports timber is by far the most important—£10,500,000 or more. Next come minerals and metals, chiefly iron and steel; animal foods and animals (mainly butter); grain and flour, paper, and textiles. Great Britain takes principally wood, timber, and wood-pulp, butter, paper, pig and bar iron and steel, and matches, and sends back coal, iron, machinery, and textiles.

The executive power is vested in the king, advised by a council of ten; and there are two houses of parliament. The members of the first house (150) are elected by the provincial councils and the municipal councils of certain large towns; they sit for nine years, and receive no salary. The members of the second house (230) are returned by direct or indirect ballot from rural districts

and towns. The revenue averages about £9,850,000, and generally balances the expenditure. The debt, £19,179,000, has been contracted solely for railways. The military forces include a standing army and a militia. The regular army numbers about 40,000 men, the militia 400,000. The navy, with 25,000 men in all, is made up of sixteen port-defence vessels, 11 second and third class cruisers, and some 20 torpedo boats.

Sweden was originally occupied by Lapps and Finns, but probably (1500 B.C.) Teutonic tribes drove them into the forests of the north, and at the dawn of history we find Svealand occupied by Swedes (Svea) and Gothland by the cognate Goths. Some, however, make Sweden or Scandinavia generally the original home of the Aryans. Gothland was christianised and also conquered by the Danes in the 9th c., while Svealand remained fanatically heathen till the time of St Eric (12th c.), who conquered Finland, henceforth a Swedish possession. For a century Goths and Swedes had different kings, but gradually melted into one people toward the end of the 13th c. Now arose bitter feuds between king, nobility, and peasants, and universal turbulence prevailed; agriculture, industry, literature and culture progressed not at all or hardly existed. Even after the union of Sweden, Norway, and Denmark under one monarch (1397), Sweden was torn by conflicts which lasted down to the expulsion of Danish oppressors, and the restoration of Swedish autonomy by the national rising under Gustavus Vasa (1524), the ablest prince who had yet ruled the Swedes. Under him the Reformation was heartily accepted. Gustavus Adolphus and the Swedes were its bulwark, not merely at home but in Germany in the Thirty Years' War; and by the acquirement of Bremen, Verden, and Pomerania, Sweden became (1648) a member of the empire. Under Charles XII. and his successor, the enmity of Denmark, Poland, and Russia wrested her new conquests from Sweden, and gave Livonia, Esthonia, Ingermanland, and Karelia (which had long been Swedish) to Russia; thus reducing Sweden from the rank of a first-rate European power. After a bloody struggle, Sweden had to cede Finland (1809) to Russia. Norway was united by a personal union (i.e. by the monarch) with Sweden in 1810; and in 1818 the French general Bernadotte was elected king (as Charles XIV.). Norway's demand for a larger measure of home rule led in 1905 to a complete separation. Swedish, a descendant of the Old Norse, differs (since the 9th c.) more from the parent tongue than Icelandic, Norwegian, or Danish; it has had, especially since the 16th c., an extensive literature.

See W. W. Thomas, *Sweden and the Swedes* (1892); *Sweden, its People and Industry*, by G. Sundbärg (trans. 1903); *Scandinavia* by Nisbet Bain (Cambridge Histories, 1905).

Sweetheart Abbey. See NEW ABBEY.

Swilly, LOUGH, an inlet of the Atlantic, 25 miles long and 3 to 4 wide, on the north coast of Donegal, Ireland, enters between Dunaff Head on the E. and Fanad Point, with a lighthouse, on the W. A second lighthouse is on Dunree Head. The entrance is protected by forts. On the E. shore is the watering-place, Buncrana. In Lough Swilly a French fleet was destroyed in 1798; and in 1811 the foundering of H.M.S. *Saldanha* at the entrance cost 300 lives.

Swindon, a municipal borough of Wiltshire, 77 miles W. of London and 29 ENE. of Bath, consists of Old Swindon, on an eminence 1½ mile S., and New Swindon, which originated in the transference hither in 1841 from Wootton-Bassett of the engineering works of the Great Western Railway. The former is rather a picturesque place, with a good Decorated parish church (rebuilt by Sir G. G. Scott in 1851), a town-hall (1852), assembly rooms (1850), and a corn exchange (1867); New Swindon has a mechanics' institute (1843), a theatre, &c. Pop. (1861) 6856; (1881) 22,374; (1901) 45,006 (6100 in Old Swindon). See J. E. Jackson's *Swindon and its Neighbourhood* (1861), and the *English Ill. Mag.* for April 1892.

Swineford, a Mayo market-town, 22 miles SW. of Ballymote. Pop. 1360.

Swinemünde (*Sween-eh-meen'deh*), a fortified seaport and watering-place of Prussia, on Usedom Island, 124 miles by rail NNE. of Berlin. Pop. 10,500. (See ODER.)

Swineshead, a town of Lincolnshire, 6 miles WSW. of Boston. At its Cistercian abbey King John surfeited himself with peaches and new beer. Pop. 1760.

Swinton, (1) a town in the West Riding of Yorkshire, 5 miles NNE. of Rotherham. It has manufactures of bottles, iron, pottery, &c. Population, 12,500.—(2) A town of Lancashire, 4½ miles WNW. of Manchester, with cotton-mills and brick-fields. Pop. of Swinton and Pendlebury, 27,000.

Switzerland, a confederation or republic of twenty-two cantons, three being divided into half-cantons, situated in the centre of Europe between France, Germany, Austria, and Italy. The greatest length (E. to W.) is 216 miles, the width being 137 miles; area, 15,981 sq. m. The pop. in 1850 was 2,392,740; in 1900, 3,325,023. In the following table of the census of 1898, the ordinary name is put first, followed by the French name in the German cantons, or by the German in the French ones. F. or G. or F.G. indicates that the majority speak French, or German, or both. When neither P. nor R.C. is appended, it is to be understood that the canton is partly Protestant and partly Catholic.

Cantons.	Date of Admission.	Area in sq. m.	Pop. in 1898.
Aargau (Fr. Argovie), G.	1803	548	187,858
Appenzell—			
Outer, G., P.	1513	163	56,696
Inner, G., R.C.			12,907
Basel (Fr. Bâle)—			
Town, G., P.	1501	178	101,256
Country, G., P.			65,257
Bern (Fr. Berne), G.	1353	2,659	549,387
Fribourg (Ger. Freiburg), F.G., R.C.	1481	644	124,138
Geneva (Fr. Genève, Ger. Genf), F.	1814	108	122,473
Glarus (Fr. Glaris), G., P.	1352	267	33,327
Graubünden (Fr. Grisons), G.F.	1803	2,754	95,941
Luzern (Fr. Lucerne), G., R.C.	1332	579	140,171
Neuchâtel (Ger. Neuenburg), F.	1814	312	121,047
St Gallen (Fr. St Gall), G.	1803	779	250,283
Schaffhausen (Fr. Schaffhouse), G., P.	1501	114	37,237
Schwyz, G., R.C.	1291	351	50,777
Solothurn (Fr. Soleure), G., R.C.	1481	306	91,918
Thurgau (Fr. Thurgovie), G.	1803	381	111,204
Ticino (Fr. and Ger. Tessin), Ital.	1803	1,089	128,732
Unterwalden—			
Upper, G., R.C.	1291	295	14,698
Lower, G., R.C.			13,209
Uri, G.	1291	416	17,249
Valais (Ger. Wallis), F.G.	1814	2,036	104,132
Vaud (Ger. Waadt), F.	1803	1,244	266,970
Zug (Fr. Zoug), G., R.C.	1352	92	23,267
Zürich (Fr. Zurich), G., P.	1351	666	399,441
Total		15,981	3,119,635

The area of Switzerland (15,981 sq. m., of which 11,443 are classed as 'productive' and 4538 as

'unproductive') is distributed over four river-basins—those of the Rhine, the Rhone, the Inn, and the Ticino, a tributary of the Po. The Confederation is bounded S. by a part of the main chain of the Eastern Alps, W. and NW. by the Jura, and N. by the Rhine. The Pennine Alps lie to the south of the valley of the Rhone, on the north of which are the Bernese Alps extending from the Lake of Geneva to the Grimsel. East of the Bernese Alps is the St Gothard group. The Rhætian Alps are east of the Pennine Chain (see ALPS, JURA, &c.). A broad fertile plain extends from the Lake of Geneva to the Lake of Constance. The lowest level on Swiss territory is 646 feet on the banks of Lake Lugano; the highest is 15,217, the summit of Monte Rosa. Of the 4538 sq. m. of land classed as 'unproductive,' 3229 are covered by rocks, moraine, &c., 711 by glaciers, 535 by lakes, and 63 by towns and villages. The largest lakes are those of Geneva and Constance; fifteen cover an area of over 3 sq. m. each. Of some 470 glaciers (more in Valais than in any other canton) the largest is the Gross Aletsch, 15 miles long. In the Central Alps the limit of perpetual snow varies from 9250 to 9020 feet. Few metallic deposits are found; those which exist cannot be worked. Some salt is obtained. In a country where the height above the sea-level is from 646 feet—where the almond, the fig, and the olive ripen in the open air—to the region of perpetual snow, there is inevitably great variety in the climate. There is a variation of about 34½° in the mean temperature—between 54½° F. at Bellinzona, and 20° on the Theodule Pass. The population is composed of four distinct ethnical elements. The language of 71·3 per cent. of the population is German; of 21·8, French; of 5·3, Italian; of 1·6, Romansch or Ladin. There is no federal church, each canton has its own ecclesiastical constitution, and liberty of belief is inviolable. Of the inhabitants, 58·8 per cent. are Protestants, 40·5 Catholics, and 0·3 Jews. The republic of Switzerland became a federal state (*Bundestaat*) in 1848: previously it consisted of a league of semi-independent states or cantons. The political structure is built up in three tiers—the Commune, the Canton, and the Federal Assembly. In the communes all local matters are administered by two governing bodies—the Communal Assembly (which is purely legislative), composed of all male citizens who have attained the age of twenty, and the Communal Council, the executive of the former body, by whom it is elected. Each canton has its own constitution and local government. The constitutions of the several cantons vary considerably, but all are based on the sovereignty of the people, and are subject also to the ratification of the Confederation. In Uri, the two half-cantons of Appenzell, and in Glarus there still exists the ancient *Landsgemeinde*, an open-air gathering of all those possessing votes, who meet every spring to legislate on cantonal affairs. These cantons possess a representative power in their *Landruth*, and an executive power in the *Regierungsrath*. In other cantons the citizens elect representatives to the cantonal council from electoral districts. The supreme legislative authority of the Confederation is vested in a parliament of two chambers, the Council of the States (*Ständerath*) and the National Council (*Nationalrath*), which represent the supreme government of the country, under reserve of the *referendum* or vote of the people. The Council of the States consists of forty-four members, each canton having two representatives, and each half-canton one. The National Council consists of 147 members, elected in each canton in the proportion of one deputy for every 20,000 of the population. These two chambers each elect a president and vice-president, and meet at Bern at least twice a year, in June and December, together forming the Federal Assembly. This body controls the general administration of the Confederation; they alone can declare war, make peace, or conclude treaties with foreign powers. The executive authority of the Federal Assembly is deputed to the Federal Council composed of seven members, elected for a period of three years. The president of the Federal Council, who is also president of the Confederation, is chosen annually at a united meeting of the Council of the States and the National Council from among the members of the Federal Council. By means of the *referendum* all legislative acts passed in the Federal or Cantonal Assemblies may be referred to the people *en masse*. In the majority of cantons 5000 signatures are required in order to obtain a *referendum* for cantonal laws. The compulsory *referendum* regarding federal legislation, established in 1848, was then limited to the revision of the constitution. That of 1874 contains an article extending it, when demanded by 30,000 citizens or eight cantons, to all laws and resolutions of a general nature passed by the Federal Assembly. *Initiative* is the exercise of the right granted to voters to initiate proposals for the enactment of new laws or for the alteration or abolition of old ones. Fifty thousand signatures are required to obtain the initiative for federal legislation, and in most cantons 5000 for cantonal matters.

The revenue for 1905 was £4,629,000, the expenditure £4,672,000. The revenue is chiefly derived from customs, postal and telegraph services, the tax for exemption from military service, and from real property. The public debt in 1905 amounted to £4,763,000. The total cantonal debts do not exceed £10,000,000. The French metric system of money, &c. is in use throughout the Confederation. Every Swiss is liable to military service; and the total strength of the army (essentially a citizen force, designed only for defensive purposes), not including the *Landsturm*, is: *Elite*, 125,620; *Landwehr*, 80,715; total, 206,335. Primary instruction is compulsory, unsectarian, and provided gratuitously at the cost of each canton. There are five universities on the German model—Basel, Bern, Zurich, Geneva, Lausanne, and (for Catholics only) Freiburg; there is also an academy at Neuchâtel, and a great federal technical college, the Polytechnic, at Zurich, besides several smaller technical colleges elsewhere.

More than one-half of the arable land is devoted to cereals. Cattle-breeding is an industry of great importance. There are upwards of 5500 cheesemaking establishments. Tobacco is grown chiefly in the cantons of Valais, Vaud, Freiburg, Bern, and Aargau; the quality is by no means good, but the exports (including cigars and cigarettes) amount to £90,000 a year. The average annual production of wine amounts to 31,266,400 gallons. Little or no coal is mined, there are no canals or navigable rivers, the country is situated far from the sea-coast, and nearly all the raw material and half-finished goods have to be imported. Yet there is a large general trade. The textile industries are the most important, the chief centres being Zurich, Basel, Glarus. Next comes watchmaking, established at Geneva in

1587, which has since spread to the cantons of Neuchâtel, Bern, and Vaud. Machinery (weaving-looms, &c.) is also largely exported. Embroidery is carried on chiefly in St Gall and Appenzell. Wood-carving, introduced in the Oberland about 1820, employs some 4000 persons. The exports range from £26,760,000 to £29,000,000 in value per annum, the imports from £28,000,000 to over £40,000,000. The gross amount of money brought annually by tourists into the 'Playground of Europe' is estimated at £4,000,000.

The original inhabitants of Switzerland were the Celtic Helvetii, and the Rhætii of doubtful affinity; both were conquered by Julius Cæsar and the generals of Augustus, and Romanised. Overrun by the Burgundians in the west, and their Germanic kinsmen the Alemannians in the east, Helvetia became subject to the Frankish kings and christianised in the 7th century. Most of the country was subsequently part of the Holy Roman Empire; and in 1273 a Swiss noble, Rudolf of Hapsburg in Aargau, became German Emperor. Soon after his death (in 1291) the inhabitants of Uri, Schwyz, and Unterwalden formed a league to defend their common interests, and in 1315 crushed an Austrian army at Morgarten. In 1332 Lucerne joined the alliance, and in 1353, Bern, Zurich, Glarus, and Zug. The Austrians were again routed at Sempach in 1386, and in 1388 at Näfels. The Swiss next had a fierce but triumphant struggle with Charles the Bold of Burgundy, whom they routed at Grandson and Morat in 1476, and finally at Nancy (where Charles was slain) in 1477. When the Reformation began there were thirteen cantons, and the cantons took opposite sides from the beginning, not without serious turmoil and bloodshed. The treaty of Westphalia in 1648 recognised Switzerland as an independent state. Some of the cantons were strictly aristocratic and some highly democratic, and there was much discontent long before the French Revolution, when, in 1798, between civil strife and French armies, the old republic (or rather alliance) came to an end. The Helvetic Republic of nineteen cantons, under French auspices, endured till 1805; then a new republican constitution was adopted, the Federal Pact of twenty-two cantons. On Napoleon's downfall Valais, Neuchâtel, and Geneva, which had been incorporated with France, were restored, and Swiss neutrality and inviolability were recognised by the treaty of Vienna in 1815. Religious troubles led to a Catholic league in 1844, which was suppressed by the Federal forces in 1847. The present constitution was adopted in 1848, but revised in 1874.

See, besides Murray, Baedeker, and other guidebooks, works on the constitution by Adams and Cunningham (1889), Moses (Oakland, U.S. 1889), Vincent (1891), Winchester (1891); or the history by Hug ('Story of the Nations,' 1890), and Swiss life by Symonds (1892).

Swords, a town, 8 miles N. of Dublin, with a round tower, castle, and abbey. Pop. 945.

Sydenham (*Sid'nam*), a district in Lewisham parish, 8 miles S. of London. It has become of world-wide celebrity in connection with the Crystal Palace, which, however, is really in the adjoining parish of Lambeth, and which was erected in 1852–54, chiefly from the materials of the Great Exhibition (1851), and under the superintendence of Sir Joseph Paxton. The cost amounted to nearly £1,500,000. The building is 1608 feet long, 390 wide across the transept, and 175 high, the height of the two water-towers being 282 feet. The chief arts and sciences illustrated by the collections are Sculpture, Architecture, Painting and Photography, Mechanics and Manufactures, Botany, Ethnology, Palæontology, Geology, and Hydraulics. There are two concert-rooms, within the larger of which the triennial Handel festivals (since 1859) take place with 4000 performers. The park and gardens occupy nearly 200 acres, and are adorned with sculptures, stone balustrades, an artificial lake, and magnificent fountains. In 1866 there was a fire in the north wing, doing damage to the amount of £150,000; the Crystal Palace had never been a monetary success, and in 1887 the company was declared insolvent. Under new and more prosperous auspices, important 'demonstrations' still take place here, as well as cricket, football, bowling, and tennis matches, not to speak of great firework displays.

Sydney, the capital of New South Wales, and the oldest city in Australia, is situated on the southern shores of Port Jackson, and was named after Thomas Townshend, first Viscount Sydney (1733–1800), then Secretary of State for the Colonies. The first British settlers that reached New Holland were landed at Botany Bay (q.v.) on January 20, 1788. The spot here selected, being found ineligible, was abandoned a few days afterwards, and the infant settlement was transferred to a point 7 miles farther N., where Sydney now stands. The choice of the new locality was chiefly determined by a stream of fresh water flowing into Sydney Cove, one of the numberless bays into which the basin of Port Jackson is divided. This magnificent expanse of water, completely landlocked, and admitting vessels of the largest size, extends 20 miles inland, ramifying in every direction. Its bold and rocky shores, covered with luxuriant vegetation, present a succession of beautiful landscapes. The surrounding hills often rise to from 200 to 250 feet. In other points the coast consists of terraces and smooth sandy beaches. The narrow entrance of Port Jackson—through the 'Heads,' which are indicated by the Macquarie lighthouse, its electric light visible 30 miles at sea—is defended by the shore fortifications, torpedo boats, and a naval establishment on Garden Island. Sydney stands nearly in the centre of the immense coal formation of East Australia, which extends 500 miles N. and S., with a breadth of from 80 to 100 miles; and the sandstone rock on which it is erected affords a valuable building material.

The older streets are narrow and irregular; but several of the modern streets are not behind those of the principal towns of Europe. There are excellent lighting and drainage systems; and an abundant supply of pure water is obtained from the Nepean River, near Penrith. The Botanical Gardens cover 38 acres, and there are also numerous parks. Sydney has one shipbuilding establishment. The Fitzroy Dry Dock, originally intended for vessels of the royal navy, can take in ships of the largest size, and has been supplemented by one of the most extensive graving-docks in existence. Steps have been taken to put the city in a state of defence, and forts and batteries armed with powerful Armstrong guns have been erected. Amongst public buildings by far the most important edifice is the university (1852), which stands on a commanding height. The principal façade is 500 feet in length, and is flanked at its western end by the Great Hall. Affiliated to it are a women's college and three denominational colleges. The metro-

politan cathedral of St Andrew is a handsome Perpendicular edifice; the R. C. cathedral of St Mary, burned in 1865, and since rebuilt, is one of the finest churches in Australia. There are also a technical university and technological museum, the museum, Colonial Secretary's office, lands office, post-office, customs office, town-hall (possessing the largest organ in the world), and public grammar-school. The Thomas Walker Convalescent Hospital was built out of a bequest of £100,000. The neighbourhood of Sydney, especially the shores of the bays and the Parramatta and Lane Cove rivers, is studded with villas, surrounded by park-like grounds, and gardens of orange-trees, bananas, and numberless semi-tropical plants. There are numerous industrial establishments, but Sydney is essentially a commercial rather than a manufacturing city. Pop. (1862) 93,596; (1881) 220,427; (1901) 487,900.

Sydney, a small town of Cape Breton (q.v.) with a large coalfield. Pop. 3200.

Syene (*Sī-ee'nee*). See ASSOUAN.

Sylhet (*Seel'het*), or SRIHATTA, a British district in the extreme south of Assam (q.v.). Area, 5414 sq. m.; pop. 2,000,000. The chief town, Sylhet, on the Surmá River, has a pop. of 15,000.

Sylt (*Seelt*), a narrow island, 23 miles long, off the W. coast of Sleswick, with a pop. of 5000. The chief town is Keitum.

Syra (Gr. *Syros*), the most important, though not the largest, of the Cyclades. It is 10 miles long by 5 broad, 42½ sq. m. in area, and is bare and rocky. Pop. of island, 27,800. The capital, *Syra*, or *Hermoupolis*, on a bay on the E. side, is the chief commercial entrepôt of the Ægean, importing manufactured wares, hides, grain, flour, yarns, timber, iron, &c., and exporting tobacco, emery-stone, valonia, sponges, &c.

Syracuse (*Sir'a-kyooz*), anciently a famous city of Sicily, on the E. coast, 80 miles SSW. of Messina, was founded by Corinthian settlers about 733 B.C. The colonists seem to have occupied the little isle of Ortygia, stretching south-east from the shore; but later the city extended to the mainland. The seat successively of 'tyranny' and democracy, Syracuse was involved in a great struggle with Athens (415–414 B.C.), and the celebrated siege in which it came off victorious. Dionysius' fierce war with Carthage (397 B.C.) raised the renown of Syracuse still higher. In 212 B.C. the city was conquered by the Romans after a two years' siege, it having sided with the Carthaginians. Under the Romans Syracuse slowly declined, though with its handsome public buildings and its artistic and intellectual culture, it always continued to be the first city of Sicily. It was captured and burned by the Saracens in 878 A.D., and after that sunk into complete decay. The modern city (*Siracusa*) is confined to the original limits, Ortygia, which, however, is no longer an island, but a peninsula. The streets, which are defended by walls and a citadel, are mostly narrow and dirty. Syracuse has a cathedral (the ancient temple of Minerva), a museum of antiquities, a public library, the fountain of Arethusa (its waters mingled with sea-water since the earthquake of 1170), and remains of temples, aqueducts, the citadel Euryalus, a theatre, an amphitheatre, and quarries, besides ancient Christian catacombs. Pop. 32,100.

Syracuse, an important city of central New York, lies in the beautiful Onondaga valley, stretching along Onondaga Creek to the head of Onondaga Lake. It is on the Erie Canal, and is a terminus of the Oswego Canal; by rail it is 148½ miles E. of Buffalo and 147½ W. of Albany. Syracuse is the seat of a Methodist Episcopal university (1870). Salt is the chief manufacture, and there are also rolling-mills, Bessemer steel-works, foundries, blast-furnaces, boiler-factories, and manufactories of engines, farming implements, furniture, silver-ware, saddlery, boots, flour, beer, &c. The salt-springs were visited by French missionaries in 1654, and began to be worked by white men in 1789; the city was incorporated in 1847. Pop. (1880) 51,792; (1900) 108,374.

Syr-Daria (*Seer-Dar'ya*). See JAXARTES.

Syria (*Sirria*), a country of western Asia, forming part of Turkey in Asia, and embracing the regions that lie between the Levant and the Euphrates from Mount Taurus in the north to the southern border of Palestine, or even to the peninsula of Sinai. A range of mountains, split in the north into two parallel chains—Libanus and Anti-Libanus—fronts the Mediterranean, ranging in height from 6000 feet in the north up to 10,000 feet in the central parts, but falling again in the south to 3500 feet. Behind these mountains lies a tableland, that gradually falls away eastwards to the desert. The separate districts and features of Syria are described under LEBANON, PALESTINE, PHŒNICIA, BASHAN, HAURAN, DEAD SEA, JORDAN, &c. The prevailing winds being westerly, the slopes of the mountains next the Mediterranean, together with the immediate seaboard, get a tolerably plentiful supply of moisture during the rainy half of the year (October to May); snow even falls on the highest summits. The climate on the plateau is generally dry. The valley of the Jordan is remarkably hot. The soil is in many parts possessed of good fertility, and in ancient times, when irrigation was more extensively practised, yielded a much greater return than it does now. Damascus is noted for its gardens and orchards. Hauran produces excellent wheat. Northern Syria is the home of the olive. The vine grows almost everywhere. Fruit (oranges, figs, &c.) is cultivated on the coast plains. Sheep and goats are the chief domestic animals. The principal exports are silk, cereals, wool, olive-oil, lemons and oranges, soap, sponges, sesame, liquorice, cottons, and tobacco. The total value is £1,000,000 to £1,250,000. The imports reach pretty nearly the same figure; Manchester goods (£700,000 to £950,000) the chief item. Besides these there are woollens, rice, copper and iron, sacking, timber, and hides. The chief port is Beyrout, with Acre, Haifa, Tyre, and Tripoli. Railways to connect Damascus with Acre and with Beyrout, and Tripoli with the interior, are projected or in course of construction. The pop. of Syria, including Lebanon and Palestine, is estimated at 3,317,000. The bulk of the inhabitants are Mohammedans, including the Druses, Shiites, &c. The Christians make up one-fifth of the total—Orthodox Greeks, United Greeks, Maronites and Nestorians, Roman Catholics, and a few Protestants. The main ethnic elements in the population are descendants of the ancient Syrians (Aramæans) and Arabs, both settled and nomad; besides there are Jews, Turks, and Europeans.

Syria was the scene of the Hittite, Phœnician, and Jewish states, and of the Aramæan (Syrian and Semitic) principalities of Damascus, Zobah, Hamath, &c. In the 8th and 9th centuries B.C. Syria was the battle-ground of the Egyptian and Hittite armies, and after that period it was, as a province of Assyria (Babylonia), in-

volved in the struggle between that great empire and Egypt. (The Greeks first knew this region as a province of Assyria; hence the contracted name Syria.) Towards the end of the 6th century B.C. Syria fell under the dominion of the Persian empire; and two centuries later it was conquered by Alexander of Macedon. When his empire broke to pieces the Seleucidæ made Antioch the capital of their empire of Syria. From the Seleucidæ it passed, through the hands of Tigranes of Armenia, to the Romans, for whom it was won by Pompey in 64 B.C. Under these new masters the country flourished and became celebrated for its thriving industries, its commercial prosperity, and its architectural magnificence (see BAALBEK and PALMYRA). On the division of the Roman world Syria became part of the Byzantine empire, and remained a province of it until its conquest by the Mohammedan Arabs in 636. It still continued to be prosperous under the Arabs and their successors the Egyptian sovereigns, in spite of the unsettled period of the Crusades. The first severe blow it suffered came from the Mongols in 1260, and its ruin was completed when in 1516 it passed from the Egyptians to the Ottoman Turks. See Burton and Drake, *Unexplored Syria* (2 vols. 1872); Lady Burton, *Inner Life of Syria* (1875); Baedeker's *Palestine and Syria* (by Professor A. Socin); Conder, *Heth and Moab* (1883); and books quoted under the various articles cited above.

Syrtis, the ancient name of two gulfs of the Mediterranean Sea, on the north coast of Africa. The Syrtis Major (now Gulf of Sidra) lies between Tripoli and Barca; the Syrtis Minor (now Gulf of Cabes), between Tunis and Tripoli.

Syzran (*Seez'ran*), a town (1685) of Central Russia, 90 miles S. of Simbirsk. Pop. 32,500.

Szabadka (*Saw-bawd'ka*), or MARIA-THERESIOPEL, a royal free town of Hungary, 106 miles S. by E. of Budapest. Pop. 81,500.

Szarvas (*Sawr-vaush*), a town of Hungary, 80 miles SE. of Budapest. Pop. 24,393.

Szathmar-Nemethy (*Sawt'mar-Nemetee*), a cathedral-city of Hungary, on the Szamos, 68 miles by rail NE. of Debreczin. Pop. 20,736.

Sze-chwan, the largest province of China, 185,000 sq. m. in area, is situated in the west, having Tibet on the NW. and Yunnan on the SW. It is traversed by the Yang-tsze-Kiang, is hilly throughout, and rich in coal, iron, and other minerals. The capital is Ching-tu. The chief commercial town, Chung-king, on the Great River, was thrown open to British trade in 1889, as Ichang (q.v.) was to foreign trade in 1877. Pop. 71,000,000. See A. Hosie's *Three Years in Western China* (1890).

Szegedin (*Seg-e-deen'*), a royal free town of Hungary, stands at the confluence of the Maros with the Theiss, 118 miles by rail SE. of Budapest. In March 1879 a terrible flood overwhelmed 6235 out of 6566 houses. Since then Szegedin has been rebuilt, and now possesses very handsome public buildings, and is protected against inundations by a double ring of embankments. The Theiss is spanned by two railway bridges and a fine suspension bridge (1940 feet long) designed by Eiffel. Szegedin manufactures soap, spirits, matches, soda, tobacco, coarse cloth, &c. From 1526 to 1686 it was occupied by the Turks. Pop. (1880) 73,675; (1900) 102,970.

Szenta. See ZENTA.

Szentes (*Sen'tes*), a town of Hungary, 30 miles N. of Szegedin, near the Theiss. Pop. 30,791.

Szolnok (*Sol'nok*), a town of Hungary, on the Theiss, 66 miles E. by S. of Budapest, with a trade in tobacco, timber, and salt. Pop. 25,400.

TABASCO, a Gulf state of Mexico, named from a river running to Campeachy Bay. Area, 10,072 sq. m.; pop. 160,000.

Table Mountain. See CAPETOWN.

Taboga. See PANAMÁ.

Ta'bor, a dome-shaped oak-clad hill, 1000 feet high, of N. Palestine, 7 miles E. of Nazareth. Regarded in the 2d c. as the Mount of Transfiguration, it is crowned by a ruined crusading church.

Tabriz (*Tabreez'*; anc. *Tauris*), a city of Persia, capital of Azerbijan province, 40 miles E. of Lake Urmia. The Kabúd Masjid, or 'blue mosque' (1450), is an interesting ruin; the citadel is a spacious edifice, its brick walls cracked by earthquakes. Tabriz manufactures leather, silk, and gold and silversmith's work; it is also the emporium of an extensive transit trade. The imports include cotton fabrics, sugar, woollen cloth, and wines, spirits; the exports, drugs, spices, dried fruits, shawls, carpets, raw silk. The opening of the Russian railway between the Black Sea and the Caspian, and Russian tariff legislation, have injured the overland trade by Tabriz. The Anglo-Indian telegraph line passes here. Pop. 170,000.

Tacna, a southern province of Peru, taken possession of by Chili in 1883 avowedly for only ten years. Area, 8685 sq. m.; population, 25,000. The capital, Tacna, 38 miles by rail N. of Arica (q.v.), has a pop. of 9500.

Taco'ma, the second city of Washington state, on the E. side of Puget Sound, by rail 145 miles N. of Portland, Oregon, and 18 S. by W. of Seattle. In 1880 it was a mere village; in 1890 a flourishing city, with trams, water, gas and the electric light, miles of wide streets, numerous mills and factories, and a busy port. In the district around are coal, iron, precious metals, lumber, farms of wheat, hops, fruit, and vegetables; it has a tea trade direct with Japan. Pop. (1880) 1098; (1900) 37,714. Behind the city is beautiful Mount Tacoma or Rainier (14,444 feet).

Tacuarem'bo, the largest dep. of Uruguay, bounded S. by the Rio Negro. Area, 8074 sq. m.; pop. 40,100.

Tad'caster (Roman *Calcaria*), a Yorkshire town, on the Wharfe, 9 miles SW. of York. Towton, 2½ miles S., witnessed a great Yorkist victory on Palm Sunday, 29th May 1461. Pop. 3000.

Tadmor. See PALMYRA.

Taf, a river of Pembroke and Carmarthen shires, flowing 25 miles to Carmarthen Bay.

Taff, a river of South Wales, flowing 40 miles to the Bristol Channel at Cardiff.

Tafilet. See MOROCCO.

Taganrog, a Russian seaport, on the N. shore of the Sea of Azov, 15 miles W. of the Don's mouth. It exports wheat, linseed, hempseed, skins, wool, butter, and tallow. Founded in 1698, it was bombarded during the Crimean war by an Anglo-French fleet. Pop. 60,700.

Taghmon, a market-town, 9 miles W. of Wexford. Pop. 555.

Tagus (Span. *Tajo*), the largest river of the

Spanish Peninsula, rises on the hilly frontier of Guadalajara and Teruel provinces. It first flows NW., then curving SW., flows mainly in that direction past Aranjuez, Toledo, and Alcantara, and, in Portugal, Abrantes, Santarem, and Lisbon, 10 miles below which it enters the Atlantic. Below Salvaterra it divides into the western Tejo Novo and the eastern Mar de Pedro, which form a delta, and both fall into the noble Bay of Lisbon. It is 566 miles long, and navigable to Abrantes from Santarem for ocean-going steamers.

Tahiti (*Tahee'tee;* formerly spelt *Otaheite*), an island giving name to a small archipelago, also called Society Islands, in the mid Pacific, more than 2000 miles NE. of New Zealand and some 3400 SSW. of San Francisco. The islands consist of Tahiti (which embraces 455 sq. m. out of a total of 637 for the entire archipelago), Raiatea, Moorea or Eimeo (q.v.), and others. The group is divided into the Windward and the Leeward clusters, and stretches for about 200 miles NW. and SE. They are composed of volcanic rocks, are mountainous (Orohena on Tahiti is 7340 feet high), and well wooded, with belts of low fertile soil along the shores, and girt by coral-reefs. The scenery is magnificent, the chief island being often called 'the Garden of the Pacific.' The climate is very moist and hot (70° to 84° F.), but equable and healthy. Cocoa-nuts, oranges, vanilla, fruit, cotton, and sugar are grown, and these and mother-of-pearl, cocoa-nut fibre, and trepang are exported. The imports include textiles, flour, wine, live-stock, sugar, coffee, coal, timber, and soap. The people cultivate the bread-fruit, taro, yam, sweet potato, &c. The most important harbour is Papeete, the capital, in the NE. of Tahiti, which has a R. C. cathedral, an arsenal, and a pop. of 3224. The population in 1905 of all the islands was 16,300 (Tahiti, 10,750; French, 400). The people, a handsome race of the Polynesian stock, are light-hearted and polite, but very immoral and untrustworthy. The group was discovered by the Spanish navigator De Quiros, but first accurately described by Cook (1769–77), who named them in honour of the Royal Society of London; the pop. then numbered nearly 250,000. The London Missionary Society commenced work here in 1797; but in 1812 they had to flee for a while to Australia. In 1842 France forced a protectorate over the eastern cluster; the treaty of 1847 with Great Britain, recognising the independence of the western cluster, was abrogated in 1888, and the whole archipelago practically became a French possession. See works by Ellis (1829), Williams (1839), Pritchard (1866), and Dora Hort (1891).

Tahlequah, a small Cherokee town in the U. S. Indian Territory, 1 mile from the Illinois River.

Taimyr. See Chelyuskin.

Tain (Scand. *Thing*, 'a place of assembly'), an ancient royal burgh of Ross-shire, near the south shore of the Dornoch Firth, 44 miles NNE. of Inverness by the Highland Railway (1864). A ruined chapel marks the birthplace of St Duthac (*c.* 1000–65), whose body was brought back from Armagh in 1253; within it Bruce's queen was taken captive for Edward I., and James IV. did yearly penance here. There are also a collegiate church (1471; restored 1849–82), a court-house (1849), a public hall (1876), and an academy (1812). The population is over 2000—1650 in the police and parl. burgh (see Wick). See a work by the Rev. W. Taylor (1882).

Tai-wan. See Formosa.

Taj Mahal. See Agra.

Tajurra Bay (*Tajoo'ra*), an African inlet of the Gulf of Aden, S. of Bab-el-Mandeb, on which lies the French dependency of Obock (q.v.).

Takamatsu, a seaport on the N. coast of Shikoku Island, Japan. Pop. 34,500.

Takaoka, a manufacturing town of Japan, about 60 miles W. of Nagano. Pop. 31,500.

Takasaki, an important commercial town of Japan, 60 miles NW. of Tōkyō. Pop. 31,000.

Takata, a town of Japan, 30 miles N. of Nagano. Pop. 20,350.

Takazzeh. See Atbara.

Talavera de la Reina (*Talavay'ra de la Ray'na*), a Spanish town, on the Tagus, 75 miles SE. of Madrid. Here on July 27–28, 1809, Wellington defeated the French. Pop. 10,600.

Talca, capital of the province of Talca, Chili, 140 miles SW. of Santiago. Pop. 42,800.

Ta-lien-wan. See Dalny.

Ta-li-fu, capital of western Yunnan (q.v.).

Talisker, a Skye distillery at Carbost, 23 miles WNW. of Broadford.

Tallahassee, the capital of Florida, 166 miles by rail W. of Jacksonville. Pop. 2983.

Talla Water, a tributary of the Tweed, in Tweedsmuir, Peeblesshire, on which a reservoir was completed in 1905 for a supply of water to Edinburgh.

Tamanieb. See Teb.

Tamaqua, a borough of Pennsylvania, on the Tamaqua or Little Schuylkill River, 134 miles by rail W. of New York. Pop. 7270.

Tamar, a river which through 45 of its 59 miles bounds Devon and Cornwall; its estuary in Plymouth Sound is called the Hamoaze.

Tamatave (*Tamatahv'*), the chief port of Madagascar, on the E. coast. Pop. 4000.

Tamaulipas (*Tamowlee'pas*), the northernmost of the Gulf states of Mexico (area, 29,336 sq. m.; pop. 218,950). Capital, Victoria (pop. 14,575).

Tamboff, a Russian town, 300 miles SE. of Moscow. Pop. 48,100.—Area of Tamboff *government*, 25,710 sq. m.; pop. 2,715,500.

Tame, a river of Warwick and Stafford shires, flowing 25 miles to the Trent.

Tammerfors, the chief manufacturing city of Finland, 50 miles NW. of Tavastehus by rail. Pop. 28,730.

Tampa, capital of Hillsborough county, Florida, at the head of Tampa Bay (nearly 40 miles long), 240 miles by rail SSW. of Jacksonville. There is a good harbour, and the place is growing in importance. Pop. 15,850.

Tampi'co (*i* as *ee*), a Mexican seaport, on the Panuco, 9 miles from the Gulf of Mexico, and 200 miles NNE. of Mexico. Pop. 16,000.

Tamsui. See Formosa.

Tamworth, a town on the border of Stafford and Warwick shires, at the confluence of the Tame and Anker, 17½ miles NNE. of Birmingham, and 110 NW. of London. Burned by the Danes in 911, and rebuilt by the Princess Ethelfleda, it was the seat of a castle of the Saxon kings, held afterwards by the Marmions, Ferrars, &c., and now by the Marquis of Townshend. That castle crowns a knoll 130 feet high; in its noble round keep Mary, Queen of Scots, was a prisoner. The church of St Edith, restored since 1870 at a cost of £10,000, has interesting monuments and a curious double tower-staircase. There are also a bronze statue

of Peel (M.P. 1833–50), the new Jubilee municipal buildings and assembly rooms, a town-hall (1701), a grammar-school (1588; rebuilt 1868), almshouses founded by Thomas Guy (the founder of Guy's Hospital, who was brought up here), a cottage hospital, recreation grounds, &c. The manufactures include elastic, tape, smallwares, paper, &c.; and in the vicinity are market-gardens and coal-pits. A municipal borough, chartered by Elizabeth, Tamworth returned two members until 1885. The borough boundary was extended in 1890. Pop. (1851) 4059; (1901) 7271. See two works by C. F. R. Palmer (1871–75).

Tana, a river of British East Africa, rising on Mount Kenia and flowing 450 miles to a bay S. of Witu. See a book by Dundas (1893).

Tana. See THANA, TZANA.

Tan'agra, an ancient city in the extreme east of Bœotia, on the Asopus. Here in 457 B.C. the Spartans defeated the Athenians.

Tanais. See DON.

Tananari'vo (*i* as *ee*). See ANTANANARIVO.

Tanderagee' (*g* hard), an Armagh market-town, on the Cusher, 83 miles N. of Dublin. Pop. 1444.

Tanga, an excellent German port of East Africa.

Tanganyika (*Tang-gan-yee'ka*), a lake of Eastern Africa, between 3° and 9° S. lat., and on 30° E. long.; length, 420 miles (nearly a fifth longer than Lake Michigan); breadth, 15 to 80 miles; height above sea, 2700 feet. It was discovered by Speke and Burton in 1858, and explored by Livingstone, Stanley, Cameron, Thomson, Hore, &c. Formerly supposed to belong to the Nile basin, it really sends its surplus waters by the Lukuga outlet westward to the Congo in periods when its level is high. Except when several rainy seasons follow one another, the great evaporation keeps the water about the same level. The water is fresh and wholesome, the climate not unhealthy. Mountains, some of them 10,000 feet high, surround the lake, which lies in a trough that seems to indicate a former connection with the Red Sea. Some 600 miles from the coast, it divides the Congo Free State from German East Africa, touches Northern Rhodesia on the south, and is on the line of the Cape-to-Cairo railway. For physical features, see J. E. S. Moore, *The Tanganyika Problem*.

Tangier, or TANGIERS (*Tan-jeer', Tanjeers'*; Arab. *Tanja*), a seaport and health-resort of Morocco, on a small bay of the Straits of Gibraltar, 38 miles SW. of Gibraltar. It is a small, ill-built town, situated on two hills, but has an extensive shipping trade, though the harbour is a mere roadstead. Tangier was taken by the Portuguese in 1471, and given to Charles II. of England as Catharine of Braganza's dowry, and England retained it till 1683. The notorious Colonel Kirke commanded the garrison, and Bishop Ken was chaplain here. It was subsequently a nest of pirates. Coal has been found. Pop. 30,000, mostly Moors and Spanish Jews.

Tan'is (Greek form of Egyptian *Tân;* Heb. *Zoan*), an ancient city in the north-east of the Delta, once the chief commercial city of Egypt. The ruins, near the S. shore of Lake Menzaleh, were in 1883–84 explored by Flinders Petrie. See his monograph (1885).

Tanjore (originally *Tanjávúr*), a town of India, 180 miles SSW. of Madras, on a branch of the lower Kaveri. Its 14th-century great pagoda is 190 feet high. An old Hindu capital, it was a famous seat of learning and religion. Pop. 59,250.

Tansa, a small river whose valley has been impounded for the water-supply of Bombay, 65 miles to the S. The reservoir (1887–92) is 8 sq. m. in area, and the water-supply is 100,000,000 gallons per day.

Tanta, capital of a province in the delta of the Nile, 60 miles N. of Cairo, noted for its fairs and festivals and its large and costly khedivial palace. Pop. 35,000.

Tantallon Castle. See NORTH BERWICK.

Taormina (*Tah-or-mee'na;* anc. *Tauromenium*), a coast-town of E. Sicily, on a rock 900 feet high, 35 miles SW. of Messina by rail. It has a splendid ruined theatre, aqueduct, &c. Pop. 4388.

Tapajos (*Ta-pah'zhoce*), a navigable river of Brazil, formed by the Arinos and Juruena, both rising in the S. of Matto Grosso state. Flowing 900 miles northward, it falls into the Amazon, above Santarem. Steamers run 150 miles to the lowest of several waterfalls.

Taplow, a Thames-side parish of Bucks, 1½ mile E. of Maidenhead. Pop. 1029.

Tappan Bay. See HUDSON.

Tappington Court, a mansion near Woolton, Kent, made famous by the *Ingoldsby Legends*.

Taprobane (*Tap-rob'a-nee*). See CEYLON.

Tapti (*Taptee*), a river of Bombay, rises in the Central Provinces, and flows 450 miles W. to the Gulf of Cambay, 17 miles below Surat.

Tara, HILL OF (*Tak'ra*), an eminence (507 feet) in County Meath, 7 miles SSE. of Navan. Here prior to 560 is said to have stood the hall of the kings of Ireland; and here O'Connell held a monster meeting on 15th August 1843.

Tarai, or **Terai.** See HIMALAYA.

Taranaki (*Taranáh'kee*), a provincial district of New Zealand, occupying the SW. corner of the North Island. Area, 3308 sq. m.—three-fourths dense forest. The soil and climate are good for rearing stock. Pop. (1901) 37,855. Capital, New Plymouth; pop. 4400.

Taranto (anc. *Tarentum*), a seaport of S. Italy, on a rocky islet between the Gulf of Taranto and the Mare Piccolo, 72 miles SSE. of Bari by rail. The harbour is sheltered by two small islands, San Paolo and San Pietro, the *Chœrades* of antiquity. The town is joined to the mainland by a six-arched bridge on the east side, and on the west by an ancient Byzantine aqueduct. There are a modernised cathedral, and a castle erected by Charles V. Pop. 25,246.

Tarapaca (*Tarapakah'*), the southernmost dep. of Peru till 1883, but then annexed by Chili. Area, 19,300 sq. m.; pop. 98,000. Capital, Iquique.

Tarare (*Tar-âhr'*), a manufacturing town of France, dep. Rhone, at the foot of Mount Tarare, 21 miles NW. of Lyons by rail. It manufactures muslins, silks, satins, plush, &c. Pop. 11,738.

Tarascon (*Taraskon''*), a walled town of France, in the Provençal dep. of Bouches-du-Rhone, 14 miles SW. of Avignon. It has King René's castle (1400) and a Gothic church (1187–14th c.); but Tarascon is chiefly famous through Daudet's immortal Tartarin. It manufactures woollen and silk fabrics, 'saucissons d'Arles,' &c. Pop. 6597.

Tarawera. See NEW ZEALAND.

Tarazo'na, an episcopal city of Spain, 20 miles S. of Tudela. Pop. 8412.

Tarbag'atai (*ai* as *i*), mountains, 10,000 feet high, in Russian Central Asia, on the frontier between Semipalatinsk and Chinese Zungaria.

Tarbert, an Argyllshire seaport, 35 miles NNE. of Campbeltown. Pop. 1697. See KINTYRE.

Tarbert, a Kerry seaport, on the Shannon estuary, 35 miles SW. of Limerick. Pop. 410.

Tarbes (*Tārb*), the capital of the French dep. of Hautes-Pyrénées, on the Adour's left bank, 30 miles ESE. of Pau by rail. It has a cathedral and a government cannon-foundry. Pop. (1881) 17,744; (1901) 21,214.

Tarentum. See TARANTO.

Targovica, or TARGOWICZ, a town (pop. 2000) in the Russian government of Kieff.

Targovist. See TERGOVIST.

Tarifa (*Tahree'fa*), a Spanish seaport, the southernmost town of Europe, 21 miles SW. of Gibraltar. Still quite Moorish in aspect, it is connected by a causeway with a fortified islet, on which is a lighthouse, 135 feet above sea-level. Tarifa, the Julia Joza of Strabo, was occupied in 710 A.D. by the Moorish leader Tarif, whence its name. It was taken from the Moors in 1292, and valiantly defended against them by Guzman in 1294. Gough with 1800 British and 700 Spaniards held it successfully against 10,000 French (Dec. 1811–Jan. 1812). Pop. 11,750.

Tarik. See GIBRALTAR.

Tarim River. See TURKESTAN (EASTERN).

Tarn, a hilly, well-wooded dep. of S. France, named after the river Tarn, an affluent of the Garonne. Area, 2217 sq. m.; pop. (1881) 359,223; (1901) 332,093. The arrondissements are Albi (the capital), Castres, Gaillac, and Lavaur.

Tarn-et-Garonne (*Tarn-ay-Garonn'*), a dep. of S. France. Area, 1436 sq. m.; pop. (1881) 217,056; (1901) 195,669. The principal river is the Garonne, with its affluents the Tarn and Aveyron. It is divided into the three arrondissements of Montauban (the capital), Castelsarrasin, and Moissac.

Tarnopol, a town of Austrian Galicia, 80 miles ESE. of Lemberg. Pop. 30,420, half Jews.

Tarnow (*w* as *v*), a cathedral city of Austrian Galicia, 50 miles E. of Cracow. Pop. 31,700.

Tarporley, a Cheshire market-town, 10 miles ESE. of Chester. Pop. of urban dist. (1901) 2644.

Tarragona (anc. *Tarraco*), a Spanish seaport, the capital of a province on the Mediterranean, 60 miles W. of Barcelona by rail. Its Gothic cathedral dates from about 1120; and its Roman remains include an amphitheatre, a magnificent aqueduct, still used, 96 feet high and 700 feet long, and the Tower of the Scipios. Pop. 25,360.

Tarrasa, an industrial town of Spain, 22 miles NW. of Barcelona. Pop. 16,500.

Tarrytown (rhyming with *carry*), a village on the Hudson, 21 miles by rail N. of New York City. Close by Major André was captured in 1780; and at Sunnyside, 2 miles S., Washington Irving died, and is buried. Pop. 4770.

Tarshish, often referred to in Scripture, has been doubtfully identified with Tarsus, Tartessus in Spain, a place in S. Arabia, and Ophir (q.v.).

Tarsus, St Paul's birthplace, was capital of Cilicia, and a chief city of Asia Minor, on the Cydnus, 12 miles from the sea. Squalid modern *Tarso* or *Tersus* has a pop. of 20,000.

Tartary, a name once given to the whole central belt of Asia and eastern Europe, was loosely used, and was latterly limited to Turkestan (q.v.).

Tarudant, capital of the Moorish province of Sus, on the Sus River. Pop. 8500.

Tashkand, or TASHKENT, the capital of Russian Turkestan, 300 miles NE. of Samarcand. It consists of an ancient walled city and a new European quarter, with the Russian citadel a little to the S. It is connected with the European system of telegraphs, and the railway from Samarcand was opened in 1904; its manufactures include silk, leather, felt goods, and coarse porcelain. Pop. 156,420, comprising 120,000 Sarts and 35,000 Russians. Once capital of a separate khanate, Tashkand was in 1810 conquered by Khokand, and since 1868 has been Russian.

Tasmania, an island-state of the Commonwealth of Australia (1901), is bounded N. by Bass Strait, its other coasts being swept by the great Southern Ocean. Area, 26,215 sq. m. Although it possesses wide stretches of plains and tableland, it has fifty mountains exceeding 2500 feet, the loftiest being Cradle Mountain (5069 feet); the higher tiers are snow-capped through the winter. The lakes of Tasmania (on a plateau more than 3000 feet above sea-level and 60 miles long) should become summer-resorts and sanatoriums for all Australasia. The Great Lake is about 90 miles in circumference. The Derwent, Tamar, Gordon, Pieman, and Huon are navigable rivers. Hobart (the capital) is a magnificent harbour; the Launceston port has been improved by dredging. The west coast has Macquarie Harbour. The soil varies very considerably. In the NW., NE., midland, and SE. divisions, where settlement has mostly taken place, the plains and valleys have been enriched by extensive outbursts of basalt with accompanying tuffs, which have produced a very rich chocolate soil; towards the extreme W. and S. granites, metamorphic mica, and quartzose schists, with overlying slates, grits, and limestone of Cambro-Silurian age, re-appear again and again. The western vegetation as compared with that of the east presents as marked a contrast. The most remarkable trees are the eucalypts, often over 280 feet high, the magnificent tree-ferns, and the fragrant wattle. But the most valuable trees are the blackwood, Huon pine, King William pine, and musk. All Tasmanian trees and shrubs are evergreens. The *fauna*, like the *flora*, of Tasmania is almost identical with that of Australia. Of the forty-six species of mammals the platypus is the most remarkable. The twenty-seven marsupials, nine of them peculiar to Tasmania, include the Tasmanian devil or dasyure, and the hyæna-like native tiger, or thylacine. Of the 187 species of birds few are peculiar to the colony. Snakes are few and, though poisonous, not deadly; but there are many lizards. Sea and fresh-water fishes (including the seven species of salmon, salmon-trout, and trout successfully acclimatised) number 213 species, about one-third good edible fish.

There are a few half-castes, the descendants of European sealers by native *jins*; but the aboriginal Tasmanian has died out—the last male in 1869, the last female in 1876. Probably there were never more than 5000, all of a very inferior race, savage, suspicious, treacherous, and untamable. The racial war in which large numbers were killed, was perhaps inevitable. The climate is peculiarly temperate and genial. The difference between the mean summer and winter temperature is 15°. Hobart has a maximum of 96·3 against 92·2 at Greenwich, and a minimum of 32·0 against 15·5. It is cooler on the hills, and is more equable at other places in the plains. Snow is very rarely seen except on the mountains. The

rainfall varies in different localities—at Hobart about 23 inches; on the east coast and parts of the midlands probably less; on the NW. and NE., where timber-clad hills more abound, greater; and on the west coast, where the prevailing wind off the Southern Ocean meets a barrier of forest-clad ranges, greatest of all. The amount of sunshine is much greater than in Britain. The air is drier, the atmosphere clearer, and the extremes of heat and cold less trying.

Tasmania was discovered in 1642 by Tasman (*c.* 1602–59), despatched by Van Diemen (1593–1645), Dutch governor-general of Batavia. In 1798 Flinders and Dr Bass explored the strait which divides it from the continent. The island was frequently visited by French and English explorers between 1772 and 1802; in 1803 the first settlement was made by Lieutenant Bowen, under instructions from Governor King of New South Wales. For many years sheep-farming was the principal industry. Whaling in the south seas was largely carried on from Hobart for years. Gold, silver, tin, copper, coal, &c. are found. Gold (since 1867), silver, and tin have been largely mined. Tasmania now supplies all her own coal requirements, and since 1882 has a large surplus for export. Sapphires, topazes, cat's-eyes, and zircons are obtained. Orchards have greatly increased, and in 1889 Tasmanian apples were sent in quantity to England. In 1903 the exports (minerals, wool, timber, fruit, jam, grain, hops, skins, bark, &c.) had a value of £2,843,108; the imports (textiles, art and mechanical products, food and drinks) of £2,593,810. The revenue then was £857,668, and the expenditure £879,356 (largely for public works). The public debt is £9,318,399. Tasmania (as Van Diemen's Land) was, till 1852, a penal settlement. In 1855 it was the first colony of Australasia to receive representative government. Pop. (1881) 115,705; in 1901 it had increased to 172,475. In 1903 there were 620 miles of railway, and 2187 miles of telegraph line.

See, besides the official handbook, Bonwick, *The Lost Tasmanian Race* (1884); Fenton, *History of Tasmania* (1885); May, *Tasmania as It Is* (1886); Johnston, *Geology of Tasmania* (1888); Ling Roth, *The Aborigines of Tasmania* (1890).

Tasman Sea, the Admiralty name since 1891 for the sea between New Zealand, the islands NW. of New Zealand, and Australia and Tasmania.

Tassisu'don, the capital of Bhutan (q.v.).

Tatar-Bazardjik. See Bazardjik.

Tati. See Matabeleland.

Tattershall, a Lincolnshire market-town, on the Bain, 9 miles SSW. of Horncastle. Pop. 474.

Taunton (*Tahn-ton*), a pleasant, well-built town of Somersetshire, in the fair and fertile valley of the Tone ('Taunton Deane') 45 miles SW. of Bristol. Here about 710 Ine, the West Saxon king, built a fortress, which, passing with the manor to the bishops of Winchester, was rebuilt by Bishop William in the first quarter of the 12th century. Added to in the 13th and 15th centuries, this castle received Perkin Warbeck (1497), and was held by Blake during his famous defence of the town (1644–45). In its great hall, fitted up now as a museum, Judge Jeffreys opened the 'Bloody Assize,' hanging 134 and transporting 400 of the inhabitants of Taunton and the neighbourhood who had accorded Monmouth an enthusiastic welcome (1685); and here too Sydney Smith made his 'Mrs Partington' speech (1831). The church of St Mary Magdalene has a noble Perpendicular tower 153 feet high (*c.* 1500; rebuilt 1858–62); and other buildings are the Elizabethan shire-hall (1858), the municipal buildings (formerly the grammar-school founded by Bishop Fox in 1522), King's College school (1880), Independent college (1847–70), Wesleyan Institution (1843), Huish schools (1874), Bishop Fox's girls' school, hospital (1809–73), barracks, &c. Once a great 'clothier town,' Taunton now has shirt, collar, glove, and silk manufactures, with a large agricultural trade. It was thrice chartered (1627, 1677, 1877) as a municipal borough, and lost one of its two members in 1885. Pop. (1851) 14,176; (1901) 21,078. See works by Toulmin (2d ed. 1822), Cottle (1845), Macmullen (1860–62), Jeboult (1873), and Pring (1880).

Taunton, capital of Bristol county, Massachusetts, at the head of navigation on Taunton River, 34 miles by rail S. of Boston. It contains a fine park, court-house, city hall, state lunatic asylum, and numerous foundries and cotton-mills, locomotive and copper works, shipyards, and manufactories of bricks, nails, jewellery, &c. Taunton was settled from Taunton in England in 1637. Pop. (1880) 21,213; (1900) 31,036.

Taunus Mountains. See Hesse-Nassau.

Taupo, Lake. See New Zealand.

Tau'rida, a government of South Russia, bounded E., S., and SW. by the Sea of Azov and the Black Sea. The Crimea forms its southern portion. Area, 24,539 sq. m.; pop. 1,443,570.

Taurus, Mount. See Asia Minor.

Tavastehus, a town of Finland, on Lake Vanajajärvi, 50 miles N. of Helsingfors. Pop. 6098.

Tavira, a Portuguese seaport, 20 miles NE. of Faro. It has sulphur-baths. Pop. 12,459.

Tavistock, a pleasant market-town of Devon, 11 miles N. of Plymouth and 31 (by rail 40) SW. of Exeter, lies in a trough of the hills on the Tavy's left bank, with Dartmoor stretching away from it to the eastward. An old stannary town, till 1885 governed by a portreeve, it is the centre of what was a great mining district; and it sent two members to parliament till 1867, then one till 1885. Two gateways, a porch, and the refectory are the chief remains of its once magnificent Benedictine abbey, founded in 961. It was rebuilt between 1285 and 1458, was the seat of a very early printing-press, and at the dissolution in 1539 was conferred on the first Lord Russell, remaining still with the Duke of Bedford. Tavistock has a fine parish church (1318) with a west tower (106 feet) resting on arches, a guildhall (1848), corn-market (1839), covered markets (1863), statues of the seventh Duke of Bedford by Stephens (1864) and Drake by Boehm (1883, a very fine one presented by the ninth Duke), and the Kelly College (1877), founded by Admiral Kelly. Drake and William Browne were natives; Pym and William Lord Russell members; and the Right Hon. W. H. Smith was educated at the grammar-school. Pop. (1851) 8086; (1901) 4728. See works by Kempe (1830), Rachel Evans (1846), Worth (1888), and Alford (1891).

Tavoy', the chief town of a district in Tenasserim, Burma, on the left bank of the Tavoy River, 30 miles from its mouth. Pop. 22,400.

Tavy, a Devon river, flowing 20 miles to the Tamar. See a work by Mrs Bray (new ed. 1879).

Taw, a Devon river, flowing 50 miles, past Barnstaple, to Bideford Bay.

Tay, a river of Scotland, draining nearly the whole of Perthshire, and pouring into the German Ocean a greater bulk of water than any other

British river, rises on Benloy, on the Argyllshire border, at an altitude of 2980 feet. Thence it winds 118 miles ENE., SSE., and E.—for the last 25 miles as a tidal estuary, ½ mile to 3½ miles broad, which separates Perth and Forfar shires from Fife. In the first 25 miles of its course it bears the names of Fillan and Dochart; it then traverses Loch Tay, and it afterwards passes Aberfeldy, Dunkeld, Stanley, Perth, Dundee, and Broughty-Ferry. Its principal affluents are the Tummel (58 miles long, and sometimes regarded as a northern head-stream), Isla, Almond, and Earn. The Tay, as it is the most beautiful of Scottish rivers, so it is unrivalled for its salmon-fisheries, whose rental in good years exceeds £20,000. Vessels of 100 tons can ascend as high as Perth, but even to Dundee the navigation of the firth is much impeded by shifting sandbanks. For the Tay Bridge, see DUNDEE.

LOCH TAY lies 355 feet above sea-level, extends 14½ miles NE. from Killin to Kenmore, is ½ to 1½ mile broad, 15 to 85 fathoms deep, and covers 6550 acres. It is a magnificent Highland lake, flanked on the north-west by Ben Lawers (4004 feet), and containing near its foot a wooded islet, with a fragment of an Augustinian priory, founded in 1122 by Alexander I., who here buried his queen, Sibylla. In Sept. 1842 Queen Victoria was rowed up Loch Tay, on which a steamer was launched in 1883, and a railway to which, at Killin, was opened in 1886. See the articles RANNOCH, EARN, PERTHSHIRE, &c., and J. Geddie's finely illustrated monograph on the Tay (1891).

Tayport, a watering-place and police-burgh of Fife, on the south side of the entrance of the Firth of Tay, opposite Broughty-Ferry, and 3½ miles E. by S. of Dundee. Pop. 3325.

Tchad, LAKE. See CHAD.

Tchelyabinsk. See CHELIABINSK.

Tchelyuskin. See CHELYUSKIN.

Tcherkask, (1) a town of S. Russia, on the Don, 12 miles S. of Novotcherkask (q.v.). Pop. 15,000.—(2) A town of Russia, 190 miles SE. of Kieff, on the Dnieper. Pop. 29,620.

Tchernavo'da, a town of the Dobrudja, Roumania, 30 miles WNW. of Kustendje, with a railway bridge across the Danube (1895). Pop. 5000.

Tchernigoff, capital of a Russian government, 85 miles NE. of Kieff. Pop. 25,580.

Teb, EL, 50 miles SSE. of Suakin, was the scene, in 1884, of Osman Digna's defeat.

Teck, a principality named from a castle on 'the Teck,' a limestone peak in the Swabian Alb, 20 miles SE. of Stuttgart. Held by various families from the 11th c. on, it passed in 1498 to the Dukes of Würtemberg. In 1863 the king of Würtemberg conferred it on Duke Albert's son, who in 1866 married the Princess Mary of Cambridge. Their daughter, Princess May, was married in 1893 to the Duke of York.

Teddington, a town of Middlesex, on the left bank of the Thames, 13½ miles (by water 18½) SW. of London. Pop. (1861) 1183; (1901) 14,029.

Tees, a river rising on Cross Fell, Cumberland, and flowing 70 miles eastward, mainly between Durham and Yorkshire, to the North Sea, 4 miles below Stockton. Works carried out since 1853 have made it navigable to that town for vessels of large burden.

Tegern-See (*Tay'gern*, *g* hard), a beautiful mountain lake, 3½ miles long, in the extreme south of Bavaria, 30 miles SE. of Munich.

Tegu'cigalpa, the capital of Honduras, on the Rio Grande, 3400 feet above the sea, with mountains rising round about. Pop. 18,600.

Tehâma. See ARABIA.

Teheran', or TEHRAN, capital of Persia, 70 miles S. of the Caspian Sea. It stands on a wide plain, with Mount Demavend (q.v.) to the N. The old wall and ditch (4 miles long) were levelled in 1868, and the space thus gained made into a circular boulevard. New fortifications, 10 miles in circumference, were completed in 1873. The town rapidly extended, especially on the north side, where many fine streets, gardens, and buildings soon made their appearance, among them the British Legation. The Shah's palace, reconstructed since 1866, occupies the Citadel, its large court-yards laid out with gardens and fountains. The Shah has five other palaces in the neighbourhood. The bazaars, some of them very handsome structures, are filled with every kind of merchandise. Lines of telegraph radiate in all directions; and in 1886 a railway was constructed to Shah Abdul Azim, a place of pilgrimage 6 miles S. Tramways were also laid down, and gas introduced in 1892. Pop. (1860) 70,000; (1900) 230,000, the Europeans having likewise increased from 30 to 1000. Near Teheran are the ruins of Rei, the *Rhages* of the Book of Tobit, and *Ragæ* of Alexander the Great's time, Harûn-al-Raschid's birthplace.

Tehuantepec (*Te-wan-te-pek'*), a town of Oaxaca, Mexico, 10 miles above the mouth of the river Tehuantepec; pop. 25,000. The isthmus here is only 120 miles wide, and an interoceanic canal has been dreamt of since Cortes' day. A railway across it was opened in 1894.

Teifi, a river of South Wales, flowing 50 miles to Cardigan Bay.

Teignmouth (*Tinmuth*), a Devon seaport and watering-place, 12 miles (by rail 15) S. of Exeter, on the N. side of the Teign's pretty estuary, which is spanned by a wooden bridge (1827), 557 yards long. Burned by the Danes in 970, by the French in 1338 and 1690, it has a grassy promenade, the Din or Dune, a pier (1866), a public market (1883), baths (1883), a Benedictine nunnery (1865), &c. Pop. 8700.

Tekna, the practically independent country S. of Morocco, from the Draa to Cape Bojador.

Tel-el-Amarna, or TELL-EL-AMÂRINA, a mass of ruins representing the capital of the heretic Egyptian king, Amenhotep IV., a little N. of Assiout, on the Nile's E. bank. Here, in 1887, were found 230 tablets in Babylonian cuneiform.

Tel-el-Kebir (*Kebeer'*), midway on the railway between Ismailia and Cairo, was the scene on the morning of 13th September 1882 of the capture by Sir Garnet Wolseley of Arabi Pasha's entrenched camp, defended by 26,000 men.

Tell, a district in NW. Africa, extending from the Mediterranean to the Atlas Mountains, through Morocco, Algeria, and Tunis.

Tellicher'ri, a seaport in Malabar district, Madras Presidency. Pop. 28,000.

Tembuland. See TRANSKEI.

Teme, a river of South Wales and Worcestershire, flowing 60 miles east-south-eastward to the Severn, 1½ mile S. of Worcester.

Temesvar (*Tem-es-vahr'*), a royal free city of Hungary, on the Bega Canal, 160 miles SE. of Pesth by rail. It has a fine cathedral, an ancient castle, and manufactures of flour, tobacco, cloth, silk, paper, leather, wool, and oil. Temesvar has endured many sieges—the latest in 1849, when it was bombarded for 107 days by the

Hungarian insurgents, but relieved by Haynau. Pop. (1880) 33,694; (1900) 49,625.

Tempe (*Tem'pee*), a famous mountain-gorge, 6 miles long, in NE. Thessaly, between Olympus and Ossa. The river Peneus traverses it.

Templemore, a town of Tipperary, on the Suir, 8 miles N. of Thurles, took its name from a Knights Templars' commandery. Pop. 2774.

Tenas'serim, the southernmost division of Burma, is a narrow territory between the sea and the mountains of the Siamese frontier. Area, 46,590 sq. m.; pop. (1881) 825,741; (1901) 1,137,780. The chief towns are Maulmain, Taung-ngu, and Tavoy. The town of Tenasserim (pop. now under 600) stands 33 miles from the sea at the junction of the Great and Little Tenasserim rivers.

Ten'bury, a town of Worcestershire, on the Teme, 22 miles NW. of Worcester. It has a spa, discovered in 1839, and St Michael's College, founded in 1855 by Sir Gore Ouseley. Pop. 2084.

Tenby, a thriving watering-place of Pembrokeshire, South Wales, 9½ miles E. of Pembroke and 276 W. of London, is finely seated on a rocky headland overlooking Carmarthen Bay. The Cymric *Din-bach y Pysgod* ('fishy little fortress'), it was one of the Flemish colonies planted by Henry I. in Pembrokeshire, and retains a long stretch of its ancient walls, strengthened by Queen Elizabeth in 1588, and a fragment of a castle, whence in 1471 the future Henry VII. escaped to Brittany. Its mild climate, fine level sands, and capital bathing have been the making of the place, which has an interesting Gothic church (1250) with a spire 152 feet high, a colossal marble statue of the Prince Consort (1865), and a fort (1868) on St Catherine's Island. It is an ancient municipal borough, and with Pembroke (q.v.), &c., returns one member. Pop. (1861) 2982; (1901) 4400. See works by P. H. Gosse (1856) and Mrs Hall (2d ed. 1873).

Tène, La, near the north end of the Lake of Neuchâtel (q.v.), was the seat of a characteristic type of prehistoric culture.

Ten'edos (*Bosdscha Ada*), a rocky Turkish island in the Ægean, off the Troad, and 12 miles S. of the entrance to the Dardanelles. It is 8 miles long and 2 to 4 broad. Pop. 5000.

Teneriffe, Peak of (usu. *Ten-er-iff'*; Span. Tenerife, pron. *Tay-nay-ree'fay*), a famous dormant volcano, the highest summit (12,200 feet) in the Canary Islands (q.v.), stands in the south-west of the island of Teneriffe or Santa Cruz. Its lower slopes are covered with forests, or laid out in meadows; but the upper ridges are wild and barren. The Peak El Piton and its two inferior neighbours, the Montana Blanco and Chahorra (9880 feet), rise from a rugged circular plain of lava debris and pumice, 7000 feet above sea-level, about 8 miles in diameter, and fenced in by an almost perpendicular wall of rock. From the crevices sulphurous vapours exhale. The wall of the crater at the top is 300 feet in diameter, and 70 deep. The colour of the whole is white. There is an ice cave at an altitude of 11,000 feet. The Peak can be seen more than 100 miles off. In 1795 and 1798 there was volcanic activity here. See works by Piazzi Smyth (1858), Olivia M. Stone (new ed. 1889), and Strettell (1890).

Tengri Nor. See Tibet.

Ten'nessee, one of the central southern states of the American Union, is surrounded by Kentucky, Virginia, North Carolina, Georgia, Alabama, and Mississippi, and separated by the Mississippi River from Arkansas and Missouri. Its mean length is 385 miles, its mean width 109 miles; area, 42,050 sq. m. East Tennessee extends from the Unaka and Smoky Mountains to the crest of the Cumberland Plateau, contains some of the great ridges of the Appalachians, and abounds in magnificent scenery. Between the eastern ridges and the plateau stretches a valley region 100 miles wide, sloping from N. to S. Along its western edge the plateau rises in a bold wall 100 to 200 feet high; and on the plateau are the ridges and peaks of the Cumberland Mountains. The southern end is divided into two arms by a deep gorge with perpendicular sides (800 to 1000 feet). Between the Tennessee River in its northern course and the Cumberland Mountains is Middle Tennessee, presenting a varied landscape of mountains, plains, hills, and valleys. Between the Tennessee and the Mississippi rivers lies the western division. From the ridge bounding the Tennessee valley on the west, slopes a rolling plain, terminating in a steep bluff, beyond which are the alluvial bottom lands of the Mississippi. The coal-measures occupy an area of 5100 sq. m., and the seams are of exceptional thickness. The deposits of iron ore are practically inexhaustible; copper and zinc are found, and the marbles are celebrated. Several famous mineral springs are the resorts of invalids. The soil is fertile, and the forests of hard-wood timber constitute a great natural source of wealth. The climate is generally mild. Herbage is often green throughout the year, and cattle graze during the winter months. The rainfall amounts to 54 inches. The drainage of the state is ultimately received by the Mississippi. The Cumberland River, which enters the state from Kentucky, flows about 150 miles through the northern central part and then re-enters Kentucky. The Tennessee (800 miles), the largest affluent of the Ohio, formed by the Clinch and the Holston, flows southward through the depression in East Tennessee into Alabama, and then back northward across the state towards the Ohio. Agriculture is the leading industry. The staple crops are corn, cotton, hemp, tobacco, and peanuts. Stock-raising is extensively carried on. The production of pig-iron has greatly increased, and factories for machinery, agricultural implements, &c., have become numerous. There are also many cotton, woollen, flour, and paper mills, besides tobacco-factories and potteries. The chief towns are Memphis, the largest city (105,000), Nashville, the capital (82,000), Knoxville (23,000), and Chattanooga (31,000). The first permanent settlement was made in 1756; territorial government was established in 1790; and in 1796 Tennessee became a state. It was the last state to secede in 1861, and the first to re-enter the Union in 1866. Pop. (1800) 105,602; (1850) 1,002,717; (1880) 1,542,359; (1900) 2,020,616 (480,430 coloured). See Histories by Ramsey (1860), Carpenter (1863), Phelan (1889), and Thruston's *Antiquities of Tennessee* (1890).

Tenos, or Tino, a Greek island of the Cyclades. Area, 70 sq. m.; pop. 12,565. The capital, Tenos, is on the S. coast; pop. 2083.

Ten'terden, a municipal borough in the Weald of Kent, 13 miles SW. of Ashford and 7½ S. by E. of Headcorn station. The church has a noble Perpendicular tower, built in the 15th c., and associated by legend with the Goodwin Sands (q.v.). Pop. 3250.

Tepic, a town in the Mexican territory of Tepic, 30 miles E. by S. of San Blas. Pop. 15,000.

Teplitz (*Tay'plitz*), a watering-place of Bohemia,

in a beautiful valley near the Erzgebirge, 20 miles NW. of Leitmeritz by rail. The baths, supplied from a dozen alkalo-saline springs, are taken very hot, and are good for gout, rheumatism, &c. One spring is used for drinking. Pop., with Schönau, 24,420. Some 7000 bathers come here yearly, besides many more mere visitors.

Terai (*Te-rī'*). See HIMALAYA.

Ter'amo (anc. *Interamna*), an Italian cathedral city, 84 miles S. of Ancona. Pop. 8650.

Terceira. See AZORES.

Terek, a stream of the Caucasus, flowing 350 miles NE. to the Caspian.

Tergovist, the former capital of Wallachia, at the foot of the Carpathians, 52 miles by rail NW. of Bucharest. Pop. 9400.

Terlizzi (*Ter-lit'zee*), a town of Italy, 22 miles W. of Bari. Pop. 20,442.

Termini (*Ter'mi-nee;* anc. *Thermæ Himerenses*), a seaport on the north coast of Sicily, 23 miles ESE. of Palermo by rail. Pop. 22,733.

Ternate (*Ter-nah'tay*). See MOLUCCAS.

Terneuzen, a small Dutch port, in Zealand, on the S. bank of the Scheldt. Pop. 8750.

Terni (*i* as *ee*), a cathedral city of Central Italy, 70 miles NNE. of Rome by rail. About 2 miles off is the cataract of Velino, 500 feet high, celebrated in *Childe Harold*. Terni is the ancient *Interamna Umbrica*, perhaps the birthplace of Tacitus. Pop. 9415.

Terracina (*Terrachee'na*), a coast-town of Italy, 60 miles SE. of Rome. Pop. 10,000.

Terra del Fuego. See TIERRA DEL FUEGO.

Terrano'va, a seaport on the south coast of Sicily, 60 miles W. of Syracuse. Pop. 16,440.

Terre Haute (now *Ter'reh Hoat*), capital of Vigo county, Indiana, on the river Wabash, 72 miles S. of Chicago. Pop. (1870) 16,103; (1900) 36,673.

Territet (*Ter-ri-tay'*), a village adjoining Montreux (q.v.).

Terror, MOUNT, an Antarctic volcano (extinct) in South Victoria Land, 30 miles SE. of Mount Erebus. Its height is 10,900 feet.

Terschelling (*Ter-skel'ling*), one of the chain of islands N. of Holland. Area, 45 sq. m.

Teschen (*Tay'shen*), a town of Austrian Silesia, 35 miles ESE. of Troppau. Pop. 23,000.

Tessin. See TICINO.

Tetbury, an old market-town of Gloucestershire, 5 miles NW. of Malmesbury. Pop. 1950.

Tetuan' (Arab. *Tetawin*), a port of Morocco, 4 miles from the sea, and 22 S. of Ceuta. Pop. 25,000 (one-third Jews).

Teviot. See ROXBURGHSHIRE.

Tewkesbury, a quaint old market-town of Gloucestershire, on the Avon at its confluence with the Severn, 9 miles NNW. of Cheltenham, 10 NNE. of Gloucester, and 15 S. by E. of Worcester. On the site of the cell of the hermit Theoc, from whom the place got its name, was founded in 715 a monastery, refounded in 1102 as a great Benedictine abbey. Its noble church, consecrated in 1123, measures 317 feet by 124 across the transepts, and remains essentially Norman, in spite of later additions. It was restored by Scott in 1875–79. Special features are the west front and the massive central tower, 132 feet high. Many of the Clares, Despencers, Beauchamps, and other lords of Tewkesbury are buried here, as also the murdered Prince Edward and (possibly) Clarence; and in 1890 a tablet was erected to Mrs Craik, the scene of whose *John Halifax* is laid in Tewkesbury. The place has also a town-hall (1788), a corn-exchange (1856), Telford's iron bridge over the Severn (1824), with a span of 176 feet, a free grammar-school, &c. The thick mustard Falstaff speaks of is a thing of the past, and the trade is chiefly agricultural. Within half a mile was fought (4th May 1471) the famous battle of Tewkesbury, in which the Yorkists under Edward IV. gained a crowning victory. Incorporated by Elizabeth in 1574, Tewkesbury returned two members from 1609 till 1867, and then one till 1885. Pop. (1851) 5878; (1901) 5419. See works by Dyde (1790), Bennett (1830), Fetit (1848), and Blunt (2d ed. 1877).

Tex'as is the extreme south-western state of the American Union, bordering on Mexico, New Mexico, Oklahoma, Indian Territory, Arkansas, Louisiana, and the Gulf of Mexico. The largest state in the Union (265,780 sq. m.), it covers nearly 9 per cent. of the total area of the United States, exclusive of Alaska; and is larger than France or Germany, and more than twice as large as the British Isles. Its extreme length is about 900 miles, and its greatest breadth 750; the coast-line is 400 miles long. From the low, flat prairie lands along the coast the land rises till it reaches the plateau and mountains of the distant west, some of whose peaks attain 5000 feet. All along the coast is a fringe of low islands (Padre Island is 100 miles long) and peninsulas, separated from the mainland by lagoons. The alluvial coast-belt, extending from 25 to 60 miles inland, comprises both fertile lowlands and stretches of barren soil. Beyond lies a terrace of rich rolling land called the 'prairie belt.' In the eastern prairie sections there are extensive timber regions. N. and W. of the prairies the land presents a rough, broken surface, with occasional bluffs. On the southern border of the plateau the elevation is about 1000 feet, but a height of 2000 feet is reached as the ascent continues toward the arid *Llano Estacado* and the foot-hills of the Rocky Mountains.

There is every variety of soil, from the fertile lands of the river-bottoms and prairies to the sterile sand of the southern desert. In the S. and SE. the rainfall is ample, in the W. and NW. insufficient. Yet even the *Llano Estacado*, or Staked Plains, once considered utterly uninhabitable, can supply water for irrigation by the use of artesian wells and windmills. The northern winds are usually dry, the rain comes almost entirely from the south-west, and the winter months are generally the driest. The best water-supply is found in the timber-lands. The climate on the coast-plains is semi-tropical, tempered by the winds from the Gulf. The north experiences cool winters, with heavy snowstorms at times. The air of western Texas is so dry that meats are perfectly preserved in the open air without salt. The 'norther,' a sudden and extreme change of temperature produced by a rush of cold wind from the north, ordinarily lasts for three days, and the fall in temperature is often as much as 30°. The Red and Arkansas rivers convey the waters of the northern part of the state to the Mississippi. The other streams flow directly into the Gulf. The Red and Sabine rivers and the Rio Grande form parts of the boundary line. Within the state the most important rivers are the Trinity, the Brazos, and the Colorado. The coal-measures occupy about 10,000 sq. m., besides extensive beds of brown lignite. There are vast

deposits of iron ore, tin and other metals are found, and the supply of lime, gypsum, and salt is inexhaustible. Agriculture and stock-raising are the leading occupations. Rather more than one-half of the entire area is practically uninhabited, but settlements are extending. Texas ranks foremost in cattle-raising, thanks to its pasturage and climate. It is also a leading cotton state—for some years it was *the* foremost in produce. Wheat and the other grains are extensively cultivated. Sugar and rice yield abundant harvests along the coast, and fruits are produced in the south. Petroleum has also (since 1897) created a prominent industry. Austin, the capital, has a pop. of 24,000, and there are other five cities of over 20,000 (San Antonio, with 55,000; Houston, 45,000; Dallas, 43,000; Galveston, 38,000; Fort Worth, 28,000). A hurricane and high tide in 1900 destroyed 4000 lives and $10,000,000 worth of property at Galveston. Texas formed part of the Spanish province of Mexico, which in 1822 became a republic. In 1835 it declared its independence, and in 1836 Houston was made president. In 1845 Texas, with an area of 375,000 sq. m., was annexed to the United States, this being the prime cause of the Mexican war. The state seceded from the Union in 1861, and re-entered it in 1870. Pop. (1870) 818,579; (1880) 1,591,749; (1890) 2,235,523 (492,837 coloured). See Histories by Yoakum (1856), Baker (1873), Theall (1879), and Bancroft (1885).

Tex'el, an island of North Holland, at the entrance to the Zuider Zee. It is separated from the mainland by a narrow strait, called the Marsdiep. Area, 55 sq. m.; pop. 6500, who keep some 35,000 sheep, famous both for their wool and their cheese. The Marsdiep is also often called the Texel; and here many important naval battles have been fought. Blake defeated Tromp and De Ruyter in 1653; Prince Rupert fought De Ruyter in 1673; Duncan blockaded the Texel (for a time with a single ship) in 1797; and twelve Dutch ships of war and thirteen Indiamen surrendered to Admiral Mitchell in 1799.

Tezcu'co, a city of Mexico, on the east shore of the salt lake (92 sq. m.) of the same name, 25 miles by rail ENE. of Mexico city. The ancient *Acolhuacan*, once the chief seat of Aztec culture, it retains traces of palaces and of a noble aqueduct, and now has glass-works. Pop. 6000.

Thame (*Tame*), an Oxfordshire town on the river Thame, 13 miles E. by S. of Oxford. It has remains of an abbey (1138), and at it died John Hampden. Pop. 3000.

Thames (*Temz*), the most important river of Great Britain, flows ESE. across the S. portion of the country. Its four head-streams—the Thames or Isis, Churn, Coln, and Leach—rise on the south-east slope of the Cotswold Hills, the upper part of the main stream being often called Isis (a quasi-classical form of *Ouse*) and not Thames until after it receives the Thame near Dorchester. The Thames or Isis flows ENE. for about 35 miles, when, curving SE., it passes Oxford, and flows on to Reading. Here, after receiving the Kennet from the west, it again changes its course, and, winding eastward, passes Windsor, Eton, Teddington (the lowest of thirty-three locks between here and Oxford, and the highest point to which the tide ascends), Richmond, London, Greenwich, Woolwich, and Gravesend, below which it expands into a wide estuary, and enters the North Sea. On its tidal estuary, and on the fact that like most British rivers it has no delta, depends the river's importance as a navigable waterway; the navigation is, however, somewhat impeded by a 'submarine delta'—banks formed of river sediment. From Lechlade to the Nore the direct length is 120 miles, and with the windings may be 250 miles (112 from Oxford to London Bridge); the area of its basin is 6100 sq. m. Its chief affluents are the Windrush, Cherwell, Thame, Colne, Lea, and Roding, on the left; and the Kennet, Lodden, Darent, Mole, Wandle, and Medway, on the right bank. At London Bridge its width is about 290 yards; at Woolwich, 490; at Gravesend Pier, 800; 3 miles below Gravesend, 1290; and at its mouth, between Whitstable and Foulness Point, about 8 miles below the Nore, it is 18 miles across. At the Nore Light, reputed the mouth of the Thames, the breadth is nearly 6 miles. The river is navigable for barges to Lechlade, and it is connected with several important canals. Vessels of 800 tons can reach St Katharine's Docks; much larger ones can ascend to Blackwall, 6 miles below London Bridge; and the largest sea-going steamers reach Tilbury Docks, 26 miles below. The part of the river immediately below London Bridge is called the *Pool;* and the part between the Bridge and Blackwall is called the *Port*. Two embankments have been formed, one since 1864 on the north shore from Blackfriars Bridge to Westminster, and one since 1866 on the south shore from Westminster Bridge to Vauxhall. The river supplies London with much of its drinking-water, and carries most of its sewage to the sea. Though the lower Thames has been converted into a sewer, in virtue of this same part of its course the river ranks as the chief commercial highway of the world. Above London the scenery is rich and beautiful, though not romantic, the numerous eyots or islands lending a peculiar charm. The Thames is the best beloved of English rivers for those who boat for pleasure. For boat-racing, it divides the honours with the Tyne; the Thames watermen are renowned in song and story. Since Spenser's days 'the silver-streaming Thames' has been sung by England's poets; Herrick calls it 'Silver-footed Thamesis;' Denham's apostrophe is famous; and Pope has word-painted much of the scenery of its banks. It was (now alas! long since) famous for its salmon, as it still is for other anglers' fish; below London flounders and eels are still plentiful, while the whitebait is almost peculiar to the lower Thames.

See works by Mr and Mrs S. C. Hall (1859; new ed. 1878), Robertson (1874), Huxley (1877), Farren (1881), Law (1881), George D. Leslie, R.A. (1881; new ed. 1888), Church (1885), Herring (1885), Cassell (*Royal River*, 1886), W. Black (*Strange Adventures of a House-boat*, 1888), Justin M'Carthy and Mrs Campbell Praed (1890), Senior (1890), Mr and Mrs Pennell (1891), Wyllie and Allen (1894), Charles Dickens, junior (1880), and Sir Walter Besant (1903).

Thames (or GRAHAMSTOWN), New Zealand, a gold-mining town, on an inlet of Hauraki Gulf, 40 miles SE. of Auckland. Pop. 4200.

Thamu'gas, 'the Numidian Pompeii,' near the Aures Mountains, and 22 miles from Batna, which is half-way by rail from Constantine to Biskra. Here are extensive remains of Roman colonnades and temples, with statues and inscriptions.

Thana, or NORTH KONKAN, a British district of India, consisting of the island of Salsette and a strip of coast. The seaport of Thana (pop. 16,000) is 21 miles NE. of Bombay by rail.

Than'et, ISLE OF, forms the NE. corner of Kent, from the mainland of which it is cut off on

the W. by the river Stour and the Nethergong rivulet—the ancient Wantsome channel, completely silted up since the beginning of the 16th c. It is bounded N. and E. by the sea, and opens on the S. side into Pegwell Bay. It measures 9 miles E. and W., and 5 miles N. and S., and contains 26,180 acres. On its shores are the well-known watering-places Ramsgate, Margate, and Broadstairs; and on the North Foreland, in the NE., is a lighthouse, 85 feet high, visible 19 miles. Pop. (1871) 42,129; (1881) 50,646; (1901) 71,631. See Simson's *Historic Thanet* (1891).

Thann (*Tann*), a manufacturing town of Alsace-Lorraine, 13 miles NW. of Mülhausen, has a superb Gothic church. Pop. 7500.

Tharandt, in Saxony, 20 miles SW. of Dresden, has a forestry school and a pop. of 4000.

Tharsis. See Rio Tinto.

Tha'sos, the most northerly island in the Ægean, near the coast of Macedonia. Area, 167 sq. m.; pop. 12,000, almost all Greeks. The surface is covered with wooded hills (Hypsaria, 3428 feet). Its gold-mines were famous of old.

Thaxted, an Essex town, on the Chelmer, 6 miles N. of Dunmow. Samuel Purchas was a native. Pop. of parish, 1667.

Thayet-myo, a town of Lower Burma, on the Irawadi, 40 miles NW. of Prome. Pop. 17,500.

Thebes (*Theebz*), a celebrated Egyptian city, formerly capital of Upper Egypt; called by the Egyptians Tuabu, by the Hebrews No-Amon, by the Greeks Thebæ. It lies in the broadest section of the Nile valley, in 26° N. lat., at a spot where the desert on the W. sheers away to the Libyan mountains, leaving a broad plain, partly cultivated, on which stand the famous twin statues, one of which is known as the 'vocal Memnon,' and behind them the temples grouped about Kurna and Medinet-Habû. The Nile divides this western part or Necropolis of Thebes from the extensive ruins now known by the names of the villages Luxor (el-Uksur, 'the palaces') and Karnak which stand on the E. bank, with the low Arabian hills for a background. At the Persian conquest (525 B.C.) Cambyses got nearly £2,000,000 from the city, and destroyed many of its noblest monuments. The foundation of Alexandria still further injured it; and in Strabo's time Thebes was only a cluster of small villages. Its temples, tombs, and ruins were visited by many Greek and Roman travellers, including the Emperor Hadrian. A considerable Christian population lived there under the later empire; but at the Arab invasion the inhabitants fled to Esné. Thebes is now inhabited only by Fellahîn, a few officials, and visitors to the three hotels at Luxor. The Thebaid, the territory of Thebes, was a favourite retreat for Christian hermits.

Thebes, the principal city of Bœotia in ancient Greece, situated on the slopes of Mount Teumessus, and between two streams, the Dirce and the Ismenus, about 44 miles NW. of Athens. Destroyed by Alexander (336), Thebes was in 316 rebuilt by Cassander (whose walls were traced by E. Fabricius in 1888). It was plundered by Sulla, and in Strabo's time was a miserable village. During the 11th and 12th centuries it revived through its silk manufacture, but under the Turks again declined, though its modern representative, Thiva, had a pop. of 4000 at the time of its destruction by earthquake in April 1894. See E. Fabricius, *Theben* (1891).

Theiss (*Tice;* Hun. *Tisza*), the chief river of Hungary, rises by two streams, the Black Theiss and the White Theiss, in the Carpathians, and winds 750 miles NW., SW., and S., joining the Danube after running parallel to it for 300 miles. The Theiss has several large and navigable affluents, as the Maros and Bodrog. The lower part of its course is sluggish, and it has often inundated the plains, flooding the cities on its banks, such as Szegedin (q.v.). Much has lately been done to regulate the course and drain the marshes on its banks.

Theobalds (*Tib'alds*), Hertfordshire, near Waltham Cross, 13 miles N. of London, a former mansion built by Lord Burghley, and exchanged for Hatfield in 1607 by his son the Earl of Salisbury with James I., who died here. It was demolished in 1650 and 1762. The present Theobalds Park, across the New River, is the 18th-c. seat of the Meux family. Here Temple Bar, removed in 1878–79, was re-erected in 1888.

Theodosia (see Kaffa), the town which superseded Sebastopol as a commercial port.

Théodule. See Zermatt.

Thera. See Santorin.

Therap'ia, a town of 3000 inhabitants, on the Bosphorus, 15 miles NE. of Constantinople.

Theresio'pel. See Szabadka.

Thermop'ylæ (lit., 'hot gates'), a pass leading from Thessaly into Locris, and the only road by which an invading army can penetrate from northern into southern Greece. In it are several hot springs, whence the name probably. It has won an eternal celebrity by the heroic death here of Leonidas and his 300 Spartans in their attempt to stem the tide of Persian invasion (480 B.C.).

Thessaloni'ca. See Salonica.

Thes'saly, the largest division of ancient Greece, lay S. of Macedonia and E. of Epirus. In 1204 A.D. it came under the Venetians, and in 1355 was taken by the Turks. In 1881 Turkey ceded to Greece (q.v.), Thessaly S. of mountains forming the watershed of the Salambria (anc. Peneus), by much the largest and most fertile section of the province. The Greek portion constitutes the three nomarchies of Larissa, Trikhala, and Phthiotis with Phocis.

Thetford, a market-town on the border of Norfolk and Suffolk, at the Thet's confluence with the Little Ouse, 31 miles SW. of Norwich and 12 N. of Bury St Edmunds. Doubtfully identified with the Roman Sitomagus, it was the capital of Saxon East Anglia, the seat from 1070 of a bishopric, transferred to Norwich in 1094 (since 1894 it again gives title to a suffragan bishop). It suffered much from the Danes between 870 and 1010; in Edward III.'s time it had eight monasteries and twenty churches (now only three). The steep Castle Hill, 100 feet high and 260 yards in circumference, is one of the largest earthworks in the kingdom; and there are remains of Bigod's Cluniac priory (1104). The grammar-school (1566) was rebuilt in 1879. The industries include brewing, tanning, and farming machinery; and there is some trade by barges on the Ouse. 'Honest' Tom Martin, the antiquary, and Tom Paine were natives. Incorporated in 1573, Thetford returned two members till 1867; it has a suffragan bishop under Norwich (1894). Pop. 4700. See works by Martin (1779) and Hunt (1870).

Thian-shan. See Tian-shan.

Thibet. See Tibet.

Thielt (*Teelt*), a town of Belgium, 18 miles SE. of Bruges by rail. Pop. 10,800.

Thiers (*Tee-air'*), a manufacturing town in the

French dep. of Puy-de-Dôme, on the Durole, 23 miles ENE. of Clermont by rail. Pop. 17,500.

Thionville (*Tee-on^{g}-veel;* Ger. *Diedenhofen*), a fortified town of Lorraine, 18 miles N. of Metz. Taken by Condé in 1643, it fell with Lorraine to France, but was besieged and taken by the Germans, 9th–25th November 1870. Pop. 10,100.

Thirlestane Castle. See LAUDER.

Thirlmere, a narrow sheet of water in the heart of the Lake District (q.v.), lying 533 feet above sea-level, between Derwentwater and Grasmere. It was acquired as a water-supply by Manchester (q.v.), and the work was carried out in 1885–94. Originally 2½ miles long and 328 acres in area, the embankment (294 yards long) raised the surface by 50 feet, and increased the length to 3⅝ miles, and the area to 793 acres.

Thirsk, a town in the North Riding of Yorkshire, in the Vale of Mowbray, on the Cod Beck, an affluent of the Swale, 23 miles NNW. of York. It has a fine church, and manufactures farm implements and saddlery. Thirsk returned two members till 1832, and then one till 1885. Pop. 3164. See W. Grainge, *The Vale of Mowbray* (1859).

Tholen (*To'len*), a Dutch island, part of Zeeland province, with a town of Tholen (pop. 3100).

Thomastown, a Kilkenny market-town, on the Nore, 19½ miles N. of Waterford. Pop. 900.

Thomasville, a town of Georgia, 200 miles by rail WSW. of Savannah. Pop. 5514.

Thompson, a town of Connecticut, 38 miles N. by E. of Norwich. Pop. 6560.

Thongwa, a town of Burma, administrative capital of a district, 23 miles SW. of Rangoon. Pop. 20,000.

Thorn (*Torn;* Pol. *Torun*), a town of West Prussia, on the right bank of the Vistula (here spanned by a viaduct 1100 yards long), 31 miles by rail ESE. of Bromberg. Founded by the Teutonic Order in 1231, and a member of the Hanseatic League, it contains a town-hall and a number of other buildings with beautiful gables and interiors; became a Polish town in 1454; and was annexed to Prussia in 1793, and again finally in 1815. An important stronghold in the 17th c., it was five times besieged between 1629 and 1813; and since 1878 has been made a fortress of the first rank, the old fortifications being removed, and a series of detached forts built. Copernicus was a native; and a colossal bronze statue of him was erected in 1853. Pop. 31,500.

Thornaby-on-Tees, the name under which South Stockton (q.v.) was incorporated in 1892. Pop. (1881) 10,665; (1901) 16,054.

Thornbury, a Gloucestershire market-town, 12 miles N. of Bristol. Pop. of parish, 2600.

Thorne, a market-town of Yorkshire, on the Don, 10 miles NE. of Doncaster.

Thorney, a Cambridgeshire parish, 7 miles ENE. of Peterborough, was the seat of a monastery (662).

Thornhill, a town of Yorkshire, 1½ mile S. of Dewsbury. Pop. 10,290.

Thornhill, a Dumfriesshire village, on the Nith, 14 miles NNW. of Dumfries. Pop. 1128.

Thornliebank, a town of Renfrewshire, 1½ mile SW. of Pollokshaws. Pop. 2452.

Thorshavn. See FAROE ISLANDS.

Thornton, a town in the West Riding of Yorkshire, now incorporated with Bradford.

Thourout (Fr. pron. *Too-roo*), a Belgian town, 11 miles SW. of Bruges. Pop. 10,200.

Thousand Islands. See ST LAWRENCE.

Thrace, a name used by the ancients somewhat vaguely for a large region to the west of the Euxine (Black Sea), so as to include the whole country between the Ister (Danube) and the Ægean, and even part of the Scythian country beyond the Ister. Latterly the northern part of Thrace has become the province of Eastern Roumelia (see BULGARIA), while the remainder is still part of the Ottoman empire.

Thrapston, a Northamptonshire town, on the Nen, 21 miles NE. of Northampton. Pop. 1570.

Thrasimene. See TRASIMENE.

Threave Castle. See DEE.

Three Rivers (*Trois Rivières*), capital of St Maurice county, Quebec, at the confluence of the St Maurice and St Lawrence, 95 miles NE. of Montreal. It has a large trade in lumber; and manufactures boots, car-wheels, and stoves. Champlain founded it in 1634. Pop. 9996.—THREE RIVERS, Michigan, on the St Joseph River, 128 miles E. of Chicago. Pop. 5550.

Throndhjem. See TRONDHJEM.

Thule (*Thyoo'lee*). See SHETLAND.

Thun (*Toone*), a picturesque and ancient town of Switzerland, 17 miles SSE. of Bern by rail. It stands on the Aar, hardly a mile from the Lake of Thun (12 miles long, 2 broad; greatest depth, 1844 feet), out of which the crystal river rushes past the town. Pop. 6100.

Thunder Bay. See SUPERIOR (LAKE).

Thurgau (*Toor-gow;* Fr. *Thurgovie*), a frontier canton of NE. Switzerland. Area, 381 sq. m.; population, 115,000, of whom two-thirds are Protestants. The surface attains only 3722 feet; the chief river is the Thur, flowing WNW. to the Rhine in Zurich canton. Capital, Frauenfeld.

Thuringia (Ger. *Thüringen*—pron. nearly *Tee'ring-en*), the name still borne by that part of the ancient Saxon area bounded by the Werra, the Saale, and the Harz Mountains; the Thuringian states being the minor Saxon Duchies (q.v.), the two Schwarzburgs, the two Reuss principalities, and small parts of Prussia, Saxony, and Bavaria. The Thuringian Forest (*Thüringer Wald*) is a series of wooded mountain-ridges (highest point, 3224 feet above sea-level) occupying great part of this area. It is some 70 miles long, and belongs to the Sudetic system.

Thurles (*Thur'less*), a town of Tipperary, on the Suir, 87 miles SW. of Dublin by rail. It has the classical R. C. cathedral (cost £45,000) of Cashel archbishopric; 4 miles off is the beautiful 14th-c. ruin of Holy Cross Abbey. Pop. 4411.

Thursday Island, one of the smallest of the group of the Torres Straits islands, north of Cape York, and belonging to Queensland. It has an excellent harbour, Port Kennedy.

Thurso, a burgh of barony and seaport of Caithness, at the mouth of the Thurso River, by rail (1874) 21 miles NW. of Wick and 154 NNE. of Inverness. It has a town-hall (1870), capital bathing, &c. The harbour had got silted up; but extensive improvements were carried out in 1891–92, when also a good pier at Scrabster was extended, on the west side of the bay. Paving-stones are prepared and exported. The self-taught geologist, Robert Dick (1811–66), was a baker here from 1830. Pop. 3730.

Thyati'ra. See AK-HISSAR.

Tian-shan (*Tee-an-shan'*; 'Celestial Mountains'), a great mountain-system, consisting of several ridges, mostly parallel, in central Asia, extends from the Pamir (q.v.) to the north of the Tarim depression in Turkestan, and occupies the frontier region between Russian territory on the north and the Chinese dominions to the south.

Tibbermore. See TIPPERMUIR.

Tibbu, a people of the Sahara (q.v.).

Tiber (Ital. *Tevere*, Lat. *Tiberis*), the chief river of Central Italy, and the most famous in the peninsula, rises in a dell of the Tuscan Apennines, 11 miles N. of the village of Pieve Santo Stefano, whence it winds 260 miles SSE., S., and SSW., and enters the Mediterranean by two branches, which enclose the Isola Sacra. Of these the northern, the Fiumicino, alone is navigable; the Fiumara is silted up. Towns on or near its banks are Perugia, Orvieto, Rome, and Ostia. It is navigable for boats of 50 tons to the confluence of the Nera, 100 miles from its mouth. The Tiber is supplied mainly by turbid mountain-torrents, whence its liability to sudden overflowings. Its waters, too, are still discoloured with yellow mud, as when Horace described it. See W. Davies, *The Pilgrimage of the Tiber* (2d ed. 1875).

Tiberias. See GALILEE.

Tibesti, or TU, a mountainous country in the Eastern Sahara (where 20° N. lat. and 16° E. long. cross), inhabited by a Tibbu tribe. The Tarso Mountains reach 7500 feet. First explored by Nachtigal in 1869, the country seems likely to be absorbed into the French Sahara.

Tibet', or THIBET, a country in central Asia, called by the natives Bod or Bodyul, lying between China and India, and enclosed between the Kuen-Lun, Altyn Tagh, and Nanshan Mountains on the N., and the Himalayas on the S. Area, 700,000 sq. m., eight times the size of Great Britain. Tibet is the loftiest region of such extent on the globe; its tablelands, which vary in height from 17,000 to 10,000 feet, are loftiest in the west and north, whence they slope gradually to the south and east. Bonvalot certifies to the existence of volcanoes. The lowest lands in Tibet are the grooves in which the Indus runs westward and the Sanpo eastward to the points where they turn south through the Himalayas. The mountain-girdle which surrounds Tibet has kept it to the present day the country least known to geographers. Tibet is divided into provinces equal in extent to European states. Tsaidam, or Chaidam, in the NE., between the Nanshan and Altyn-tagh chains and the Kuen-Lun, includes the Koko-Nor lake. Katchi in the centre, just S. of the Kuen-Lun, contains the gold-fields of Thok-Jalung, one of the highest inhabited spots on the globe. East Nari, in the SW., includes Khorsum and Dokthol, an elevated Himalayan country in which the Indus and Sanpo take their rise, and contains Lake Manasarowar, 15,000 feet high, a sheet of water sacred alike to Tibetans and Hindus. West Nari, or Little Tibet, consists of Ladakh (q.v.) and Balti, now dependencies of Cashmere (q.v.) and the Indian Empire. Yu-tsang, the provinces of Yu and Tsang, occupying the valley of the Sanpo between the meridians of 87° and 92°, constitutes the most populous and important part of Tibet, and contains Lhassa, capital of Yu and of the whole country, and Shigatze, capital of Tsang. Kham, the province drained by the deep valley of the upper courses of the great rivers of China and Indo-China, is largely under the direct rule of China. The lake Tengri Nor, NW. of Lhassa, is 150 miles in circuit.

Tibet lies in the latitudes of Delhi, Cairo, Algiers, and Naples, but its inland position and elevation give it a cold, dry, and extreme climate. On the tablelands at an elevation of 14,000 feet the thermometer in May sinks to 7° F. below zero, and over the whole country an arctic winter prevails for five or six months. There is a very short but excessively hot summer, more especially in the valleys of the Indus and Sanpo. The northern and western tablelands are treeless, with steppes where innumerable herds of yaks, horses, asses, goats, antelopes, &c. pasture undisturbed by man. The southern tablelands supply food to the flocks and herds of a large nomad population. Agriculture is confined chiefly to the valleys of the Indus and Sanpo; and the irrigation and terrace cultivation necessary to secure even scanty crops are supposed to have sharpened the intelligence of the peasants and made them strong and laborious. The mineral products of Tibet include gold, silver, iron, copper, zinc, mercury, cobalt, borax, sulphur, &c. The Tibetans are good blacksmiths and cutlers; their chief industrial occupation, however, is the preparation of woollen cloth. They are active traders; and large caravans, in which yaks and sheep are the beasts of burden, are constantly traversing the country on their way to the great fairs in Tibet, and the entrepôts of the surrounding countries. At one time there was a busy commerce with India, but after Tibet became a Chinese dependency the passes were jealously closed. The pop. is estimated at 6,000,000.

The Tibetans are a Mongolic race, much more closely allied to the Burmese than to the Chinese or Mongols proper, and are broad-shouldered and muscular. A few nomads, Mongol and Turkish tribes, camp on the northern steppes, and Chinese in large numbers have colonised the south-east. Polyandry, the husbands of one wife being generally brothers, is almost universal among the poor Tibetans; the rich are polygamists. Both systems check population. In Little Tibet, where monogamy has penetrated from the west, population increases rapidly. There exist in Tibet two religions: the Bon or Bon-Pa creed, which is a development of Mongol Shamanism, and is the native religion; and Lamaism, a form of Buddhism introduced from India. The Tibetan clergy are very numerous; monasteries are everywhere. Since 1720 Tibet has been, nominally at least, a dependency of China. Civil and religious government was retained practically by the Tibetan clergy; the Dalai Lama delegating the active duties of government to the de-sri or king, with four ministers. The non-observance by the Tibetans of this Anglo-Chinese convention of 1890 (opening a trade 'port'), and their refusal to meet commissioners, led to the mission of 1904 under Sir F. G. Younghusband. The mission soon became an expedition, which, after sharp fighting at Gyangtse and elsewhere, forced its way to Lhassa, where, the Dalai Lama having fled, a treaty was concluded in the famous Po-ta-la palace-monastery. The Tesho Lama or Bogdo Lama (of Shigatze) superseded the Dalai Lama (of Lhassa); trade facilities with British India were increased (three new marts being established), and Tibet bound itself not to enter into relations with any foreign power save by British assent. The Tibetan language is losing its monosyllabic character; its literature consists chiefly of translations from the Sanskrit, and of religious works.

See works by Huc (1852), Hodgson (1874), Markham (1876), Rockhill (1891), Bonvalot (1892), Wellby (1898), Landor (1898), and, after the 1904 expedition, those by Candler, Landon, and Waddell on Lhassa (q.v.).

Tibur. See TIVOLI.

Tichborne, a Hampshire property, 2 miles SSW. of Alresford station and 6½ E. by N. of Winchester. It has from before the Conquest been the seat of the Tichbornes, a Catholic family who received a baronetcy in 1626.

Ticino (*Ti-chee'no*), a river of Switzerland and N. Italy, rises on the southern slopes of Mount St Gothard, and flows S. through Lake Maggiore, and then SSE. to its junction with the Po, 4 miles below Pavia.

Ticino (Ger. *Tessin*), the most southern canton of Switzerland, bounded W. and S. by Italy. Area, 1082 sq. m.; population, 140,000, mainly Italian-speaking and Catholics. The largest town is Lugano; since 1881 Bellinzona is the capital.

Tickhill, a town in the West Riding of Yorkshire, 10 miles E. of Rotherham. Pop. 1568.

Ticondero'ga, a township of New York, 100 miles by rail N. of Albany, on Lake Champlain. Here the French built a fort in 1755, which figured largely in the war of independence.

Tideswell, a town of Derbyshire, 6½ miles E. of Buxton. Pop. 1985.

Tiel (*Teel*), a Dutch town, on the Waal, 60 miles E. by S. of Rotterdam. Pop. 10,800.

Tien-tsin (*Teen-tsin*), a city of China, on the Pei-ho's right bank, 34 miles from its mouth and 80 SE. from Peking, of which it is the port. The river is frozen over from December to March, when the business is taken up by sledges. By the treaty of Tien-tsin (1858) the port was declared open; a British consulate was established in 1861; in 1881 Tien-tsin was connected by telegraph with Shanghai and Peking; and there is a railway to the Pei-ho's mouth. Pop. 950,000.

Tierra del Fuego (*Tee-er'ra del Foo-ay'go*; 'Land of Fire,' so named by Magellan who saw fires on the shore, when he discovered them in 1520), a group of several large and many small islands named from the largest one, in 54° S. lat., 70° W. long., separated from the south end of South America by the Strait of Magellan. Its farthest south point is Cape Horn (q.v.). Staten Island and the half of the main island belong to Argentina; all the rest to Chili. The shores of the archipelago are much indented with bays and arms of the sea, with mountains rising abruptly from the water. The whole group is mountainous, attaining 7000 feet, and the snow-line being 4000 feet above sea-level. There are some dreary plains and a few fertile river-valleys, with areas of marshy ground. Towards the north the plains produce good pasturage. Forests of beech, winter's bark, magnolia, and cypress occupy large areas, with dense growths of bushes. Lichens cover much of both high and low grounds. The guanaco, tucu-tucu (a small rodent), dog, fox, and rat are the only native quadrupeds. Birds are abundant, including owls, falcons, and a great variety of sea-birds. The land of Tierra del Fuego is rapidly rising. The rocks are principally volcanic. Some poor coal and a little gold have been found. The climate is the most tempestuous in the world. The native inhabitants are of a low type, divided into three tribes, the Onas (or Aonas), the Yaghans, and the Alakalufs. They numbered about 10,000 in 1870, but are now reduced to about 1000. See Darwin's *Voyage of a Naturalist* (1845; new ed. 1889), surveys and voyages by King, Fitzroy, Cunningham, Fitzgerald, Conway (1902).

Tiffin, capital of Seneca county, Ohio, on the Sandusky River, 43 miles by rail SSE. of Toledo. It is the seat of Heidelberg College (Reformed Church; 1851), and manufactures farming implements, churns, stoves, woollens, &c. Pop. 11,000.

Tiflis (*Tif-leess'*), the chief city of a government and the capital of Russian Caucasia, on the Kûr, 165 miles as the crow flies ESE. of the Black Sea. Since 1883 it has been connected by rail with Batoum on the Euxine and Baku on the Caspian, and is the chief centre of trade between Russia and Persia. The old city, the capital of the Georgian princes by the 5th century, has been greatly metamorphosed since the Russian occupation in 1795 and annexation in 1802. In the middle ages the metal-workers of Tiflis were famous for their skill in engraving, inlaying, and brass-work; and the silversmiths and gunsmiths still maintain their character. Otherwise its manufactures (carpets, &c.) are unimportant. Near it are naphtha and thermal springs. Pop. (1897) 160,645.—Area of *government*, 15,306 sq. m.; pop. 875,181.

Tighnabruaich (*Tee-na-broo'aihh*), an Argyllshire watering-place, on the Kyles of Bute, 9½ miles NW. of Rothesay. Pop. 515.

Tigré, the northern division of Abyssinia (q.v.).

Tigris (Heb. *Hiddekel; Tigrâ* in Old Persian, 'swift as an arrow'), a large river of Asiatic Turkey, rises south of Lake Goljik, in the mountains of Kurdistan, within a few miles of the eastern bend of the Euphrates, and flows 1150 miles SE., E., and SE. again, till at Kurna it joins the Euphrates (q.v.) 90 miles above its mouth in the Persian Gulf. It receives the Bitlis, Great and Little Zab, and Dyala, all from the left. In its upper course the Tigris is very swift, and it brings down much mud. On its banks are Diarbekir, Mosul, and Bagdad, with the ruins of Nineveh, Seleucia, and Ctesiphon. The river is navigable for small steamers to Bagdad.—For the Bocca Tigris, see BOCA TIGRE and CANTON.

Tilburg, a town of Holland, 14 miles ESE. of Breda, is an important railway junction, and has 300 manufactories of calico, cloth, leather, &c. Pop. (1871) 22,256; (1901) 42,334.

Til'bury Fort, in Essex, on the N. bank of the Thames, opposite Gravesend, and 22 miles E. of London. A block-house of Henry VIII.'s time, it was converted (1667) into a regular fortification after De Ruyter's expedition into the Medway, and has been greatly strengthened since 1861. Here on 8th August 1588, after the dispersal of the Spanish Armada, Elizabeth reviewed her troops. The East and West India Dock Company constructed extensive docks at Tilbury in 1882–86.

Till, a Northumberland stream, flowing 32 miles to the Tweed, 2¾ miles NE. of Coldstream.

Tillicoul'try (*oul* as *oo*), a manufacturing town of Clackmannanshire, at the base of the Ochils and near the Devon's right bank, 10 miles ENE. of Stirling and 4 NNE. of Alloa. Woollens have been manufactured here since the 16th c., and later shawls and silks. Pop. 3500.

Tillietudlem. See CRAIGNETHAN.

Til'sit, a town of East Prussia, on the left bank of the Memel or Niemen, 65 miles NE. of Königsberg by rail. Here was signed, on an island in the river, the treaty of 1807 between Russia and Napoleon. Pop. 34,545.

Tilt. See GLENTILT.

Timaru (*Timaroo'*), a small port in the south island of New Zealand, 100 miles SW. of Christchurch by rail. Pop. 6500.

Timbo, capital of Futa Jallon (q.v.), in the heart of the country.

Timbuctoo' (native *Tumbutu*, Arab. *Tinbûkhtu*), a famous city of the Soudan, on the southern edge of the Sahara (q.v.), 8 miles N. of the main stream of the Upper Niger. It is 3 miles in circumference. The houses are mainly one-storey mud-hovels, but one of the three chief mosques is an imposing building, dating from 1325. The place stands on a trade-route between the interior and the west and south; and its importance increased through the gradual extension of the influence of the French, who in 1894 occupied the city (see SENEGAMBIA). Gold-dust, salt, kola-nuts, ivory, gums, ostrich-feathers, dates, and tobacco are exchanged for Manchester goods, mirrors, knives, tea, coral, &c. The town stands on the borders of various tribes and kingdoms—Sonrhai, Berbers, Tuaregs, Fulahs, Mandingoes, &c.; and amongst its 20,000 inhabitants all these races are represented, with Arabs, Arabised Africans, and Jews. Founded in the 11th c., Timbuctoo first became known to Europeans in the 14th (Ibn Batuta was here about 1350); till the French occupation it had been visited by but six or seven Europeans. Timbuctoo has been besung by Tennyson and Thackeray.

Timor (*Tee-mor'*), the most important of the chain of islands which stretch eastward from Java, has a length of 300 miles, an area of 12,264 sq. m., and a pop. of 500,000. A chain of wooded mountains runs throughout its entire length; one peak, Allas, near the south coast, being 11,500 feet high. It is less volcanic than its smaller neighbours of the Sunda group. Magnetic iron, porphyry, gold, copper, and sulphur are found. The exports are maize, sandalwood, wax, tortoise-shell, and trepang. The smaller western portion belongs to the Dutch (capital Kupang); the eastern part is Portuguese (capital Deli); but native chiefs really govern the island.

Timor-Laut (*Tee-mor'-Lowt*), or TENIMBER, a group of three Dutch islands, E. of Timor, extending 100 miles, and 2263 sq. m. in area. Unlike Timor, they are mainly coralline and correspondingly low-lying, though one extinct volcano is 2000 feet high. Pop. 25,000.

Tinchebrai (*Taw'sh-bray'*), a town (pop. 2429) in the NW. of the Norman dep. of Orne, where Henry I. of England defeated his brother Robert.

Ting-hai. See CHUSAN.

Tinnevel'li (originally *Tiru-nel-véli*), a town of S. India, 170 miles by rail SSW. of Trichinopoli, and 1½ mile from the river Tambraparni. It is connected with the military station of Pallamcotta, across the river; has a Sind temple, Hindu college, and cotton-factory; and is a great Protestant missionary centre. Pop. 40,500.

Tino. See TENOS.

Tintagel Head (*Tintaj'el*), a cliff 300 feet high on the western coast of Cornwall, 22 miles W. of Launceston, and but 6 miles from Camelford—the Camelot of Arthurian legend. Partly on the mainland and partly on the so-called island, almost cut off by a deep chasm, stand the imposing ruins of the castle where King Arthur held his court. The oldest part, the keep, is apparently of Norman construction.

Tintern Abbey, Monmouthshire, perhaps the loveliest ruin in England, on the Wye's right bank, 5 miles above Chepstow. The abbey was founded in 1131 for Cistercians, but its church dates from the end of the 13th c. The length of the building is 228 feet; the style a transition from Early English to Decorated; the window-tracery is especially fine. In Wordsworth's noble *Lines composed above Tintern Abbey*, the abbey itself is not mentioned. See works by Heath (1793), Cooper (1807), and Thomas (2d ed. 1845).

Tinto. See LANARKSHIRE.

Tippecanoe (*Tip'pekkanoo'*), a river of Indiana, which rises in the north, flows 200 miles WSW. and S., and empties into the Wabash 10 miles above Lafayette. In a battle near its mouth, in 1811, General Harrison defeated the Indians.

Tip'perah (*Tipura*), a district of the division of Chittagong (q.v.); Hill Tipperah being a small tributary state on its borders.

Tipperary, an inland county of Munster, touching Galway on the north and King's County, Queen's County, and Kilkenny on the east. Area, 1659 sq. m., or 1,061,731 acres, of which 843,837 are arable. The county lies mainly in the basin of the Suir (total length 85 miles); the Shannon touches the north-west border. The surface is generally level, but is diversified by the Galtees (3008 feet), Knockmeledown (2609), and Slievenaman on the S., Keeper Mountain on the W., and the Slievardagh Hills on the E. To the isolated Devil's Bit many popular legends attach. The soil of the plain is a rich calcareous loam, singularly fertile and productive, especially the Golden Vale, in which stands Tipperary town. Anthracite coal is worked; and copper, lead, zinc, slates, and pipe-clay also occur. The chief occupation is agriculture, especially dairy-farming. The county, which since 1885 returns four members, is divided into two ridings, North and South, each subdivided into six baronies. Pop. (1841) 435,553; (1901) 160,232—150,332 Catholics. Anciently Tipperary formed part of the two principalities of Ormond, or North Munster, and Desmond, or South Munster; after the English invasion it was formed into a county by King John in 1210. Eventually it came to be divided between two Anglo-Norman families, the Butlers holding Ormond, and the Geraldines part of Desmond. The antiquities are numerous, as well Celtic as Anglo-Norman. In the latter the city of Cashel (q.v.) is specially rich; Holy Cross is a noble monastic ruin; the castle of Cahir is a fine specimen of baronial architecture. There is a series of caves near the Cork border.

TIPPERARY, the county town, is 110 miles SW. of Dublin by rail, with a Catholic and a Protestant church, and a noted butter-market; pop. 6250. Under the 'Plan of Campaign,' a 'New Tipperary' was opened on 12th April 1890; but the scheme collapsed in the following year.

Tippermuir, 5 miles W. of Perth. Here Montrose routed the Covenanters, Sept. 1, 1644.

Tipton, a town of Staffordshire, 4½ miles SSE. of Wolverhampton. It has important iron manufactures. Pop. (1851) 24,872; (1901) 30,543.

Tiptree Hall, Essex, 3½ miles E. of Witham, was (1841–80) the model farm of Mr Mechi.

Tiree. See TYREE.

Tirhut (*u* as *oo*), formerly a district of Bengal, but in 1875 divided into the districts of Darbhangah (q.v.) and Muzaffarpur (q.v.).

Tirlemont (*Teerl-mon'g'*; Flem. *Thienen*), a Belgian town, 30 miles ESE. of Brussels. It manufactures machinery, hosiery, flannel, leather, sugar, &c. Here the French, under Dumouriez, defeated the Austrians in 1793. Pop. 18,000.

Tir'nova, a town of Bulgaria, on the Jantra, 35 miles SSE. of Sistova, became in 1235 the seat of the Bulgarian patriarch, and has more than once been the capital. Pop. 12,858.

Tiryns (*Tir'rins*), an ancient city of Argolis, in the Peloponnesus, 3 miles from the head of the Argolic Gulf. Its Cyclopean walls and those of the neighbouring Mycenæ are the grandest in Greece. The citadel was built on an oval-shaped rock, 330 yards long by 112 at its widest, fringed by a wall, 30 to 40 feet thick, and about 50 feet high (from the outside base), composed of blocks, 10 by 3½ feet. See Schliemann's *Tiryns* (1883).

Tisbury, a Wiltshire town, 12¾ miles W. of Salisbury. Pop. 1580.

Tissington, a Derbyshire parish, 4 miles N. of Ashborne, famous for its 'Well-dressing' on Holy Thursday.

Titicaca (*Teeteekah'ka*), Lake. See Peru.

Titusville, a city of Pennsylvania, on Oil Creek, 120 miles by rail SSW. of Buffalo. It has oil wells, sawmills, ironworks, &c. In June 1892 it suffered from a flood. Pop. 8250.

Tiumen (*Tyoo'men*), a town of W. Siberia, 90 miles SE. of Tobolsk, on a feeder of the Tobol. Connected by rail with Perm, it is on several important trade-routes; and large quantities of leather, carpets, soap, candles, and pottery are manufactured and exported. It has a technical school, a great January fair, and an exile forwarding prison. Pop. 29,700.

Tiv'erton, a municipal borough of Devonshire, 14½ miles N. by E. of Exeter, stands pleasantly on an eminence between the confluent Exe and Loman, and got the name *Twy-ford-ton* from two fords upon those two rivers. Little save the gateway remains of the castle of the Earls of Devon, built in 1106, and dismantled after its capture by Fairfax in 1645. St Peter's, a Perpendicular church of the 15th century, was mostly rebuilt in 1855; and other edifices are the town-hall (1864), late Venetian in style, with a tower 80 feet high, the market-house (1830), the infirmary (1852), the Greenway almshouses (1517), Waldron's almshouses (1579), and the grammar-school (1604), which was founded by Peter Blundell (1520–1601), and has an endowment of £1100 a year. Among its scholars have been Bishops Bull, Hayter, Conybeare, and Temple, A. Hayward, 'Jack' Russell, R. D. Blackmore, and his hero, John Ridd. New school buildings in the Tudor style were erected in 1880 at a cost of £20,000. Tiverton was a great seat of the woollen trade from 1353 till 1700 and afterwards, but lace-making is now its staple industry, the lace-factory, employing 1500 workpeople, having been established in 1816 by Mr John Heathcoat (1783–1861), inventor of the bobbin-net frame. Cosway, the painter, and Mrs Cowley, dramatist, were natives; whilst Lord Palmerston for thirty years (1835–65) represented Tiverton, which was chartered by James I., but lost its two members in 1885. Pop. (1851) 11,144; (1871) 10,025; (1901) 10,382. See works by M. Dunsford (1790), W. Harding (2 vols. 1844–47), and F. J. Smith (1893).

Tiv'oli (anc. *Tibur*), a town of Italy, 18 miles E. of Rome by rail and steam-tramway, on the slope of the Sabine hills and the river Teverone (anc. *Anio*, q.v.). Here works for the electric lighting of Rome were inaugurated in 1892. *Tibur* was the favourite summer-resort of the wealthy Romans. Above the falls of the Anio rises the so-called Sibyl's temple, in good preservation; the church of San Giorgio is an ancient temple; there are extensive remains of Hadrian's magnificent villa, the villa of Mæcenas, mausoleums, aqueducts, baths, &c. Near Tivoli is the famous Villa d'Este. Pop. 9370.

Tlaxcala (*Tlaskak'la*), the smallest state of Mexico. Area, 1506 sq. m.; population, 175,000. The capital, Tlaxcala, stands 7300 feet above the sea; pop. 2850.

Tlemcen (*Tlem-sen'*), a town of Algeria, 80 miles SW. of Oran. Pop. 35,382.

Toba'go, the most southerly of the Windward Islands belonging to Britain, lies 18½ miles NE. of Trinidad (of which it is a dependency), is 32 miles long by 7 broad, and has an area of 114 sq. m. It was discovered by Columbus in 1498, and named by him Assumption; the name Tobago probably arose from the free use of tobacco by the Carib natives. It was long contested between Dutch, Spaniards, and French, but came to Britain in 1763. The island is volcanic, mountainous (1800 feet), and picturesque. Scarborough, its chief town, is on the S. side, and at the base of a conical hill (425 feet), crowned by Fort King George, now without garrison. The exports (rum, molasses, cocoa-nuts, live-stock, &c.) amount to from £20,000 to £40,000 a year; the imports to from £20,000 to £30,000. Pop. 18,750.

Tobercurry, a Sligo market-town, 9 miles SW. of Ballymote. Pop. 870.

Tobermo'ry. See Mull.

Tobolsk, a town of W. Siberia, at the Tobol's influx to the Irtish, nearly 2000 miles E. of St Petersburg. Pop. 20,630.—Area of Tobolsk *government*, 539,659 sq. m.; pop. 1,500,000.

Tobo'so, El, a town (pop. 1925) in the Spanish district of La Mancha, 60 miles SE. of Toledo, the home of Don Quixote's peerless Dulcinea.

Tocantins', an important river of Brazil, rises in the state of Goyaz, flows 15 miles N., and finally widens into the Pará (q.v.), 138 miles from the Atlantic. Its affluent, the Araguay (1600 miles), bears along a greater volume of water than the Tocantins itself. Steamers ascend for 400 miles from the sea; above the rapids 400 miles more is navigable.

Toddington, a town of Bedfordshire, 5 miles N. of Dunstable. Pop. of parish, 2087.

Tod'morden, a market-town on the border of Yorkshire and Lancashire, prettily situated among hills on the Calder, 9 miles N. by E. of Rochdale, 18½ NNE. of Manchester, and 13 W. of Halifax. The classical town-hall was erected in 1875, and in front of it is a bronze statue by Foley of John Fielden, M.P. (1784–1849), the founder here of an enormous cotton-mill. Coal abounds in the vicinity. Pop. (1871) 21,764; (1901) 25,418.

To'goland, since 1884 a German protectorate on the Slave Coast, east of the British Gold Coast, between 0° 30′ E. long. and 1° 41′ E., the boundary towards the interior being somewhat indefinite. Area, 33,000 sq. m.; pop. 2,000,000. It is the most prosperous of Germany's African possessions. Togo, the largest native town (pop. 8000), is on Lake Togo; Little Popo is the capital, and Lome the chief port.

Tokat', a town of Sivas province, Asia Minor, 70 miles inland from the Black Sea. Pop. 30,000.

Tokay, the centre of a wine-growing district in Hungary, 130 miles NE. of Pesth. Pop. 5500.

Tokushima, the largest town of Shikoku, Japan, on the NE. coast. Pop. 65,300.

Tōkyō, or Tōkei ('Eastern Capital'), is the

chief city of the Japanese empire. Until 1868, when the emperor removed his court thither from Kyōtō, it was known as Yedo ('Estuary Gate'). Its position at the mouth of the rivers which drain the largest plain of Japan, fits it to be a national centre. The lower portion of the city, which is flat and intersected by canals, stretches between the two parks of Ueno (north) and Shiba (south), famous for their shrines. Midway rises the castle or palace (1889), a fine structure in Japanese style, furnished *à l'Européenne* and lit with electricity, around it a double ring of high walls and broad moats. In spring-time the city is gay with plum and cherry blossoms. The immense enclosures formerly inhabited by the nobles and their retainers, are gradually disappearing, and handsome modern buildings in brick for the use of the various government departments are taking their place. Of the fifteen city divisions (*ku*) the northern, Hongo and Kanda, are mostly educational, and contain the buildings of the Imperial University, Law School, &c. The student population is astonishingly large. The seaward districts of Nihonbashi, Kyobashi, and Asakusa are industrial and commercial, while the government offices are located in Kojimachi *ku*. There is an anchorage at Shinagawa, the southernmost suburb, but Yokohama is the port of entry (17 miles off). The city is subject to disastrous fires; that of April 1892 burned 4000 houses in one morning. Tōkyō has two railway termini. Foreigners are now free to live anywhere in the city, and almost every phase of modern civilisation is to be found within its vast area. Pop. (1874) 813,500; (1905) 1,530,000.

Toledo (*Tolay'do*), a famous city of Spain, capital of a province, and long the capital of the whole country, stands on the north bank of the Tagus, 40 miles SSW. of Madrid by rail. It is situated on a number of hills, 2400 feet above sea-level; and the climate, excessively hot in summer, is bitterly cold in winter. The Tagus, flowing between high and rocky banks, leaves only one approach on the N., which is defended by an inner and an outer wall, the former built by the Gothic king Wamba in the 7th c., the latter in 1109, and both remarkable for their towers and gates. Seen from afar the city is most imposing; within it is gloomy, silent, inert. In its midst rises the lofty, massive, five-aisled cathedral, built in 1227–1493 on the site of a former mosque. The interior, which is more impressive than the exterior, was plundered in 1621 and 1808, but retains some admirable stained glass, and the choir is a perfect museum of sculpture. It is 404 feet long and 204 wide; the tower is 329 feet high. The great square or Zocodover, thoroughly Moorish in character, is a fashionable promenade. The Alcazar or old palace, the fortress commanded by the Cid, rebuilt as a palace in Charles V.'s time, and subsequently, occupied the highest part of the city, but was burned down in 1887. There are manufactures of church ornaments and vestments, and confections. Toledan sword-blades, famous since old Roman times, are still made, but outside the city. Pop. 23,470. Toledo, the *Toletum* of the Romans, and the capital of the Goths, was held by the Moors from 714 to 1085, when it was annexed to the crown of Castile as capital. In its highest prosperity it had 200,000 inhabitants. It was the headquarters of the Inquisition. The university (1498) is long since extinct.—Area of *province*, 5586 sq. m.; pop. 376,820.

Toledo (*To-le'do*), capital of Lucas county, Ohio, on the Maumee River, 8 miles from the western extremity of Lake Erie (to which a channel 17 feet deep has been dredged), and 92 by rail W. of Cleveland. It has a fine harbour, is on the Miami and Erie Canal, and is connected with all parts of the country by thirteen railways. Besides an immense union depot, it has huge grain elevators, and does a great trade in flour, grain, lumber, live-stock, tobacco, &c. There are great wagon-works, foundries, manufactories of boilers, pumps, engines, farming implements, and furniture, and boat-yards and bridge-works. Toledo was settled in 1832, and incorporated in 1836. Pop. (1880) 50,137; (1890) 81,434; (1900) 131,222.

Tolenti'no (*i* as *ee*), an episcopal city of Central Italy, 10 miles SW. of Macerata. Pop. 4888.

Tolima (*Tolee'ma*), a volcano of the Andes of Colombia (18,314 feet), gives name to a province.

Tolo'sa, a town in the northern Spanish province of Guipuzcoa, 15 miles S. of the seaport of San Sebastian by rail. Pop. 7239.

Tolúca, a town of Mexico, capital of Mexico state, and 45 miles by rail WSW. of Mexico city, lies in a valley nearly 8800 feet above the sea. It has a fine cathedral. Pop. 26,000. Near the town is the extinct volcano, Nevado de Tolúca.

Tombigbee. See Alabama.

Tomintoul' (*ou* as *ow*), a Banffshire village, near the Avon, 1100 feet above sea-level, and 14½ miles S. of Ballindalloch station. Pop. 516.

Tomnahu'rich. See Inverness.

Tomsk, a town of western Siberia, on the Tom, a tributary of the Obi, 2809 miles E. of St Petersburg, and on the great trading highway of Siberia. A university was established in 1888. Great part of the town was burned in 1890. Pop. 52,430.—The *government* of Tomsk extends to the Chinese frontier. Area, 331,159 sq. m.; pop. 1,975,000.

Tonawanda, a town of New York, on the Niagara River and Erie Canal, 8 miles N. of Buffalo by rail. Pop. 7500.

Tonbridge. See Tunbridge.

Tong, a Shropshire parish, 3 miles E. of Shifnal, with a collegiate church (1410), which figures in *The Old Curiosity Shop*. See a work by G. Griffiths (1894).

Tong'a. See Friendly Islands.—Tonga Bay is a small inlet of East Africa, bounded N. by Cape Delgado. Tongaland, or Amatongaland, is a state there under British suzerainty, between Zululand and the Portuguese frontier, and bordering on Swaziland; area, 5300 sq. m.; pop. 100,000.

Tongarri'ro (*i* as *ee*). See New Zealand.

Tongking. See Tonquin.

Tongres (*Tonᵍr*), an episcopal city of Belgium, Limburg, 12 miles NW. of Liége. There is a mineral spring in the vicinity, mentioned by Pliny. Pop. 10,000.

Tonk, a native state of Rajputana (area, 1415 sq. m.; pop. 151,000), named from its capital, 60 miles south of Jeypore; pop. 39,000.

Tonquin, or Tonkin, since 1884 a French possession, is the north-east portion of the Indo-Chinese peninsula, bordering on China. The country is naturally a province of Annam (q.v.), which, however, is nominally a protected kingdom, whereas Tonquin is simply a French colony. The main feature is the Song-coi, or Red River (variously spelt Song-koi, Sang-koi, &c.), coming from Yunnan, and traversing the whole of Tonquin lengthwise. The area is 46,400 sq. m.; the pop. is estimated at 9,000,000. The capital is

Hanoi (q.v.). The chief products are rice, silk, sugar, pepper, oil, cotton, tobacco, and fruits, with some copper and iron; and companies are now working coal and antimony mines near the chief port of Haiphong. The imports have a value of about £1,200,000 (one-third only from France), the exports of £600,000 (only a small fraction to France). See works by C. R. Norman (1884) and J. G. Scott (1885).

Tönsberg, an old Norwegian seaport, 71 miles SW. of Christiania by rail. Pop. 8650.

Toombudra (correctly, TUNGABHADRA) rises in the south-west of Mysore, and flows 400 miles NE. to the Kistnah, 16 miles below Karnul.

Tooting, a Surrey district of Wandsworth.

Toowoomba, a town of Queensland, on the Darling Downs, 70 miles W. of Brisbane. Pop. 10,100.

Tope'ka, the capital of Kansas, on the Kansas River, 67 miles W. of Kansas City. It is well built, with wide, shady streets, and possesses a handsome capitol, a Congregational college, a R. C. seminary, an asylum, &c. It is the see of an Anglican bishop. Founded in 1854, it became the state capital in 1861, and has now busy miscellaneous manufactures and industries. Pop. (1880) 15,452; (1900) 33,608.

Tophané (*Top-hak'neh*). See CONSTANTINOPLE.

Töplitz. See TEPLITZ.

Topsham, a Devon market-town, on the Exe, 4 miles SSE. of Exeter. Pop. of parish, 2790.

Tor Bay. See TORQUAY.

Torgau (*au* as *ow*), a town of Prussia, and a fortress of the second rank, stands on the Elbe's left bank, 70 miles SSW. of Berlin by rail. The castle, now barracks, contains a church consecrated by Luther in 1544; the town-church has pictures by Cranach and the grave of Luther's wife. Here in 1760 Frederick the Great defeated the Austrians. Pop. 11,988.

Tornea, a town in the Finnish government of Uleåborg, at the mouth of the Tornea River, which, rising in the Tornea lake, forms during great part of its course of 250 miles the boundary between Sweden and Finland. Pop. 1400; across the river is the Swedish town of Haparanda.

Toro, a town of Spain, on the right bank of the Douro, 20 miles E. of Zamora by rail. Pop. 8764.

Torontál, the Hungarian county on the Maros and Theiss, with Becskerek (q.v.) for capital.

Toron'to, the second city of Canada, lies on the N. shore of Lake Ontario, between the Don and the Humber, 310 miles WSW. of Montreal. As the latter is the metropolis of the east, so Toronto aims to be the metropolis of the west, including the newly-opened regions of the North-west. In 1749 the French established Fort Rouillé on the W. side of the present city, which in 1756 was destroyed to prevent its falling into the hands of the English. In 1793 Governor Simcoe finding Niagara or Newark too close to the American side—indeed, right under the guns of an American fort—for the seat of government, crossed Lake Ontario and established his headquarters in a tent here. In 1812 Toronto, called York by Governor Simcoe, was twice captured and burned by the American army and navy. In 1834 it was incorporated as the city of Toronto (Huron, 'place of meeting'). In 1837 it was the scene of a brief and ineffectual rebellion under Lyon Mackenzie. Pop. (1861) 44,821; (1871) 56,092; (1881) 86,415; (1901) including some annexed suburbs, 208,040. The city is the capital of the province of Ontario. Its chief churches are the cathedral of St James (Anglican), the Metropolitan Methodist Church, and St Michael's Cathedral (Catholic). The university of Toronto, which was burned to the ground in 1890, but rebuilt, is a very imposing structure, worthy of its noble site and splendid grounds. Federated with it are Victoria University, Trinity College (Anglican), Wycliff College (Protestant), Knox College (Presbyterian), and St Michael's College (Catholic); the teaching staff numbers about 150, and the students 1720. There are also the Normal School, the Collegiate Institute, a School of Practical Science, &c. Toronto has a Public Library (1884), the University Library, the Law Library, the library of the Canadian Institute, and the Legislature Library. The total imports average over $31,500,000, and the exports over $9,500,000. The lake commerce is also very large in lumber, fruit, grain, coal, and cattle.

Torphichen (*Tor-phihh'en*), a Linlithgowshire parish, 2½ miles N. of Bathgate, was the chief Scottish seat of the Knights of St John of Jerusalem.

Torquay (*Tor-kee'*), a watering-place of South Devon, occupying a cove on the north side of Tor Bay, 23 miles S. of Exeter and 220 WSW. of London. Tor Abbey was founded here for Premonstratensian monks in 1196; in Tor Bay in 1688 William of Orange landed at Brixham (q.v.), and during the war with France it was a frequent naval rendezvous. But till the beginning of the 19th c. Torquay itself was little more than an assemblage of fishermen's huts. About that time the advantages of its climate—sheltered position, equable temperature (mean 44° in winter, 55° in summer), and freedom from fogs—caused it to be resorted to by consumptive patients, and it soon acquired a European celebrity. The romantic hills and valleys of Torquay and its environs have been overspread with terraces, villas, and gardens, the luxuriance of its foliage being a delightful feature of this 'queen of English watering-places.' The scenery is as varied as it is beautiful, the geology of the district most interesting; and Kent's Cavern (q.v.) is only a mile distant. The remains of the abbey include some crypts and the 13th-century 'Spanish barn' (it housed some survivors from the Armada); and St Michael's Chapel, on a hill-top, is thought to have been connected with the abbey. St John's Church, by Street, is a striking edifice; and other buildings are the town-hall (1852), museum (1875), and theatre (1880). Torquay was incorporated as a municipal borough in 1892. It is a great yachting station; its chief industries are the working up of Devonshire marbles and the manufacture of terra-cotta. Pop. (1851) 7903; (1881) 24,767; (1901) 33,625. See J. T. White's *History of Torquay* (1878).

Torre dell' Annunziata (*Torr-reh del Annoon'-tseeah'ta*), a town of Italy, on the S. base of Vesuvius, 13 miles SE. of Naples by rail. Pop. 20,060. —TORRE DEL GRECO, also at the base of Vesuvius, only 7 miles from Naples by rail, has been repeatedly destroyed by eruptions. Pop. 21,588.

Torrens, LAKE, sometimes a brackish lake (130 by 20 miles), at others merely a vast salt-marsh, in South Australia, 90 miles N. of Spencer's Gulf. It is named after Sir R. R. Torrens (1814–84).

Torre Pellice (*Torreh Pellee'chay*; Fr. *La Tour*), a Piedmontese village (pop. 2840), 34 miles SW. of Turin by rail. It is the headquarters of the Waldenses.

Tor'res Strait, between N. Australia and New

Guinea, is 80 to 90 miles in width; its navigation is rendered dangerous by innumerable shoals, reefs, and islands. It was discovered in 1606 by Torres, a Spanish navigator.

Torres-Vedras (*Tor'rez-Vay'dras*), a Portuguese town, 26 miles N. of Lisbon by rail. Within its famous 'lines' Wellington defended himself the winter of 1810–11 against Masséna. Pop. 6926.

Torridge, a Devon stream, flowing 37 miles to the Taw at Bideford Bay.

Torrington, GREAT, a market-town of North Devon, on an eminence sloping to the Torridge, 10 miles (by rail 14) SSW. of Barnstaple. A castle (1340) has disappeared; and the church, of which Wolsey and John Howe were incumbents, was rebuilt in 1651, its predecessor having been accidentally blown up with 200 prisoners, after Hopton's defeat here by Fairfax, February 16, 1646. Torrington was made a municipal borough by Queen Mary. Gloves are manufactured. Pop. 3250.

Torry, a Kincardineshire fishing-village, at the mouth of the Dee, opposite Aberdeen.

Torshok, a town of Russia, 310 miles SE. of St Petersburg by rail. Pop. 14,574.

Tor'tola. See VIRGIN ISLANDS.

Torto'na, a town of Northern Italy, on a feeder of the Po, 13 miles E. of Alessandria. Pop. 7147.

Torto'sa, an old Spanish town, on the Ebro, 40 miles SW. of Tarragona by rail. Pop. 24,636.

Tortu'gas (*u* as *oo*; Span. 'turtles'), ten low keys or islets of Florida, at the Gulf of Mexico's entrance, 120 miles WSW. of Cape Sable.

Tory Island, a small island, 2½ miles long, 9 miles off the north-west coast of Donegal, with a lighthouse, and a signal station (1890) connected by telegraph with Londonderry.

Tot'nes, a municipal borough of Devon, pleasantly situated on the slope of a steep hill on the Dart's right bank, 29 miles SSW. of Exeter and 24 ENE. of Plymouth. The Dart is navigable for vessels of 200 tons, and Brut the Trojan is fabled to have landed here: the 'Brutus Stone,' on which he first set foot, may be seen in the main street. At least, Totnes is a place of great antiquity, and retains two gateways, remains of the walls, a quaint guildhall, a good many antique houses, and a church (1432), with a noble red sandstone tower and a fine stone screen. The Norman castle of Judhael de Totnes, that crowns the hill-top, is represented by the circular shell-keep. There is a grammar-school (1568); and on the 'Plains,' near the river, stands a granite obelisk to the Australian explorer Wills, who was a native, as also was the Hebraist Kennicott. Incorporated by King John, Totnes returned two members till 1867. Pop. (1851) 4419; (1901) 4034. See works by Colton (1850) and Worthy (2 vols. Exeter, 1889).

Tottenham, a northern suburb of London.

Toul (*Toole*), a town in the French dep. of Meurthe-et-Moselle, on the Moselle, 20 miles W. of Nancy. It has a former cathedral (965–1496), whose W. front, with towers 245 feet high, is one of the finest in France, an 18th-century hôtel-de-ville, and manufactures of lace, hats, &c. The *Tullum Leucorum* of the Romans, Toul maintained a semi-independence till 1545; on 23d September 1870 surrendered to the Germans after bombardment; and since has been strongly fortified with a cordon of forts. Pop. (1872) 6584; (1901) 9030.

Toulon (*Toolon'*), a seaport and naval arsenal of France, in the dep. of Var, on the Mediterranean, 42 miles ESE. of Marseilles and 564 SSE. of Paris. It lies at the head of a deep double bay, and rises towards the north in the form of an amphitheatre. The port is divided into the old and the new—the former, on the east, appropriated to merchant shipping, and the latter, on the west, surrounded by the dockyard, slips, arsenal, cannon-foundry, &c. The dockyard covers 240 acres; and belonging to the arsenal are the sail-yard, armoury, museum, &c. The fortifications were greatly extended after the conquest of Algeria (1830); and again since 1880. A cathedral, founded in 1096, the hôtel-de-ville, and a large theatre are the chief buildings. The climate is dry and bracing, but the older portions of the town are still unsanitary, and were ravaged by cholera in 1884. Pop. (1872) 69,808; (1901) 83,142. The Greek *Telonion* and Roman *Telo Martius*, Toulon suffered much from the Saracens, and first rose into importance as a naval stronghold about 1600. The English were defeated off here by the united fleets of France and Spain in 1744; and in 1793 Toulon was occupied for four months by the English (under Hood) and the Spaniards, who, however, were forced to evacuate the place after a siege that is memorable as Napoleon's first great achievement. See Lambert's *Histoire de Toulon* (1886 *et seq.*).

Toulouse (*Toolooze'*), a southern French city, anciently capital of Languedoc, and now of the dep. Haute-Garonne, 160 miles SE. of Bordeaux and 466 S. by W. of Paris. With the Canal du Midi on the E. and N., it lies on the right bank of the Garonne, which is crossed here by a beautiful bridge (1543–1626), nearly 300 yards long, leading to the suburb of St Cyprien. The city has few fine public buildings—the archiepiscopal cathedral, containing the tombs of the Counts of Toulouse; the *Capitole*, or town-hall (1769); the church of St Sernin (11th to 15th c.); and the Musée, with interesting antiquities. Toulouse has a university academy, an academy of 'floral games,' claiming to date from a troubadours' contest in 1323, academies of arts, sciences, &c., schools of law, medicine, and artillery, an observatory, botanic garden, and a public library of 60,000 volumes. The place manufactures woollens, silks, leather, cannon, steam-engines, tobacco, brandy, &c., and carries on a great trade with Spain. Its liver and truffle pies are celebrated. Pop. (1872) 114,025; (1901) 140,698. The *Tolosa* of the Romans, Toulouse in 412 A.D. became the Visigoths' capital. After Charlemagne's time it was under counts, who made themselves independent about 920, but in 1271 it was reunited to the crown of France. Its literary celebrity reaches back to the Roman empire; early in the middle ages it became a seat of Provençal poetry, but it suffered terribly in Simon de Montfort's pitiless crusade against the Albigenses. On 10th April 1814 the French were here defeated by Wellington. Cujacius was born, and Fermat died, at Toulouse. The floods of 1855 and 1875 were specially disastrous.

Toung-ngu (*ng* as in *ringing*), a town of Burma, 170 miles NE. of Rangoon by rail. Pop. 20,000.

Touraine (*Toorayn'*), an old French province, whose capital was Tours (q.v.), and which coincided with the dep. Indre-et-Loire and part of Vienne. See T. A. Cook's *Old Touraine* (1892).

Tourcoing (*Toorkwan'*), a frontier town of France, dep. Nord, 10 miles NE. of Lille. It manufactures cotton, wool, linen, and silk goods, beet-sugar, &c. Pop. 78,250.

Tournay (*ou* as *oo*; Flemish *Doornik*), a Belgian town, on the Scheldt, 35 miles WSW. of Brussels. Its splendid Romanesque cathedral, 400 feet long, has five towers and pictures by Rubens; and there are also the churches of St Quentin and St Brice (with the grave of King Childeric), the belfry (1190), and a bronze statue (1863) of the Princess d'Épinoy, who in 1581 valiantly defended Tournay against Parma. An ancient place, but modern in aspect, Tournay manufactures hosiery, linen, Brussels carpets, and porcelain. Pop. (1880) 32,566; (1900) 35,004. Tournay (anc. *Tornacum* or *Turris Nerviorum*) was in the 5th c. the seat of the Merovingian kings. In 1526 it was included in the Spanish Netherlands.

Tours (*Toore*), capital of the dep. Indre-et-Loire, as it formerly was of the province of Touraine, stands in the fertile valley of the Loire just above the Cher's influx, 147 miles SW. of Paris by rail. It is a regularly built and handsome town, nearly divided in half by the Rue Nationale. The noble cathedral (13th to 15th c.) has very fine glass and two towers 205 feet high. Other buildings are the church of St Julien, the towers and other remains of the famous abbey church of St Martin (destroyed at the Revolution), the archbishop's palace, palais de justice, museum, public library, &c., besides fine statues of Descartes and Rabelais. Near the town are the remains of the monastery of Marmoutier, and of the castle of Plessis les Tours, the favourite residence of Louis XI. There are some well-preserved ancient houses, including that of the executioner Tristan l'Hermite; and round Tours are many of the fine old chateaux for which Touraine is famous. Tours has a brisk trade, manufactures woollens and silk, does much printing, &c., and is famous for its plums and confections. Pop. (1872) 43,368; (1901) 58,409. The Roman *Cæsarodunum*, Tours was the capital of the Turones (whence the modern name). Near it Charles Martel won the great victory that saved northern Europe from the Saracens (732). The great silk manufactures of Tours, established in the 15th c., were destroyed by the Revocation of the Edict of Nantes (1685). During the Franco-German war Tours was the seat of government from 11th Sept. to 10th Dec. 1870. SS. Martin and Gregory both were bishops of Tours.

Towcester, a town, on the Tove, 8¼ miles SSW. of Northampton. Pop. of parish, 2775.

Tower Hamlets, originally certain parishes, hamlets, and liberties without the City of London, and within the jurisdiction of the lieutenant of the Tower; now a parliamentary borough, lying E. of the City and Finsbury. Till 1885 it sent two members to parliament; since then seven for its seven divisions—Whitechapel, St George's-in-the-East, Limehouse, Mile-End, Stepney, Bow and Bromley, and Poplar. Pop. (1901) 467,259.

Townsend, Mount. See Australia, p. 62.

Towton. See Tadcaster.

Towy, a river of South Wales, flowing 64 miles to Carmarthen Bay.

Toyama, a town near the west coast of the main island of Japan. Pop. (1905) 57,500.

Tra'cadie, a Canadian fishing-town on the E. coast of New Brunswick, 35 miles E. of Bathurst, with a leper hospital. Pop. 2000.

Trafalgar, Cape (usu. *Trafal'gar*; prop. *Trafalgar'*), a low Spanish promontory, 29 miles WNW. of Tarifa (q.v.) on the Strait of Gibraltar. Off it, on 21st October 1805, Nelson defeated the combined fleets of France and Spain. See Professor Laughton's *Story of Trafalgar* (1890).

Trafford, a Manchester suburb at the end of the Ship Canal.

Tralee', a town of Kerry, on the Lee, a mile above its mouth in Tralee Bay, and 207 miles SW. of Dublin by rail. There is a ship-canal to the sea, but the trade has decayed since larger ships took to discharging at Fenit, 5 miles off. Tralee returned a member till 1885. Pop. 9867.

Tramore, a watering-place, 7 miles S. of Waterford. Pop. 1733.

Tranent', a police-burgh of Haddingtonshire, 7⅓ miles east of Edinburgh. It has a fine school (1877), water-works (1883), and in the church Colonel Gardiner's grave. Coal has been mined here since 1219. Population, 2600. See P. M'Neil's *Tranent* (2d ed. 1884).

Trani (*Trah'nee*), a seaport of southern Italy, 28 miles NW. of Bari by rail, with a 12th-century archiepiscopal cathedral. Pop. 25,173.

Tranquebar', a Madras seaport, 22 miles N. of Negapatam. Danish 1624–1807, it passed to Britain in 1845 for £20,000. The first Protestant mission was established here in 1706. Pop. 6189.

Transbaikalia. See Siberia and Baikal.

Transcaspia, the Russian territories E. of the Caspian. The Transcaspian Railway was opened to Merv in 1886, to Samarcand in 1888.

Transcaucasia. See Caucasus.

Transkei Territory (*Trans-kī*) is a part of the Cape Colony, lying between the Great Kei River (the boundary of British Kaffraria) and Natal. Covering most of the former Kaffraria, it is now divided into Griqualand East, Tembuland, Pondoland, and Transkei Proper (Fingoland, Idutwya, and Galekaland).

Transleithania. See Austria.

Transvaal (long an independent state, and from 1884 till 1900 officially called the 'South African Republic'), a British crown colony in the highlands of South-east Africa, bounded on the N. by Rhodesia, on the E. by Portuguese East Africa and Zululand, SE. by Natal, S. by the Orange River Colony, and W. by Bechuanaland. Its length from the Vaal River on the S. to the Limpopo River on the N. is over 400 miles, while a line between the extreme southern and eastern points (25° to 32° E. long.) reaches 700 miles. Prior to 1830 the land was inhabited by several Bantu tribes under the Zulu chief Umziligase, and was noted for its abundance of game. In 1835 some Cape Colony 'boers' or farmers of Dutch descent, offended by official regulations, 'trekked' into what is now Natal. On its being annexed by Britain in 1856, they trekked into this wild region, and till 1870 received accessions from the south. After much bloodshed the natives were mostly subdued or driven out. The Boers were pioneers and pastoral farmers, who tilled but little of the soil, and had none of the trader's instinct. The little commerce was in British hands. In 1877, owing to an exhausted public treasury and accumulated debts brought about by chronic native wars, the republic was on the eve of dissolution, and the British government assumed the care of it, subjugated the rebellious natives, and put the finances in order. But promises made to the Boers as to self-governing institutions were not carried out; friction was created; and there followed the Transvaal war, the death of General Colley (see Majuba), and the con-

ventions of 1880 and 1884 between England and the Transvaal. The first gave the Boers republican rights, but retained British control over boundaries, native affairs, and foreign relations; the 1884 convention modified the restrictions considerably. British 'suzerainty' was still recognised, and a diplomatic agent represents Britain at Pretoria. The rapid development of the gold industry greatly increased the financial prosperity, but introduced elements of difficulty into public life. The growing number of 'Uitlanders,' who brought prosperity to the republic, resented their exclusion from political privileges; and their discontent led first to the disastrous 'Jameson Raid' in 1895, and to the war of 1899–1902, in which the Orange Free State sided with the Transvaal. This ended in both states being taken over by Britain as crown colonies, till the resettlement permits the concession of self-government, as in Cape Colony. £3,000,000 was granted by the government to the Boer farmers, after the war, to aid in restocking their farms. In 1903 a tract of country of about 7000 sq. m. was transferred to the colony of Natal. The revenue in 1903–4 was £5,333,342, and the expenditure £4,598,204. The chief sources of revenue are customs, the mines, and stamps. The public debt under the South African Loan and War Contribution Act, 1903 (partly shared by the Orange River Colony), is £35,000,000, to be repaid within fifty years. The administration is carried on under the governor and lieutenant-governor by executive and legislative councils. The colony is specially favourable for agriculture and stock-rearing, and about 50,000 acres are under cultivation. Gold-mining is extensively carried on, principally in Witwatersrand and Barberton. In 1903, 86,324 persons (12,702 whites) were employed at the gold-mines, and the output was 2,972,897 fine ounces. Coal-mining is on the increase; the output in 1901 was 797,144 tons, and in 1903, 2,253,677 tons, value £877,976. The diamond-mines output was in 1903, 17,976 carats, value £238,752. There are also deposits of copper, iron, tin, and lead. In 1904 Chinese labour was introduced for mining purposes, with restrictive conditions. In 1905 there were about 30,000 Chinese in the Transvaal. The area of the colony is about 111,200 sq. m., and the population at the census of 1904 was 1,268,389, of whom 299,327 were whites and 969,389 native and other coloured races. In 1899 only about 30 per cent. of the whites were Boers, the others being mostly British-born or colonial. The Boers belong to the several divisions of the Dutch Reformed Church. The natural seaports of the Transvaal are Delagoa Bay and Durban, 348 and 441 miles from Pretoria respectively. Both are connected with Pretoria and Johannesburg by rail. The total length of the railways open in the colony is 1442 miles. Johannesburg is the largest town (pop. 158,580); Pretoria (white pop. 21,161) is the capital.

See, besides official publications and Jeppe's Almanac, works by Aylward (new ed. 1881), Lady Bellairs (1885), Nixon (1885), Mather (new ed. 1889), Alford (1891), and Distant (1892).

Transylva'nia, formerly an Austrian principality, since 1868 an integral part of Hungary, is fenced by the Carpathians from Galicia and Roumania. The interior, a plateau crossed by mountain-chains, is drained by the tributaries of the Theiss and the Pruth. The Latin name ('Beyond the Forest') refers to the woods dividing it from Hungary; the Hungarian name Erdély ('Forest Land') is justified by its extensive forests (37½ per cent. of the total area of 21,512 sq. m.). Nevertheless 49 per cent. of the soil, mostly very fertile, is under cultivation or grass. The mineral wealth is great—salt, gold, silver, copper, quicksilver, iron, and lead. Mineral springs abound. The pop., 2,084,048 in 1880, and 2,500,000 in 1900, consists of Roumanians (members of the Greek Church), Hungarians and Szeklers, and Saxons or Germans. Kronstadt, Klausenburg, and Hermannstadt are the chief towns. Transylvania (Dacia) was subdued by Trajan in 107. King Stephen of Hungary (997–1038) began to reduce it; King Geisa II. (1141–61) brought in German (Saxon) colonists from the lower Rhineland, who exercised local self-government; and from the land being divided into seven principal divisions it acquired the name *Siebenbürgen*—i.e. the Seven Strong Towns. See works by Boner (1865) and Gerard (1888).

Trapani (*Trap'ance;* anc. *Drepănum*), a seaport of Sicily, stands on a tongue of land 40 miles W. of Palermo, but 141 by rail. Since 1860 most of its fortifications have been removed to make room for promenades, gardens, and new streets; and the place is plentifully supplied (since 1891) with good water brought 60 miles. Pop. 32,020. Off here the Carthaginians defeated the Romans in a great naval battle (249 B.C.).

Trappe, La, a narrow valley in the Norman dep. of Orne, near Mortagne. Its Cistercian abbey (12th c.) was reformed in 1662 by the Abbé de Rancé into the rigorous Trappist community.

Traquair, a Peeblesshire parish, 1½ mile S. of Innerleithen.

Trasimene Lake, a shallow Italian lake lying between the towns of Cortona and Perugia. Girt by hills, it is 10 miles long by 8 wide, and in some parts 20 feet deep. There is no outlet; the flat and reedy margins have been planted with eucalyptus trees. In 1894 the government sanctioned a scheme for draining the lake, which is memorable for Hannibal's great victory in 217 B.C. over the Romans.

Tras-os-Montes. See Traz-os-Montes.

Traun See. See Gmunden.

Travancore, a protected state between the sea and the Western Ghats (q.v.) in the extreme south of India, bounded N. by Cochin, and ending in Cape Comorin. Area, 6730 sq. m.; pop. (1881) 2,401,158; (1901) 2,951,038, mainly Hindus, belonging to 420 castes, from Brahmans to Negroid hill-men. Nairs are over 25 per cent., Mohammedans only 7. There are many native Christians of the Syrian rite, and some black Jews. Westward of the hill-foots is a level belt, 10 miles wide, covered with cocoa-nut and areca palms. The lagoons or backwaters along the coast Travancore shares with Cochin. Towns are the capital, Trivandram (pop. 57,887), Aulapolai, and Quilon. See a work by Mateer (1883).

Travemünde. See Lübeck.

Travnik, a town of Bosnia, once its capital, 45 miles NW. of Sarajevo by rail. Pop. 5933.

Traz-os-Montes ('Beyond the Mountains'), a province of NE. Portugal. Area, 4291 sq. m.; pop. 427,360.

Trebbia (anc. *Trebia*), a southern tributary of the Po, which rises in the Apennines. Here Hannibal routed the Romans, 218 B.C.

Trebizond' (Old Gr. *Trapezous;* mediæval Lat. *Trebisonda;* Turk. *Tarabzûn*), the capital of a province of NE. Asia Minor, and a flourishing Black Sea port. It is surrounded by walls,

outside which are Christian suburbs. The harbour is only a roadstead, but there is regular communication with Constantinople, the mouth of the Danube, and the Mediterranean. The city's silk manufactures are decaying. On the capture of Constantinople by the Crusaders in 1204 one of the imperial Byzantine family, Alexis, founded the *Empire of Trebizond*—which stretched from the Phasis to the Halys—and repelled the Turks till 1462. Pop. 50,000.

Trede'gar, a town of Monmouthshire, 12 miles WSW. of Abergavenny and 7 ENE. of Merthyr-Tydvil. Grown from a mere village since 1800, it stands in a district rich in coal and ironstone, and is the seat of huge iron and steel works. Pop. (1851) 8305; (1881) 18,771; (1901) 18,574.

Tregar'on, a Cardiganshire town, 10 miles NE. of Lampeter. Pop. 1575.

Tréguier (*Tray-ghee-yay'*), a small port in the dep. of Côtes-du-Nord, Brittany, the birthplace of Renan. Pop. 2615.

Treig (*Traig*), Loch, a loch of SW. Inverness-shire, 5½ miles long, ¾ mile wide, and 784 feet above sea-level. Mountains, 2000 to 3658 feet high, overhang it, and it is skirted by the West Highland Railway.

Treinta y Tres (*Tray-in-ta ee Trays*), an eastern dep. of Uruguay (area, 3686 sq. m.; pop. 27,773). Its name commemorates the *thirty-three* patriots who revolted against Brazil in 1825.

Tremad'oc, a Carnarvonshire village, 1½ mile WNW. of Portmadoc.

Trent, a river of central England, the third in length, rising on Biddulph Moor, NW. Staffordshire, and flowing 150 miles SE. and NE. through the counties of Stafford, Derby, Leicester, Nottingham, and Lincoln, till it unites with the Ouse to form the Humber, 15 miles W. of Hull. It receives on the right the Sow, Tame, Soar, and Devon, and on the left the Blythe, Dove, and Derwent; passes Burton, Nottingham, Newark, and Gainsborough; and is navigable for barges to Burton (117 miles), for vessels of 200 tons to Gainsborough (25). Canals connect it with many great Midland towns. See Cassell's *Rivers of England* (1889).

Trent, a small lake flowing by the Trent River into Lake Ontario. By this valley it has been proposed to connect the Georgian Bay of Lake Huron with Lake Ontario (197 miles).

Trent (Ital. *Trento*; Ger. *Trient*; Lat. *Tridentum*), a town of Austria, in the S. Tyrol, on the Adige's left bank, 145 miles by rail SSW. of Innsbruck and 59 N. of Verona. The cathedral, begun in 1212, is a beautiful specimen of Lombard Romanesque. The church of Santa Maria Maggiore (15th c.) was the meeting-place (1545–63) of the famous Council. Other buildings are the former Jesuits' church, ornamented with the richest marbles; the theatre; the town-hall; some noble private mansions; and the feudal Palazzo Buonconsiglio adjoining the town, now a barrack. Trent manufactures silks, wine, pottery, confections, and sugar, and has a brisk transit trade. The population is now about 25,000. Italian from 1809 to 1813, Trent is still quite Italian in aspect, language, and habits; and the restoration to Italy of it and the *Trentino* (district of Trent), with Trieste, is the chief aim of the 'Italia Irredenta' agitation in Italy.

Trentham Hall, the Duke of Sutherland's Staffordshire seat, 3 miles S. of Stoke-upon-Trent.

Trenton, (1) the capital of New Jersey, is on the Delaware River, at the head of tide-water and of steam-navigation, 57 miles by rail SW. of New York. The city, divided into Trenton and South Trenton by Assanpink Creek, has wide, straight streets, in the residence portions delightfully shaded. The public buildings include a state-house, federal buildings, a county court-house, city hall, and state lunatic asylum, arsenal, penitentiary, reform school, and normal school. The Delaware, which is crossed by two fine bridges, is utilised for water-power. Trenton is the chief centre in the United States of the production of crockery and pottery, but also manufactures iron, steel, zinc, rubber goods, fire-bricks, &c. On December 26, 1776, Washington here surprised 1500 Hessians, and captured nearly 1000, after crossing the Delaware during the night, amid blocks of floating ice and in the face of a fierce snow-storm. Pop. (1880) 29,910; (1900) 73,307.—(2) Capital of Grundy county, Missouri, on the Crooked Fork of Grand River, 102 miles NE. of Leavenworth. Pop. 5400.

Trenton Falls, a village of New York, on West Canada Creek, 17 miles by rail NW. of Utica, celebrated for five beautiful cascades, with a fall of nearly 400 feet in 2 miles.

Tresco. See Scilly Islands.

Tresilian, a Cornish village, 3¼ miles ENE. of Truro. Here Sir Ralph Hopton surrendered to Fairfax (1646).

Treves (*Treevz*; Fr. *Trèves*; Ger. *Trier*), a city of Rhenish Prussia, on the Moselle's right bank, between low vine-covered hills of ruddy sandstone, 69 miles by rail SW. of Coblenz and 111 SSW. of Cologne. The river is crossed here by an eight-arch bridge, 623 feet long, whose Roman piers date from 25 B.C. 'A quiet, old-fashioned town, Treves,' Freeman says, 'has a body of Roman remains far more numerous and varied than any other place north of the Alps can show.' These include the 'Porta Nigra,' 118 feet long and 95 high; the so-called Roman baths (more probably part of an imperial palace); and a basilica built of Roman brick by Constantine, but partly demolished to make room for an electoral palace in 1614. This, however, was removed, and the basilica fitted up for a Protestant church in 1856. Beyond the walls are the ruins of an amphitheatre that could seat 30,000 spectators; and 6 miles off is the 'Igelsäule' or 'Heidenthurm,' a monumental column, 71 feet high, sculptured with bas-reliefs of the 2d c. The cathedral is an interesting structure, chiefly of the 11th c. Its 'Holy Coat,' which consists of 'connected fragmentary particles of material,' is said to have been brought to Treves by the Empress Helena, but is first referred to in 1106, and was not a source of revenue till 1512. It was visited by nearly two million pilgrims in 1891, the first time of exhibition since 1844. Connected with the cathedral by a cloister is the beautiful Liebfrauenkirche (1243); and there is a library of over 150,000 volumes and many MSS. A university (1472) was suppressed in 1798. The manufactures comprise woollens, cottons, and linens. Pop. (1871) 21,442; (1900) 43,506.

Treves, which claims to be 1300 years older than Rome, derives its name from the *Treviri*, who in Cæsar's time dwelt between the Meuse and the Rhine. Their capital, *Augusta Trevirorum*, seems to have become a Roman colony under Augustus, and ultimately was a frequent residence of the emperors, especially Constantine. Sacked by Attila in 451, it passed to the Franks in 463, to Lorraine in 843, to Germany in 870, and back to Lorraine in 895, and was finally

united to Germany by the Emperor Henry I. Its archbishop was an Elector of the Empire. The last elector removed to Coblenz in 1786; and Treves was the capital of the French dep. of Sarre from 1794 till 1814, since then belonging to Prussia. See Freeman's *Historical Sketches* (1876) and Clarke's *Pilgrimage to Treves* (1892).

Treviso (*Tray-vee'zo*), a town of Italy, 17 miles N. of Venice. It has a Duomo dating from the 15th c., with pictures by Titian, the older Gothic church of San Nicolo, a public library (50,000 vols.), and a fine theatre. Pop. 34,000.

Trichinop'oli, a town of Madras Presidency, on the right bank of the Kaveri, 56 miles from the sea. The fort, which includes the old town, is dominated by gneiss rock 273 feet high, on which are two temples. The moat has been laid out as a boulevard, and the Nawab's palace, which was restored in 1873, has been utilised for offices. St John's Church contains the tomb of Bishop Heber. The troops are stationed 1½ mile south of the fort. There are a market (1868), military and town hospitals, and an observatory. Cheroots are largely manufactured, also hardware and jewellery. A railway to Madras was opened in 1875. Pop. 106,000.

Trient (*Tree-ent'*). See TRENT.

Trier (*Treer*). See TREVES.

Triermain, a fragment of an old castle, near Bewcastle, Cumberland.

Trieste (*Tree-est-ay* or *Tree-est'*; Slav. *Térst*), the most important seaport of Austro-Hungary, and the chief trading town on the Adriatic, stands at the head of the Gulf of Trieste, an arm of the Gulf of Venice, 370 miles by rail SSW. of Vienna. In 1849 it was constituted an imperial free city, and attached and belonging to it is a territory 36 sq. m. in extent. The old town, built on the slope of a steep hill, crowned by a castle (1508–1680), is distinguished by its narrow streets and black walls. It contains the cathedral, a Byzantine edifice (5th–14th c.), into whose walls stones bearing Roman inscriptions have been built, and whose tower rests on the foundation of a temple of Jupiter. The new town or Theresienstadt, with broad rectangular streets and handsome houses, occupies the plain that fronts the sea. Between these two divisions runs the *Corso*, the chief thoroughfare. The splendid *Tergesteo* (1840), in the new town, contains an exchange and reading-rooms, and the offices of the Austrian Lloyd's. Trieste, which from 1719 till 1st July 1891 was a free port, has a very fine new harbour (1868–83). The extensive industries include shipbuilding, rope-making, and the manufacture of soap, rosoglio, white-lead, leather, &c. Pop. (1810) 29,908; (1880) 144,844; (1900) 134,143, nearly all Catholics, and mostly Italian-speaking. Trieste (anc. *Tergeste* or *Tergestum*) was of importance under the Romans. In 1382 it passed finally to Austria. Charles Lever and Sir Richard Burton were consuls here.

Trik'hala, a town of Greece, in Thessaly, 40 miles W. of Larissa, manufactures cottons and woollens. Pop. 25,000. Trikhala, the *Trikka* of Homer with a temple of Æsculapius, was ceded to Greece in 1881.

Trim, the county town of Meath, on the Boyne, 30 miles NW. of Dublin by rail, with imposing ruins of a 12th-century castle, the Yellow Steeple (123 feet) on the site of an ancient abbey founded by St Patrick, and a column to Wellington, who had his first schooling here. Close by are the ruins of Newtown Abbey and the Priory of St John the Baptist, and 5 miles down the river are the noble ruins of Bective Abbey. Pop. 1511.

Trinacria. See SICILY.

Trincomalee (usu. *Trin'comalee'*; really *Trincomah'lee*), a seaport, naval station, and magnificent harbour of Ceylon, 110 miles NE. of Kandy. Here the Malabar invaders of Ceylon built the 'Temple of a Thousand Columns,' to which pilgrims flocked from all parts of India, but which was demolished in 1622 by the Portuguese. The place was next held by Dutch and French alternately, until it became British in 1795. It has lately been very strongly fortified. Pop. 15,000.

Tring, a market-town of Hertfordshire, on a spur of the Chilterns, 2 miles W. of Tring station, and 31 NW. of London. Situated near the Icknield Way and the Grand Junction Canal, it has a good church, and manufactures of silk, canvas, and straw-plait. Tring Park, built by Wren for Henry Guy (*c.* 1670), is the seat of Lord Rothschild, whose son has here established an important Natural History museum (1892). Pop. 4500.

Trinidad' is the most southerly of the British West India Islands, only 7 miles from the coast of Venezuela, the Gulf of Paria (an extremely safe anchorage) lying between. It is 50 miles long, 30 to 35 miles broad, and 1755 sq. m. in area. Three mountain-ridges run east and west, one fringing the north coast and reaching 3000 feet. The Pitch Lake, near the village of La Brea, is composed of bituminous matter floating on the surface of fresh water, about 3 miles in circumference, and 80 feet above the sea; over 100,000 tons of asphalt are obtained hence in a year. The soil is very rich and productive. The climate is hot and moist, but not unhealthy. The chief town, Port of Spain, is one of the finest towns in the West Indies (pop. 55,000). There is another town called San Fernando (pop. 7640). The chief products are cocoa, sugar, rum, molasses, coffee, cocoa-nuts, tobacco, bitters, asphalt, and fruit (exported since 1889). Pop. (1871) 109,638; (1881) 155,128; (1901) 255,148, mainly French (speaking a patois), with Spanish and English colonies, and many East Indian coolies. There are 54 miles of railway in the island, which with Tobago forms a crown colony. Trinidad was discovered by Columbus in 1498, and settled in 1532. It suffered at the hands of the English (Sir Walter Raleigh in 1595), the Dutch (1640), and the French (1677 and 1690). In 1797 it first fell to the British, who were confirmed in it in 1802. See works by Hort (1865), Wickham (1872), De Verteuil (new ed. 1884), J. H. Collins (2d ed. 1888), and L. M. Fraser (1894).

Trinidad, a small Brazilian island in the Atlantic, in 20° 30′ S. lat., and 700 miles E. of the coast of Brazil, reported to contain pirates' buried treasure. See Knight's *Cruise of the Alert* (1890).

Trinidad, capital of Las Animas county, Colorado, on the Purgatory River, 210 miles S. by E. of Denver. Coal is found here. Pop. 5523.

Trinity, a northern suburb of Edinburgh.

Trinity, a river of Texas, formed by two forks near Dallas, runs 500 miles SSE. to Galveston Bay. It is navigable for steamboats for over 300 miles, except in the dry season.

Trip'oli (*Tarâbulus*), a province of the Ottoman empire, and the easternmost of the Barbary States of North Africa, stretching along the greater and lesser Syrtes (the gulfs of Cabes and Sidra), is bounded W. by Tunis, S. (very vaguely) by the Libyan Desert and Fezzan, E.—if we in-

clude the plateau of Barca (q.v.)—by Egypt, and N. by the Mediterranean. The area is roughly estimated at 399,000 sq. m.; the pop. at over 1,300,000—Libyan Berbers, Moors, and a few Arabs—with 3000 Europeans, chiefly Maltese, and 24,000 Jews. The Atlas range terminates here in two chains (4000 feet). Rain seldom falls during the long hot summers, but the heavy dew supports vegetation in favoured spots. The coast-region (about 1100 miles long) is very fertile about Tripoli and Mesurata, where tropical fruits, grain, wine, cotton, madder, &c. are produced; but further east, along the Gulf of Sidra, reigns sandy desolation. The interior yields senna, dates, and galls, and the carob and lotus are indigenous. Sheep and cattle, small horses, and strong mules are reared. The commerce consists in exporting the products of the country and of the interior of Africa (gold-dust, ivory, natron, and ostrich feathers). The imports (chiefly European manufactures) have been declining. Tripoli is subdivided into four *livas* or provinces—Tripoli, Benghazi or Barca (q.v.), Mesurata, and Gadames. Fezzan is but nominally attached to Tripoli. From the Phœnicians Tripoli passed to the rulers of Cyrenaica (Barca), from whom it was wrested by the Carthaginians. It afterwards belonged to the Romans, the Arabs, Spain, and the Knights of St John, and after 1551, to the Turks. Of late Italy has sought to extend her interests here.—The capital, Tripoli (anc. *Œa*), lies on the edge of the desert, on a point of rocky land projecting into the Mediterranean. It is a typical Moorish city, with high walls, beautiful gardens, many mosques, and several large churches. Pop. 20,000.

Trip'oli (*Tarâbulus*, or *Atrâbulus*), a seaport of Syria, 40 miles NNE. of Beyrout. In and around the town are many remains of antiquity and traces of Saracenic architecture. Originally an important maritime city of Phœnicia, the ancient *Tripolis* was taken by the Crusaders in 1104, and retaken by the Mamelukes in 1289. The old town being in ruins, a new one was built about 5 miles inland on a spur of the Lebanon range. The harbour is small and shallow, and the trade has mostly shifted to Beyrout. Pop. 30,000.

Tripolit'za (officially Tripolis, 'three cities'), a town of Greece, under the Turkish rule capital of the Morea, 40 miles SW. of Corinth, in a plain 3000 feet above the sea. It derives its name from being near the sites of the three ancient cities Tegea, Mantinea, and Pallantium. Pop. 10,698.

Tristan Da Cunha (*Coon'ya;* wrongly spelt *Tristan d'Acunha*), an island in the South Atlantic, with two smaller ones adjoining, lies midway between South America and the Cape of Good Hope, in 37° 6′ S. lat. It is 21 miles in circumference, rugged and precipitous, rising in a central conical mountain to 7640 feet. Discovered by the Portuguese in 1506, and named after the commander of the expedition, it was occupied by American sealers in 1790–1811. Possession was taken of it in 1817 by Britain to keep watch on Napoleon, then a prisoner in St Helena. On his death in 1821 the soldiers were withdrawn, all but a Corporal Glass and two companions, who, with some whalers founded the present settlement. The colony flourished, and in 1829 numbered 27 souls; in 1873, 80; and in 1905, 75. The settlement is in a fertile tract to the north-west, and is called Edinburgh. Property (including some 600 cattle and as many sheep) is practically held in common; there is no strong drink and no crime; and the natives are healthy and long-lived, the oldest acting as governor. Nearly all the able-bodied men were drowned in December 1885 while attempting to board a vessel. During the American war the *Shenandoah* landed forty Federal prisoners here without providing for them. Inaccessible Island, 20 miles distant, harboured two Germans, who underwent a kind of Robinson Crusoe experience there (1871–73). Nightingale Island lies 10 miles farther.

Trivandram. See TRAVANCORE.

Troitsk, a town of Russia, 400 miles NE. of Orenburg. Pop. 23,500.

Tromsö, a town of Norway, on the eastern shore of the low, fertile island of Tromsö, which is nearly 5 miles long, and 1½ mile broad. Pop. of island, 75,000; of town, 7000.

Trondhjem (*Trond'yem;* Ger. *Drontheim*), the third town of Norway, on the south side of the long and narrow Trondhjem Fjord, 250 miles N. of Christiania by rail. It is built on undulating slopes, and has regular and broad streets, the houses being mostly of wood, though the building of new wooden houses is now forbidden by law. The (fortified) harbour is capacious, deep, and safe, but difficult of entry. The cruciform cathedral, dating partly from the 13th c., is of English-Norman architecture, and unquestionably the most interesting church in Norway. A great fire in 1530 destroyed most of it except the richly adorned octagonal choir (late Gothic). From 1818 the place of coronation of Norwegian kings, it has been carefully restored since 1880. Portions of an old archiepiscopal palace (Kongsgaard) also survive. The main emporium of a wide district, Trondhjem has a large trade by sea and land, exporting copper ore, herrings, train-oil, timber, &c. It was the ancient capital of Norway, originally called Nidaros, founded in 996, and became in 1152 the seat of an archbishop. Its decline dates from the Reformation. Pop. 38,780.

Troon, a seaport and watering-place of Ayrshire, 6 miles N. by W. of Ayr and 31 SW. of Glasgow. The harbour, undertaken by the Duke of Portland in 1808, and completed at a cost of more than half a million, is protected by a breakwater 1000 yards long. Golf-links were laid out in 1878; and Troon also has splendid sands and good sea-bathing. Pop. 4850. See Kirkwood's *Troon and Dundonald* (2d ed. Kilmarnock, 1881).

Troppau (*Trop-pow*), the capital of Austrian Silesia, on the Oppa, a tributary of the Oder, 184 miles by rail NE. of Vienna. It has manufactures of cloth, beet-root sugar, &c. Pop. 26,860.

Tros'sachs, a wooded defile of Perthshire, 8 miles W. by S. of Callander, which Scott's *Lady of the Lake* has made one of the places of pilgrimage of the world. It extends 1 mile eastward between Lochs Katrine and Achray, and to the north has Ben A'an (1851 feet), to the south-west Benvenue (2393 feet).

Trouville (*Troo'veel*), a popular French watering-place, dep. Calvados, at the mouth of the Touques, 10 miles SW. of Honfleur. It has famous oyster beds and fine sands, and was discovered by Alexandre Dumas. Pop. 5627.

Trow'bridge, a market-town of Wiltshire, on a rocky hill above the small river Biss, 12½ miles by rail SE. of Bath and 12 SSW. of Chippenham. A Norman castle at Court Hill has vanished. The fine Perpendicular church of St James (1475) has a spire 159 feet high; Crabbe the poet was rector from 1814 to 1832, and is buried in the chancel. A new town-hall was opened by the Duchess of Albany in 1889; and there are also a

market-house, public gardens (1884), cottage hospital (1886), waterworks (1873), &c. Trowbridge has been a seat of the woollen manufacture since Henry VIII.'s reign; and superfine broadcloth and kerseymere are largely manufactured. Pop. 11,500.

Troy, the city of Priam, whose ten years' siege by the Greeks forms the theme of Homer's *Iliad*, has through Dr Schliemann's excavations (1870–82) been successfully identified with the mound of Hissarlik, in the Troad (Asia Minor), 2 miles from the Hellespont. See Schuchhardt's *Schliemann's Excavations* (Eng. trans., 1891).

Troy, capital of Rensselaer county, New York, on the east bank of the Hudson River, at the head of steamboat navigation, and 5 miles by rail above Albany, is built upon an alluvial plain 3 miles long and on the hills to the east (the southernmost known as Mount Ida). It has a marble court-house, the Troy Savings Bank building, including a fine music-hall, a high school, the Rensselaer polytechnic, and a R. C. seminary. Cotton, hosiery, paper, stoves, carwheels, bells, engines, machinery, stoneware, &c. are manufactured, and there are foundries, breweries, distilleries, flour-mills, and a number of shirt and collar factories employing 8000 girls. Two bridges cross the Hudson to Watervliet (pop. 12,967). Troy was settled by the Dutch in 1659, and incorporated in 1816. Pop. (1850) 28,785; (1880) 56,747; (1900) 60,651.

Troyes (*Trwah*), a town of France, the capital formerly of the province of Champagne, and now of the dep. of Aube, on the Seine's left bank, 104 miles ESE. of Paris by rail. In spite of modernisations it is still an old-fashioned place, with many quaint timbered houses. The principal buildings are the cathedral, a splendid specimen of Flamboyant Gothic, founded in 872, and rebuilt between the 13th and 16th centuries; the churches of St Urban, the Madeleine, St Pantaléon, and St Rémi; the Hôtel de Ville (1624–70); and a public library with 110,000 vols. and 5000 MSS. Troyes carries on cotton, linen, and woollen manufactures. Pop. (1872) 38,113; (1901) 51,200. The capital of the Celtic Tricassii, Troyes was called by the Romans *Augustobona*, later *Civitas Tricassium*, and then *Trecæ*, whence the modern name. Under the Counts of Champagne it rose in the 12th c. to great importance, and so late as 1600 had over 60,000 inhabitants.

Trujillo (*Troo-heel'yo*), a town of Spain, the birthplace of Pizarro, in Cáceres province, 60 miles NE. of Badajoz. It manufactures linen, leather, and pottery. Pop. 12,500.—(2) An episcopal city of Peru, capital of the dep. of Libertad, on a fertile plain near the sea-coast. Pizarro founded it in 1535. Pop. 8000.—(3) A port of Honduras, on the north coast. Pop. 4000.

Truro, a city of Cornwall, of which it is considered the metropolis, though Bodmin is the county town, stands 12 miles NNE. of Falmouth and 54 W. of Plymouth, at the junction of the Allen and the Kenwyn, here met by a tidal inlet, the Truro River. The ancient Cornish bishopric of Truro was revived in 1876; the cathedral, a granite Early English structure (1880–87), incorporates a portion of the old parish church of St Mary's (1518). A very ancient municipal borough, Truro returned two members from 1239 till 1885. Pop. 11,750.

Truro, a Nova Scotian manufacturing town of 6000 inhabitants, at the head of Cobequid Bay, and 62 miles NNE. of Halifax by rail.

Tsad, Lake. See Chad.

Tsaidam. See Tibet.

Tsaritzin, or Tsaryzin, a great port on the lower Volga, in the province of Saratoff. Pop. 58,000.

Tsarskoye Selo (*Tsars-ko-yay Say-lo;* 'Czar's Town'), 18 miles S. of St Petersburg, is a favourite resort of the imperial family. Pop. 18,500.

Tsi-nan, a city of China, on the left bank of the Ta-tsin River, 100 miles from the Gulf of Pe-chi-li, with large manufactures of silk and glass. Pop. 250,000.

Tsitsihar, a town of Manchuria, on the Vladivostok branch of the Trans-Siberian Railway, 250 miles SW. of Aigun. Pop. 30,000.

Tsu, a maritime town of Japan, 50 miles ESE. of Tōkyō, with many fine temples. Pop. 36,000.

Tsuruoka, a town of the main island of Japan, 70 miles NE. of Niigata. Pop. 20,500.

Tsu-shima, a Japanese island (two islands at high water), 40 miles in length, half-way between the southern end of Japan and Corea, and dividing the Corean Strait into two channels. In the main channel was fought, on 27th and 28th May 1905, the great naval battle in which the Russian Baltic fleet under Rozhdestvensky was annihilated by Togo's fleet.

Tuam (*Too'am*), a town of County Galway, 130 miles NW. of Dublin by rail, on a branch of the Clare. It is the seat of a R. C. archbishop and of an Anglican bishop. Pop. 2890.

Tübingen (*Tü'bing-en*, nearly *Tee'bing-en*), an important town of Würtemberg, 20 miles SW. of Stuttgart (35 by rail), on a ridge between the Neckar and the Ammer. It is an old place, steep and irregular; but the suburbs, especially round the new university and the railway station, have wide and spacious streets. Book-printing, bookselling, milling, dyeing, &c. are carried on. The university, founded in 1477, had Reuchlin and Melanchthon amongst its teachers. The Thirty Years' War fatally checked its prosperity; and it was not till early in the 19th c. that it began to renew its old standing. Under the theologian Baur (1826–60) it became celebrated as headquarters of the 'Tübingen School,' and both medical and philosophical faculties are distinguished. It has 94 professors and teachers, a library of 200,000 volumes (located in Duke Ulrich's *Schloss*, on the hill above the town, dating from 1535), and nearly 1200 students. Uhland was born and long lived here. Pop. 15,340.

Tucson (*Tew'son*), capital of Pima county, Arizona, on the Santa Cruz River, 978 miles by rail SE. of San Francisco, with some trade in wool, hides, stock, and gold-dust. Founded by the Jesuits in 1560, it was the capital of Arizona from 1867 to 1877. Pop. 7530.

Tucuman', a north-central province of the Argentine Republic, with an area of 8926 sq. m. and a pop. of 257,427. The capital, Tucuman, on the Rio Sil, 723 miles by rail NW. of Buenos Ayres, was founded in 1564. Pop. 50,000.

Tudela (*Too-day'la*), a cathedral city in the Spanish province of Navarre, on the left bank of the Ebro, here crossed by a seventeen-arch bridge, 46 miles NW. of Saragossa. Pop. 9220.

Tuge'la, a river of Natal (q.v.) and Zululand.

Tula (*Too'la*), a town of Russia, 110 miles S. of Moscow by rail. It manufactures iron and steel goods, especially firearms. Pop. 111,000.—Area of Tula *government*, 11,954 sq. m.; pop. 1,432,750.

Tulare Lake (*Tu-lair;* Span. pron. *Too-lah-ray*),

in Central California, is 33 × 22 miles, and has no visible outlet.

Tuldja (*Tool'ja*; Roum. *Tulcea*), a Roumanian port in the Dobrudja, just where the Danube divides into its three main branches. Pop. 21,826.

Tuli, a tributary of the Limpopo (q.v.), flowing from Matabeleland. At Fort Tuli the trade-route and telegraph from Bechuanaland cross the river.

Tulla, a Clare market-town, 10 miles E. of Ennis. Pop. 590.

Tullamore', the chief town of King's County, Ireland, is situated on the Grand Canal, 59 miles WSW. of Dublin by rail. Pop. 4522.

Tulle (*Tüll*, nearly *Teel*), capital of the French dep. of Corrèze, at the confluence of the Solane and the Corrèze, 61 miles ENE. of Périgueux. Its 12th-century cathedral was partly demolished in 1793; the chief industry now is the manufacture of small-arms. Pop. 15,250.

Tullow, a market-town, 9 miles SE. of Carlow. Pop. 1723.

Tummel. See RANNOCH.

Tunbridge, or TONBRIDGE, a market-town of Kent, 29½ miles SE. of London, stands on the Medway, which here divides into six streams, one of them called the Tun. A castle, originally Norman, but largely rebuilt in 1280–1300, and held successively by Fitz-Gilberts, De Clares, Audleys, and Staffords, retains a fine Decorated gatehouse. The parish church, also Decorated, was almost rebuilt in 1878; and the grammar-school, founded in 1553 by Lord Mayor Sir Andrew Judd, occupies handsome new buildings of 1865. Remodelled in 1880, it has £5500 a year, and over 300 boys; Sir Sidney Smith was an alumnus. The manufacture of toys, boxes, &c., in 'Tunbridge ware' (wood mosaic in veneer) is a specialty. Pop. (1861) 5919; (1901) 12,736. See works by Fleming (1865) and, on the school, by Rivington (1869) and Hughes-Hughes (1893).

Tunbridge Wells, a charming inland watering-place, on the border of Kent and Sussex, 5 miles S. of Tunbridge, and 34½ SSE. of London. It occupies the head and slopes of one of the valleys of the Weald, and has in general a south-west aspect, commanding very fine views. The chalybeate waters, at the end of the 'Pantiles' parade, were discovered by Lord North in 1606, and have been patronised by Henrietta Maria, Catharine of Braganza, Evelyn, Queen Anne, 'Beau' Nash, Richard Cumberland, Dr Johnson, Richardson, Garrick, Chatham, and Queen Victoria. There are a breezy common of 170 acres, a church (1635) in two counties and three parishes, a public hall (1870), a new pump-room (1877), a friendly societies' hall (1878), and a considerable trade in 'Tunbridge ware.' The season lasts from July to September. Tunbridge Wells was incorporated as a municipal borough in 1889. Pop. (1851) 10,587; (1901) 33,388. See Thackeray's *Virginians*, and Martin and Row's guide (1906).

Tundras. See SIBERIA.

Tunguska, a tributary of the Yenisei (q.v.).

Tu'nis, a French protectorate of North Africa, extending 550 miles along the Mediterranean, between Algeria and Tripoli. Area, 45,000 sq. m.; pop., mostly Bedouin Arabs and Kabyles, 1,900,000, including (1906) 40,000 Frenchmen, 14,600 of them troops. Much of the surface is occupied by hills and, towards the south, desert steppes; in the east the land is low and sandy. None of the rivers are navigable, most of them disappearing in the sand before reaching the coast. There is one considerable lake in the north. The soil is largely fertile, producing fine grain-crops; and oranges, dates, figs, olives, grapes, pomegranates, and almonds are raised. The pasturage is good and abundant, except in the height of the dry season, supporting numerous flocks of cattle and sheep. Tunis is rich in all minerals except gold, and very beautiful marble is worked. The annual rainfall varies from 10 to 50 inches. The heaviest rains occur in December and January. Snow falls on the higher altitudes, and the greater mountain-peaks are always snow-clad. Although often trying for Europeans, the climate is not exceptionally unhealthy. The trade of Tunis, mainly with France, Algeria, and Italy, is gradually increasing; the value of the imports (about £2,580,000 per annum) is considerably above that of the exports. The chief imports are cottons and textile goods, flour, cereals, colonial wares, and wines; the exports, olive-oil, wheat, tan, esparto, barley, fruits, wool, sponges, and tunny-fish. There are 460 miles of railways, with over 2000 miles of telegraphs.

Long identified with the fortunes of Carthage, Tunis was in 1270 invaded by Louis IX. of France, and in 1575 brought thoroughly under the Ottoman power. The Turkish pasha, however, was after 1631 superseded by a native Bey, practically independent, whose successors prospered by piracy, directed against the Christian powers. In the 18th c. Tunis became tributary to Algeria; but in the 19th was again virtually independent. In 1881 a French invasion resulted in a treaty placing Tunis under French protection. This occupation has benefited Tunis and greatly increased the power of France in the Mediterranean, securing many safe harbours, and lessening the strategic importance of Gibraltar and Malta. See works by Broadley (1882), Graham and Ashbee (1887), and Sir H. Vivian (1899), and French works by Lanessan (1887) and Poiré (1892).

TUNIS, the capital, is situated on a small lagoon (El Bahira), near the south-west extremity of the Lake of Tunis, and about 3 miles from the ruins of Carthage (q.v.). Several of the mosques are magnificently decorated, as is the bey's palace. The citadel contains a fine collection of antiquities. A channel 81 feet broad and 11½ deep has been dredged in the lagoon from Goletta to Tunis, which in 1893 became a seaport. Good modern barracks are occupied by the French troops. Pop. 170,000. See Lallemand, *Tunis et ses Environs* (1889).

Tunstall, a market-town of Staffordshire, 4½ miles NNE. (and since 1885 within the parliamentary borough) of Newcastle-under-Lyme. It has a town-hall (1884), manufactures of earthenware and iron, and neighbouring collieries. Pop. (1811) 1677; (1851) 9666; (1901) 19,492.

Turfan (*Toor'fan*), a city in the east of Eastern Turkestan (part of which is sometimes named after it), on the S. slope of the Tian-shan Mountains and on a tributary of the Tarim. Pop. 30,000.

Turin' (anc. *Augusta Taurinorum*; Ital. *Torino*), a city of Northern Italy, formerly capital of Piedmont, and for a time of the kingdom of Italy, is situated in a beautiful plain bounded by mountains, near the confluence of the Po and the Dora Riparia, 54 miles from the Cenis tunnel by rail, and 80 NW. of Genoa. It stands at the meeting-point of several great roads through the Alps, and strategically has been of great importance. Really a very ancient city, it has a very modern appearance. Among its numerous churches are the cathedral, originally built in

the 7th c., and reconstructed in 1498; San Filippo, the finest in Turin; La Consolata, containing a wonder-working Madonna; and a Waldensian temple. On a hill near the town is La Superga, a splendid basilica, raised by Victor Amadeus to fulfil a vow, and now the mausoleum of the House of Savoy; its terrace, reached by a cable-railway, commands a glorious view. Other edifices are the royal palace; the Carignano Palace; the town-hall; the university, with 210 teachers and over 2800 students, a library of 250,000 volumes and 4000 MSS.; and the Accademia delle Scienze (once the Jesuit college). Among famous natives were Gioberti, Cesare Balbo, Cavour, Marochetti, D'Azeglio, and the French mathematician Lagrange. The manufactures include cotton, woollen, and silk fabrics, carpets, velvet hats, paper, iron, pottery, &c. Pop. (1700) 40,000; (1800) 42,000; (1881) 233,134; (1901) 335,656. Turin, originally inhabited by the Taurini, was sacked by Hannibal, and became a Roman colony under Augustus. The capital afterwards of a Lombard duchy, it fell in 1060 to the House of Savoy. It was held by the French (1536–62), and again taken in 1640; and in 1796 it was dismantled, in 1800 united to the French Republic. In 1815 restored to the House of Savoy, it was the capital of Sardinia till 1860, and from then to 1865, of the kingdom of Italy.

Turkestan' (properly *Toor-ke-stâhn'*; 'the country of the Turks'), a great region of central Asia, stretching E. from the Caspian to beyond Lob-nor (110° E. long.), and S. from Siberia and Dzungaria to Persia, Afghanistan, and Tibet. A lofty tableland, the Pamir (q.v.), separates the rivers running E. to the desert of Gobi from those which run to the Sea of Aral, and divides Turkestan into a western and an eastern portion.

Western Turkestan, or simply Turkestan, consists of the great hollow plain of the Caspian and Aral Seas, which occupies its west and centre, and of the hilly and well-watered districts formed by the ramifications of the Tian-shan Mountains and Hindu Kush. The plain is composed of deserts of shifting sand, interspersed with oases, strips of fertile land along the banks of rivers, and occasional tracts clad with coarse thin grass; the eastern districts abound in valleys of remarkable fertility. The climate varies on the plains from extreme cold to burning heat; in the eastern highlands the cold is intense in winter, and the summer is comparatively cool. The rivers are the Syr-Daria or Jaxartes (q.v.), Amu-Daria or Oxus (q.v.), Zarafshan, and Murghab, both of which terminate in marshes. Chief products are fruits, grain, cotton, flax, hemp, tobacco, silk, coal, salt, and sal-ammoniac. Agriculture and the breeding of the domestic animals are the main occupations; but cotton, silk, linen, and woollen goods, shagreen, paper made of raw silk, carpets, &c., are manufactured. Western Turkestan is divided into Russian Turkestan, including Khokand, now Ferghana, in the north and north-east, and the Tekke Turkoman country, with Merv, in the south-west; Khiva, under Russian influence, in the west; Bokhara, in the east and centre; and Afghan Turkestan, including Badakshan and Kunduz, Balkh, Maimaneh, Andkhui, and Sir-i-pul. The population comprises Uzbegs, the dominant race, Turkomans (who, like the Uzbegs, belong to the same Ural-Altaic stock from which the Osmanli Turks of Turkey are descended), Karakalpaks, Kirghiz, Sarts, Tajiks, Persians, Kiptchaks, and a few Arabs, Hindus, and Jews. Of these the Sarts and Tajiks, the original inhabitants of the cities, are of ancient Persian stock, and along with the Uzbegs, Hindus, and Jews form the settled population; the Persians are mostly descendants of slaves; the other races are largely nomad. The prevalent religion is Mohammedanism, and most of the tribes are Sunnites; a few Shiites, Sufis, and Buddhists are also found. Pop. of Russian Turkestan, 4,888,200; of Khiva, 800,000; of Bokhara, 1,250,000. The area of Russian Turkestan is 410,000 sq. m.; of Khiva, 25,000; and of Bokhara, 90,000. Turkestan, with Persia, passed to the Macedonians, who made Bactria a Greek kingdom, while the rest was Parthian. Under the Sassanides the Persian boundary was again advanced to the Jaxartes; but invading Turkish tribes from the north-east established themselves between the Oxus and Jaxartes. In the 8th c. the Arabs possessed themselves of Turkestan, which was overrun by Mongol hordes under Genghis Khan. Tamerlane made it the centre of an immense empire, which stretched from the Hellespont to the frontiers of China, and from Moscow to the Ganges. This period was the golden age of Turkestan. But after the death of his youngest son, the empire was split up. The Persians, provoked by the slave-raiding expeditions of the Turkomans, made war on them in 1860 and 1865; the Afghans took possession of several southern districts in 1849–59. In 1864 the Russians annexed Tashkend; in 1864, Samarcand; in 1873, great part of Khiva; in 1876, Khokand; in 1881, Merv. Russian Turkestan contains the provinces of Zarafshan, Semiretchinsk, Syr-Daria, Russian Kuldja, Amu-Daria, Ferghana. A railway 1000 miles long, from Krasnovodsk on the Caspian Sea by Samarcand to Tashkand, has wrought a great change in the economical condition of Turkestan. See Schuyler's *Turkestan* (1877), Vambéry's works, Krafft's superb book (Paris, 1902), and other books named at Bokhara, Merv, &c.

Eastern Turkestan, known formerly as *Chinese Tartary*, is bounded N. by the Tian-shan Mountains, W. by the Pamir tableland, and S. by the highlands of Tibet or Cashmere. Eastward it sinks to the desert plain of the Gobi, round whose western bay it forms a vast crescent-shaped oasis 4000 to 5000 feet in elevation, drained by the tributaries of the Tarim, a river which flows 1500 miles E. into the desert to the Lob-nor lake. Canals ramify the country, but large areas are very unproductive; and though there are numerous villages and towns, some of them large, the total pop.—some 600,000—is but thin. The country produces gold and abundance of silk; and the inhabitants are skilful in making gold and silver stuffs, carpets, and linen, cotton, and silk goods. The political capital is Kashgar; the commercial capital, Yarkand. Kulja (q.v.), taken by the Russians in 1871, was reoccupied by China in 1881. The language is Turkish, but there are also Tajiks of Persian descent. The country was part of the empire of Genghis Khan, broke up into many petty states (Yarkand, Kashgar, Aksu, Khoten, &c.), and became a province of China in 1758. A rising of the Mohammedan inhabitants took place in 1864, and under Yakoob Beg the country was independent of China till 1877, when the Chinese resumed possession. See Boulger's *Life of Yakoob Beg* (1878), Lansdell's *Chinese Central Asia* (1894), and the reports by Forsyth, Ney Elias, Carey, and Younghusband.

Turkey, or the Ottoman Empire, comprises the wide but heterogeneous territories really or nominally subject to the Osmânlî sultan, in

Europe, Asia, and Africa. These territories, which once extended from the Danube to the Cataracts of the Nile, and from the Euphrates to the borders of Morocco, have been greatly reduced in the 19th century. Algiers has belonged to France since 1830; Tunis has been French since 1881; Egypt, though still tributary to 'the Porte' or Turkish government, is since 1882 unlikely to be again a Turkish province; whilst by the decisions of the Berlin Congress of 1878 the tributary states of Roumania and Servia became independent kingdoms, and obtained increase of territory; Montenegro, also independent, secured Dulcigno and Antivari; Austria-Hungary took Bosnia and Herzegovina under its protection; Greece absorbed Thessaly, and Bulgaria was created a tributary principality, to which Eastern Roumelia was added in 1885. The result of these limitations is that Turkey in Europe consists merely of a strip of territory south of the Balkans, stretching across from the Black Sea to the Adriatic, and including ancient Thrace, Macedon, Epirus, and Illyria; Turkey in Africa is practically reduced to the regency of Tripoli; while Turkey in Asia still spreads from the Euxine to the Red Sea and Persian Gulf, intact, save for the cession of Kars and Batoum to Russia after the war in 1877, and the transference of the administration of Cyprus to England. The area and population of the Turkish empire is as follows (according to the most recent estimates):

	Sq. Miles.	Pop.
IMMEDIATE POSSESSIONS—		
In Europe	65,350	6,130,200
In Asia	693,610	16,893,700
In Africa (Tripoli)	398,900	1,000,000
	1,157,860	24,028,900
TRIBUTARY STATES—		
Bulgaria and Eastern Roumelia	37,200	3,744,300
Bosnia & Herzegovina (under Austria)	19,800	1,591,100
Crete and Cyprus	7,040	547,400
Samos	180	54,840
Egypt	400,000	9,821,100
	464,220	15,758,740
Total	1,622,080	29,787,640

By vilâyets or provinces, the population of European Turkey is estimated as follows: Constantinople, 1,203,000; Salonica, 1,130,800; Kossoro, 1,038,100; Adrianople, 1,028,200; Monastir, 848,900; Yanina, 527,100; Scutari (Albania), 294,100; Chatalja (Mutessarifat), 60,000. The most populous vilâyets of Asiatic Turkey are Broussa, Smyrna, Konia, and Sivas, each with over a million inhabitants. Of cities in European Turkey, Constantinople has 1,125,000 inhabitants, Salonica 105,000, and Adrianople 81,000; in Asia, Damascus has 225,000, Smyrna 201,000, Bagdad 145,000, Aleppo 127,150, Beirût 118,800. In European provinces under immediate Turkish rule, Turks, Albanians, and Greeks, nearly equal in numbers, are 70 per cent. of the population; besides Serbs, Bulgars, Roumans, Armenians, Magyars, Gypsies, Jews, and Circassians. In Asiatic Turkey the Turks come first, with four million Arabs, besides Greeks, Syrians, Kurds, Circassians, Armenians, Jews.

Turkey in Europe, generally undulating, is traversed by a mountain-system which has its origin in the Alps, enters Turkey at the north-west corner, and runs nearly parallel to the coast, under the names of the Dinaric Alps and Mount Pindus, as far as the Greek frontier. This range sends numerous offshoots east and west; the great eastern offshoot being the Balkan (q.v.) range. The Balkans are no longer included in Turkey proper, and the highest peaks of modern European Turkey are now in the Despoto Dagh or Rhodope range (7474 feet) and the Skar Dagh (10,000 feet) on the Albanian frontier. The rivers of Turkey are chiefly, to the north of the Balkans, the Morava and numerous other tributaries of the Danube; and to the south, the Maritza, Karasu, Struma, and Vardar, which flow into the Ægean, and drain Roumelia (Macedon and Thrace): the Narenta, Drin, and Voyutza fall into the Adriatic. On the high lands the cold is excessive in winter, and the heat of summer is almost insupportable in the western valleys. Violent climatic change is, on the whole, the rule in European Turkey; but those districts which are sheltered from the cold winds, as the Albanian valleys and parts of Roumelia, enjoy a comparatively equable temperature. The soil is for the most part very fertile; but owing to oppressive taxation little progress has been made in agriculture. The cultivated products include maize, rice, rye, barley, millet, besides tobacco, madder, and cotton. The mineral products are iron in abundance, argentiferous lead ore, copper, sulphur, salt, alum, and a little gold; coal has been found, but is not worked.

Turkey in Asia is still more mountainous. The two almost parallel ranges, Taurus and Anti-Taurus cover almost the whole of the peninsula of Asia Minor (q.v.) or Anatolia with their ramifications and offshoots. From the Taurus chain the Lebanon range proceeds southwards parallel to the coast of Syria, diminishing in elevation in Palestine. The Euphrates, Tigris, Orontes, and Kizil-Ermak are the chief rivers. Turkey in Asia is ill supplied with water; and though the mountain-slopes afford excellent pasture, the plains, and many of the valleys, especially those of the Euphrates, Tigris, and Jordan (in ancient times kept very fertile by artificial irrigation), are reduced by the parching droughts of summer to the condition of sandy deserts. The fertile portions produce abundance of wheat, barley, rice, maize, tobacco, hemp, flax, and cotton; the cedar, cypress, and evergreen oak flourish on the mountain-slopes, the sycamore and mulberry on the lower hills, and the olive, fig, citron, orange, pomegranate, and vine on the low lands. The mineral products are iron, copper, lead, alum, silver, rock-salt, coal (in Syria), and limestone. Turkey in Africa is described at TRIPOLI; see also EGYPT.

The exports of Turkey include cereals, tobacco, raisins, dried figs, olive-oil, silk, wool, mohair, red cloth, dressed goat-skins, excellent morocco, saddlery, swords of superior quality, shawls, carpets, dyestuffs, embroidery, essential oils, attar of roses, opium, plum-brandy, meerschaum clay, honey, sponges, drugs, madder, gall-nuts, various gums and resins, and excellent wines. The imports are manufactured goods of all kinds, glass, pottery, arms, paper, cutlery, steel, amber, and especially cotton goods. The total annual value of exports is about £14,000,000, and of imports £23,000,000; Great Britain imports to a value of £5,800,000, and exports to Turkey about £6,000,000. The principal ports are Constantinople, Trebizond, and Smyrna. There are over 1269 miles of railway open in European Turkey, and in Asiatic Turkey 1820 (Anatolian, 640; Smyrna-Cassaba, 321; Bagdad line, 125, &c.).

The government of Turkey has always been a pure despotism; for the constitution promulgated in 1876 and revoked in 1878 was merely nominal. The sultan is represented in all matters spiritual by the Grand Mufti or Sheykh-el-Islâm, who

enjoys considerable influence as head of the Ulema, and in temporal affairs by the Grand Vezir (or Sadr-A'zam), under whom are the members of the cabinet or divan. Governmental crises are frequent; and palace intrigues have always been a powerful factor in Turkish politics. The governors of the *vilâyets* or provinces are styled *vâlis;* each vilâyet is divided into *sanjaks,* or *livas,* ruled by inferior officers. The established religion is Islâm or Mohammedanism, but most other creeds are tolerated. Since 1847 schools have been established, and colleges for the teaching of medicine, agriculture, naval and military science, &c.

Long before the Russo-Turkish war of 1877 the Turkish exchequer was evidently on the brink of insolvency. The enormous expenditure of the war, and the loss of valuable provinces, added to the utter disorganisation of Turkish finances. The revenue is about £17,000,000, the expenditure £18,000,000, the deficit being an unfailing feature. The external debt in 1904 was £123,730,000, besides the balance of the war indemnity to Russia (£23,000,000). The navy consists of 6 armoured cruisers, about 30 torpedo vessels (various), and 2 submarines. The empire has an army of 700,000 men, well armed and fairly equipped. In case of war the total force of all arms could be raised to 1,500,000.

A small tribe of Turks forced their way into Armenia in the 13th c., and helped the Seljûks against the Mongols; in the 14th c. the Turks under Osmân or Othmân conquered the Seljûk kingdom, and became known as Osmânlis or Ottomans. By 1336 they pushed their way to the Hellespont; under Murâd I. (Amurath) they occupied Adrianople and Philippopolis, received homage from the kings of Servia and Bulgaria, and practically held all the Balkan peninsula except Constantinople, which, after much fighting, fell before Mohammed II. in 1453. In the same century they conquered Albania, Greece, the Crimea, &c.; and in the 16th Syria, Egypt, Tunis, Hungary, and south Russia, and had wars with the Russians, Persians, and Venetians. Their star began to decline in the 17th century; in 1682 they were driven back from Vienna, and lost Hungary, Transylvania, and Podolia. In the 18th century the Russians were their most successful enemies, wresting from them the territories from the Dniester to the Caspian. Greece attained independence in 1828, though Egypt failed to throw off its allegiance. The Crimean war (1854–57) was fought in aid of the Turks against the Russians. The next great crisis, after risings in Herzegovina, Bulgaria, and Servia, was the Russian war of 1877–78. The worst Armenian massacres were in 1895–96. Turkey held her own against Greece in 1897; Crete was put under an autonomous government in 1898. But the Macedonian question was acute in 1903–6.

See works by Tozer (2 vols. 1869), Baker (1877), 'A Consul's Daughter' (1878), E. L. Clark (New York, 1883), Sutherland Menzies (3d ed. 1883), Rudler and Chisholm (1885), Laveleye (1887), and 'Odysseus' (Sir Charles Elliot, 1900); also, for Asiatic Turkey, by Geary (1878), Davis (1879), W. M. Ramsay (1890), and Cuinet (Paris, 1891): see also other works cited at Syria, Bulgaria, &c. For the history, see Creasy (1854) and S. Lane-Poole (1888). For the literature of the Osmânli, written in Turkish, in which the original Ural-Altaic dialect has been modified by Persian influence, see works on Turkish poetry by Redhouse (1878) and Gibb (1882).

Turkmanshai (*Toork'man-shī*), a village of Azerbijan, 65 miles ESE. of Tabriz. Here Persia concluded a treaty with Russia (1828).

Turk's Islands. See Caïcos.

Turnau (*Toor-now*), a town of Bohemia, on the Iser, 64 miles by rail NE. of Prague. Its specialty is jewellery. Here on 26th June 1866 the Prussians defeated the Austrians. Pop. 6500.

Turnberry, a shattered castle on the Ayrshire coast, 6 miles N. of Girvan. Either it or Lochmaben was Robert Bruce's birthplace. A lighthouse (1874) stands within the ruined walls.

Turnhout (*Tyrn-howt'*), a town of Belgium, 26 miles ENE. of Antwerp. It has a palais de justice (1871), and manufactures of cotton, linen, lace, paper, &c. Pop. 21,000.

Turriff, a police-burgh of Aberdeenshire, 38½ miles NNW. of Aberdeen. Pop. 2270.

Turton, a town of Lancashire, 4 miles N. of Bolton. Pop. 12,355.

Tuscaloo'sa, once the capital of Alabama, 55 miles by rail SW. of Birmingham, with the state university and insane asylum. Pop. 5100.

Tus'cany, formerly a sovereign grand-duchy in the west of Italy, lying for the most part, but not wholly, south and west of the Apennines, with an area of 9291 sq. m. Pop. (1860) 1,800,000; (1901) 2,548,154. The north and north-east of the country is filled with mountains, whence numerous rivers flow down to the sea, the most important the Arno. This district is also the source of the Tiber (q.v.). The rest of Tuscany is an undulating region of hill and dale, except the coasts, which are flat and marshy (see Maremma). Tuscany was first constituted in its present dimensions in 1569, when Cosimo de' Medici became Grand-duke. On August 16, 1860, its national assembly pronounced the deposition of the reigning dynasty, and declared for annexation to Sardinia; and in February 1861 it was declared part of the new kingdom of Italy.

Tus'culum, anciently a city of Latium, whose ruins lie 15 miles S. of Rome.

Tuskar Rock, 7 miles NE. of Carnsore Point, Wexford, has a lighthouse 110 feet high.

Tuske'gee, 38 miles E. of Montgomery in Alabama, has a Normal and Industrial Institute for coloured persons (1881) under Booker T. Washington, a coloured man. Pop. 3000.

Tutbury, a town of Staffordshire, on the Dove, 6 miles NW. of Burton-on-Trent, with the ruins of the pre-Norman castle where Mary, Queen of Scots, was twice imprisoned. Pop. 1970.

Tuticorin', a port at the SE. corner of India, 35 miles E. of Tinnevelli by rail, with pearl-fisheries and R. C. missions. Pop. 28,000.

Tuttlingen (*Toot'ling-en*), a town of Würtemberg, on the Danube, 20 miles WSW. of Sigmaringen. Pop. 13,500.

Tuxford, a town of Notts, 11¾ miles N. of Newark-upon-Trent. Pop. of parish, 1283.

Tver, capital of a Russian government at the confluence of the Volga and Tvertsa, 100 miles NW. of Moscow by rail. It manufactures cottons, hosiery, and nails. Pop. (1897) 53,477.—Area of *government,* 25,225 sq. m.; pop. 1,815,000.

Twat, or Tuat, an oasis in the western Sahara, 1000 miles SW. of Tripoli. Chief town, Ain Salah.

Tweed, the noblest of Scottish rivers, rises far up in Peeblesshire at Tweed's Well, 1500 feet above sea-level, and flows 97 miles NE., E., and again NE. through or along the boundaries

of Peeblesshire, Selkirkshire, Roxburghshire, Berwickshire, and Northumberland, till it falls into the German Ocean at Berwick-on-Tweed. It receives the Gala, Ettrick (itself fed by Yarrow), Leader, Teviot, Till, and Whitadder; is tidal for 10 miles, but almost quite unnavigable; and traces the English border for only 18½ miles, so that 'North of the Tweed' is a none too accurate phrase. It is famous for its salmon-fisheries, but more famous far for its memories: 'Which of the world's streams,' asks George Borrow, 'can Tweed envy, with its beauty and renown?' For it flows by Neidpath, Peebles, Traquair, Ashiestiel, Abbotsford, Melrose, the Eildons, Bemerside, Dryburgh, Kelso, Coldstream, and Norham Castle. Merlin, Thomas of Ercildoune, and Michael Scott—the Tweed has dim legends of these; and its ripple was the last sound heard by a fourth and a mightier wizard than them all, Sir Walter. See Lauder's *Scottish Rivers* (new ed. 1890); and Veitch's *River Tweed* (1884).

Tweedmouth. See BERWICK-ON-TWEED.

Twickenham, a town of Middlesex, on the north bank of the Thames, 11½ miles SW. of London. It is a place of many villas, and has been the residence of many notabilities—Catharine of Aragon, Lord Bacon, Lord Clarendon, Pope (who is buried in the church), Horace Walpole (Strawberry Hill still remains, although a good deal altered), Kitty Clive, several of the Orleans family, J. M. W. Turner, Lord Tennyson, &c. Pop. (1851) 6254; (1901) 20,991. See R. S. Cobbett's *Memorials of Twickenham* (1872).

Tyldesley, a town of Lancashire, 10 miles NW. of Manchester, with cotton-mills and collieries. Pop., with Shakerley, 14,891.

Tyndrum (*Tine-drum'*), a Perthshire village, 36½ miles by rail E. by N. of Oban.

Tyne, a northern English river, formed by the confluence of the North and South Tynes, a mile NW. of Hexham, and flowing 30 miles E. to the sea between Tynemouth and South Shields. The North Tyne, some of whose head-streams rise in Scotland, 11 miles SE. of Hawick, flows 32 miles S. and SE., and receives on the left the Reed Water. The South Tyne rises on Cross Fell, and flows 33 miles N. and E., receiving the Allen. The scenery of the two head-streams is beautiful, with a wealth of romantic and historical associations. The Tyne itself flows through the richest coal-mining region of Britain, and on its banks stand Corbridge, Ovingham, Newburn, Ryton, Blaydon, Newcastle and Gateshead, Walker, Jarrow, North and South Shields. Its chief affluents are the Derwent and Team. Navigable from Blaydon, 8 miles above Newcastle, from that city to the sea it is one continuous harbour. The salmon-fisheries have declined, but the shipbuilding maintains its importance. The multifarious manufactures carried on on Tyneside (which sadly defile the lower course) are indicated at NEWCASTLE. It and North and South Shields are grouped together as the 'Tyne ports.' The Tyne is also famous among English rivers for its boat-racing. See works by Guthrie (1880) and Palmer (1881).

Tynemouth (*Tin'muth*), the chief watering-place of Northumberland, 9 miles E. of Newcastle, occupies the angle formed by the line of the coast and the Tyne. The municipal and parliamentary borough comprises the townships of Tynemouth, North Shields (q.v.), Chirton, Cullercoats, and Preston. Edwin, King of Northumbria, founded here, about 627, a church of wood; King Oswald rebuilt it of stone about 640, and probably established the monastery, which suffered much from the Danes. It was refounded in 1090 by Mowbray, Earl of Northumberland. The remains of the priory are chiefly those of the church, which was built about 1100 and enlarged about 1220. The chancel, whose eastern and southern walls are still standing, is one of the most exquisite specimens of Early English. The Lady Chapel, a chantry of the Percies, was founded towards the close of the 14th c. Tynemouth castle was built about 1296. All that remains of it now is the great 14th-century gateway. A wide road extends to Cullercoats called the Grand Parade. The sands are nearly a mile long, and the cliffs are very picturesque. The aquarium (1877–78) is now used for promenade concerts. The pier, over ½ mile long, was built in 1854–92. On the cliff above it is the lighthouse, 62 feet high. A monument to Lord Collingwood, by Lough, was erected in 1845 on Galley Hill. The borough returns one member. Pop. of township (1881) 22,548; of municipal borough (1891) 46,588; (1901) 51,514. See Gibson's *Monastery of Tynemouth* (2 vols. 1846).

Tyningham House (*Tin'ing-am*), Haddingtonshire, 2¾ miles NE. of East Linton, the seat of the Earl of Haddington.

Tynwald Hill. See MAN, ISLE OF.

Tyre (Phœn. *Sûr* or *Sôr*, 'rock'), a city of ancient Phœnicia, situated in 33° 12′ N. lat. There were two towns—one on the mainland, the other on the island opposite. Tyre was a city on an island in the 14th century B.C., when it is described in an Egyptian papyrus. Explorations were made here in 1874, 1877, and 1881. Alexander the Great made a causeway from the shore, which has increased in breadth to a quarter of a mile by drifting sand. Tyre was enlarged and beautified by Hiram, and sustained sieges by Shalmaneser, Nebuchadnezzar, Alexander (332 B.C.), and Antigonus. Cleopatra received Tyre as a present from Antony; but the last trace of independence was taken from it by Augustus. In St Jerome's time it was again the noblest and most beautiful city of Phœnicia, nay, almost of the whole East. In the 7th c. it came under the Saracens, and so remained until taken and held by the Crusaders (1124–1291). Soon after it was destroyed by the Moslems; a visitor in 1355 found it a mass of ruins. About 1766 the town began to be rebuilt. About 5000 inhabitants now dwell among the ruins. Here Origen and Frederick Barbarossa are buried.

Tyree', an Argyllshire island, 19 miles NW. of Iona. Having a maximum length and breadth of 14 and 6 miles, and an area of 34 sq. m., it is treeless and flat, with a mean elevation of only 20 feet, except in the south, where three hills attain 400 feet. There are a score of fresh-water lakes. Nearly forty Scandinavian forts dot the shores, and there are also a ruined castle, nine standing stones, &c. Pop. (1831) 4453; (1901) 2192.

Tyrnau (*Teer-now'*; Magyar *Nagy-Szombat*), a town of Hungary, on the picturesque Waag valley railway, 30 miles NE. of Presburg. 'Little Rome' it used to be called, as residence of the Hungarian primates; its university (1635–1774) was transferred to Pesth. Pop. 13,830.

Tyrol (*Tee-röll'*; in England usually called *the* Tyrol'; Ger. *Tirol*), a crown-land of the Austrian empire, lying between Bavaria, Switzerland, Italy, Salzburg, and Carinthia, and embracing an area of 10,302 sq. m., to which is administratively added Vorarlberg (q.v.), 1005 sq. m., on the western frontier. The province is tra-

versed from east to west by the three chains of the Alps; the central chain (11,000 to 12,500 feet), which is crossed by the road over the Brenner Pass (4588 feet), separates the German from the Italian side. The population consists of Germans (60 per cent.) and Italians (40 per cent.), and numbered 812,696 in 1890 (with the crownland of Vorarlberg), and 981,947 in 1900. The people are noted for their fidelity to the Catholic faith and their devotion to their country, but are somewhat backward in education. The more important valleys are formed by the Inn (flowing N. to the Danube) and the Adige (S. to the Adriatic). Pastoral pursuits furnish the chief occupations, though some grain is grown, and considerable attention is paid to the cultivation of the forests (46 per cent. of the area), of fruit, wine (5,720,000 gallons annually), and silkworms. The mines were formerly of great value; but little is now extracted, except salt (at Hall), anthracite, and a little iron. Metal industries flourish in German Tyrol, cotton manufactures in Vorarlberg, and silk in Italian Tyrol. The chief towns are Innsbruck, Trent, Roveredo, Brixen, and Bozen. Tyrol, the ancient Rhætia, was conquered by the Romans under Augustus, and occupied afterwards by the Boiardi (Bavarians) and Langobardi. In 1363 its count bequeathed it to the Duke of Austria, and it has formed an appanage of the House of Hapsburg ever since, except during 1806–14, a period made memorable by the patriotic resistance of Andreas Hofer to French and Bavarians. See Miss Busk's *Valleys of the Tyrol* (1874).

Tyrone (*Ti-roan'; Tir-Eogain*, 'Owen's country'), an inland county of Ulster, 48 miles long, with an average breadth of 28. Area, including part of Lough Neagh, 1260 sq. m. or 806,658 acres, of which 110,000 acres are barren mountain, 72,000 bog, 32,000 water, roads, &c. The surface in general is hilly, and often extremely picturesque; the highest point is Sawell (2236) in the NE. Except Lough Neagh, the numerous lakes are small. The rivers are the Foyle, Mourne, Blackwater, and Ballinderry. Between Dungannon and Stewartstown there is a small but rich coal-field; marble is quarried; and there are traces of iron, copper, and lead. The climate is moist, and the low lands are often flooded. The soil of the plain is a well-tilled fertile loam; that of the hilly districts, sandy or gravelly; and there is much bog. There are manufactures of linens, coarse woollens, earthenware, whisky, and soap. The chief towns are Omagh (the capital), Strabane, Dungannon, Cookstown, and Aughnacloy; Clogher gives name to both R. C. and Protestant sees. The county has four parliamentary districts. Pop. (1841) 313,011; (1881) 197,719; (1901) 150,567—84,404 Catholics, 33,896 Episcopalians, and 29,656 Presbyterians.

Tyrrhenian Sea (anc. *Tyrrhenum Mare*), the part of the Mediterranean between Corsica, Sardinia, and Sicily on the W. and the Italian peninsula on the E.

Tzana, Tana, or Dembea, a great fresh-water lake on the high plateau of Abyssinia, south of Gondar. The greatest length is 60 miles; the breadth varies from 30 to 40. It is the main reservoir of the Blue Nile (see p. 508). The water is clear and full of fish; there are many small basaltic islands.

Tzarskoye. See Tsarskoye Selo.

Ubeda (*Oo-bay'da*), a town of Spain, 26 miles NE. of Jaen. It contains a large castle, and manufactures cloth, soap, and leather. Pop. 20,000.

Ucayali (*Oo-kī-ah'lee*), a river of Peru, one of the head-waters of the Amazon, is formed by the Apurimac and Urubamba, and winds more than 1200 miles N. to the Marañon.

Uckfield, a Sussex market-town, on the Ouse, 8 miles NE. of Lewes. Pop. of parish, 2800.

Udaipur (*Oodīpore*), or Mewar, a native state of Rajputana; area, 12,861 sq. m.; population, 1,050,000. The capital, Udaipur (or *Oodeypore*), on a ridge overlooking a romantic lake, is 140 miles SW. of Ajmere; pop. 46,000.

Uddingston, a town of Lanarkshire, near the right bank of the Clyde, 7½ miles ESE. of Glasgow. It manufactures ploughs, &c. Pop. (1861) 1256; (1901) 7463.

Udine (*Oodee'nay*), a walled town of Italy, 85 miles by rail NE. of Venice. It has a Romanesque cathedral, a beautiful campo santo, and, on a hill in its midst, a castle, formerly the residence of the patriarchs of Aquileia. Udine manufactures silk, leather, gloves, &c. Pop. 23,254.

Ufa (*Oo'fa*), a Russian town, 280 miles ESE. of Kazan. Pop. 49,300.—Ufa *government* was formed in 1865 out of part of Orenburg. Area, 47,112 sq. m.; pop. 2,196,650.

Uffculme, a Devon village, on the Culm, 2¾ miles NE. of Tiverton Junction. Pop. 1806.

Uganda (*Oogan'da*), a British protectorate in East Africa extending along the north-west shore of the Victoria Nyanza, first visited (1862) by Speke and Grant, and by Stanley called the 'Pearl of Africa.' It is partly mountainous, partly undulating, partly a plain, and very fertile on the whole and well wooded. The climate is mild (50° to 90° F.). The Waganda, about 3,000,000, are a brave and warlike people, speaking a Bantu language. At the request of King Mtesa, English Protestant missionaries settled here in 1877, and French Catholics followed in 1879. The Christians had much to suffer at the hands of Mtesa's son, King Mwanga, by whose orders Bishop Hannington was murdered in 1885. The presence of Arabs and Mohammedanism further complicated matters, and intestine struggles were not long in breaking out. Meanwhile the French priests obtained ascendency over the king, and in 1892 a war broke out between sections of the people calling themselves respectively Protestants and Catholics (the latter greatly in the majority). By the Anglo-German agreement of 1887 Uganda was recognised as within the British sphere. In 1894 a British protectorate was proclaimed; and since the treaties in 1899–1900 the protectorate includes all the countries between British East Africa, Congo Free State, Victoria and Albert Nyanzas. Its area is 120,000 sq. m., and the pop. is estimated at 4,000,000. Trade is being developed by the railway from Mombasa, which was opened to Victoria Nyanza in 1901. See, besides the travels of Stanley, &c., works by Felkin and Wilson (1881), A. M. Mackay (1890), Casati (1891), Lugard (1893), Portal (1894), Gregory (1901), and Johnstone (1902).

Ugbrooke Park, Devon, the seat of Lord Clifford of Chudleigh, 1½ mile SSE. of Chudleigh.

Uglitch (*u* as *oo*), a town of Russia, on the Volga, 58 miles W. by S. of Jaroslav. Pop. 11,183.

Ugogo (*Oogo'go*), an inland province of German East Africa, between Tanganyika and the coast.

Uintah (*Yoo-in'ta*). See ROCKY MOUNTAINS.

Uist, NORTH (*Oo'ist*), an island of the Outer Hebrides, 65 miles SSW. of Stornoway. It is 18 miles long from W. to E., and 3 to 13 wide. The eastern half of it is so cut up by lochs and watercourses as to have the appearance of an archipelago—a brown, peaty, dreary bog, partly relieved, however, by a line of coast hills (1133 feet). The west part as a rule is hilly (1500 feet). Pop. 2936.—SOUTH UIST, 36 miles SW. of Lochmaddy in North Uist, Benbecula lying between them, has a maximum length and breadth of 22 and 7¾ miles. Its east coast is much indented by Lochs Skiport, Eynort, and Boisdale. The eastern district is hill or mountainous (2035 feet); the western alluvial and productive. Pop. 3541 crofters, almost all Catholics.

Uitenhage (now called *Yoot'enhaig*), capital of a district in Cape Colony, 25 miles NW. of Port Elizabeth by rail. Pop 5331.

Ujiji (*Oojee'jee*), a town and district (German) on the E. shore of Lake Tanganyika. The chief town is the terminus of the great caravan route from Zanzibar. See Hore's *Tanganyika* (1892).

Ujjain (*Oojine'*), a walled town of Central India, in Sindia's Dominions, anciently the capital of Malwa, and one of the seven sacred cities of the Hindus, stands on the Sipra's right bank, 30 miles N. of Indore. Pop. 41,000.

Ukerewe. See VICTORIA NYANZA.

Ukraine (usually *Yoo'krayn;* Polish, 'frontier country'), long contended for by Poland and Russia, is now Little Russia (see p. 604).

Uleåborg, a seaport of Russian Finland, stands on the Ulea's S. bank, on the E. shore and near the head of the Gulf of Bothnia. It was founded in 1605, and nearly all burned down in 1822. It has dockyards. Pop. 15,860.—Area of *Uleåborg government*, 63,971 sq. m.; pop. 283,500.

Ullapool, a Ross-shire village, on Loch Broom, 44 miles NW. of Dingwall. Pop. 700.

Ulls'water, after Windermere the largest of the English 'Lakes,' between the counties of Cumberland and Westmorland, 5½ miles SW. of Penrith and 11 ESE. of Keswick. Lying 477 feet above sea-level, it is 7½ miles long, ¼ to ⅔ mile broad, and 205 feet in maximum depth. It is divided into three reaches, which increase in beauty and grandeur as one goes up it from Pooley Bridge to Patterdale, a chief feature, lofty Helvellyn (q.v., 3118 feet).

Ulm (*Oolm*), the second city of Würtemberg, 58 miles SE. of Stuttgart and 91 WNW. of Munich, on the left bank of the Danube, which here receives the Blau and the Iller and becomes navigable. On the Bavarian side of the river is New Ulm (pop. 7593). Ulm till the war of 1866 was a fortress of the Germanic Confederation; its fortifications (1842–66) have since been greatly extended. The beautiful Protestant cathedral, next to that of Cologne the largest church in Germany, was built mainly in 1377–1494. It is 455 feet long, 186 broad, and 134 high; the tower and open-work spire (530 feet, the highest in the world) was only completed in 1890. The splendid organ (1856–88) has 6286 pipes. Other edifices are the 15th-century town-hall, the 'New Building' (1603) on the site of a palace of Charlemagne's, and the Teutonic Knights' Commandery (rebuilt 1718). Leading industries are the manufacture of cotton, woollen, and other textiles, of paper, leather, beer, &c., and Ulm is famed for pipe-bowls and pastry. Pop. (1871) 26,290; (1900) 42,982, of whom one-fourth were Catholics. The Romans had a settlement here. Ulm was in October 1805 the scene of the defeat by Ney of General Mack, and of his surrender with 28,000 Austrians. In 1802 it was attached to Bavaria, and in 1810 became part of Würtemberg.

Ulster, the most northern of the four provinces of Ireland, is divided into nine counties—Antrim, Armagh, Cavan, Donegal, Down, Fermanagh, Londonderry, Monaghan, and Tyrone. The north-eastern portion, now Down, was overrun in 1177 by John de Courci, and was the most permanent seat of English power in the north; but the 'plantation of Ulster' was not effected until the reigns of Elizabeth and James I. Of this gigantic scheme of colonisation the chief seat was the county of Londonderry (q.v.). The Scottish element has long been dominant in some parts of Ulster, especially the north-east, but is very unequally distributed. The originally English and Scottish element varies from 75 per cent. in Antrim to about 20 in Cavan. In 1861 the whole pop. of Ulster was 1,914,236 (966,613 Roman Catholics); in 1871, owing to emigration, the numbers were 1,833,228 (897,230); in 1881, 1,730,542 (833,566); and in 1901, 1,582,826, of whom 699,202 were Catholics, 425,526 Presbyterians, 360,373 Protestant Episcopalians. The distribution of confessions varies in different parts—the Protestants numbering 75 per cent. in Antrim, but only 20 per cent. in Cavan. The preponderance of Protestants in parts of Ulster has led to diversity of feeling and aims between Ulster and more thoroughly Catholic parts of Ireland; Ulstermen have offered resolute resistance to Irish Home Rule. Belfast (q.v.) is the most enterprising town of Ulster and of Ireland; flax-spinning is the chief industry after agriculture

Ulundi. See ZULULAND.

Ulva (*u* as *oo*), an Argyllshire island, on the W. coast of Mull, adjoining Gometra. Area, 7½ sq. m.; altitude, 1400 feet; pop. 71.

Ul'verston (locally *Ooston*), a Lancashire market-town, in Furness (q.v.), near the influx of the Leven estuary to Morecambe Bay, 8½ miles NE. of Barrow-in-Furness and 22 NW. of Lancaster. It stands in a mining and agricultural district, has a ship-canal 1 mile long, and manufactures iron, paper, boots, &c. Pop. (1851) 6433; (1881) 10,008; (1901) 10,064.

Ulwar. See ALWAR.

Uman (*Oo-man*), a town of Russia, 120 miles S. of Kieff, on the Umanka. Pop. 28,630.

Umbal'la, or AMBÁLA, a city of the Punjab, 150 miles N. by W. of Delhi. The new part of the town has straight, wide roads, and a handsome church, club-house, and hotels. It is an important railway junction. The cantonment is 4 miles SE. Pop. (1901) 78,638.

Umbria, an ancient division of Italy, W. of Etruria, and N. of the country of the Sabines.

Umrit'sir. See AMRITSAR.

Unalash'ka. See ALEUTIAN ISLANDS.

Ungava, the Canadian district that includes most of Labrador (q.v.) peninsula.

Ungvár, a town of Hungary, on the Ungh, 325 miles NE. of Budapest. Pop. 14,730.

Union, a town of New Jersey, on the Hudson, opposite New York. Pop. 15,190.

Union Canal, constructed in 1818-22, extends 31½ miles W. from Edinburgh to the Forth and Clyde Canal, near Falkirk.

United Provinces. See HOLLAND.

United States of America, the largest (next to Brazil) and most important republic of the world, embracing nearly one-half of the habitable area of the North American continent, and about seven-eighths of its inhabitants. Its area is more than three-fourths that of all Europe; including Alaska, it is almost equal to it; but its population is less than one-fifth of that of Europe. Alaska (q.v.) is rather a dependency than an integral part of the country, which, without it, occupies the central part of the continent from the Atlantic to the Pacific Ocean, and from Canada on the north to Mexico on the south. It lies between the parallels 24° 30′ and 49° N. lat., and between the meridians 67° and 124° W. long. Its greatest length, E. to W., is about 2700 miles, and its greatest width, N. to S., about 1600 miles. Its total area is, without Alaska, somewhat more than 2,900,000 sq. m. As compared with Europe the coast of the United States has few indenting bays or projecting peninsulas, though the Gulf of Mexico is of special climatic and commercial importance. Long Island Sound, Delaware and Chesapeake bays, Albemarle and Pamlico sounds, the harbours of Charleston and Savannah, though not great geographical features, are of commercial importance. On the Pacific, Puget Sound, the Bay of San Francisco, and the harbour of San Diego, are almost the only noticeable breaks. Long Island is the largest of the islands.

The two great mountain-systems of North America, one along the western, the other near the eastern border, form the framework or skeleton of the physical structure. In the east are the Appalachian (q.v.), from whose eastern base a coast-plain extends to the sea. Narrow in Maine, the system grows gradually wider, until in North Carolina it attains a width of 200 miles. The southern coast-region seldom exceeds 100 feet above the sea. It has a sandy soil, and many large swamps near the coast. The middle elevated region is diversified by hills and valleys, and has a productive soil. West of the Appalachian system and lying between it and the western highland is the Central Valley, forming part of the great continental depression which extends from the Arctic Ocean to the Gulf of Mexico. It is almost an absolute plain, rising gradually from the Gulf toward the chain of Great Lakes in the north, and toward the mountains on the east and west. The only important departure from the level is the ridge of the Ozark Mountains (500 to 2000 feet), running from S. Missouri through NW. Arkansas. This great valley occupies about one-half the entire area of the United States, and the fertile prairies and bottom-lands of the eastern and central portions make it the most important agricultural basin of the globe. From an irregular line west of the Mississippi River the land rises in an almost imperceptible slope till it reaches the base of the western plateau. Much of this region, known as the Great Plains, has a light rainfall, but affords admirable pasturage.

The western or Pacific system of mountains (see AMERICA) is a great plateau of 4000 to 10,000 feet surmounted by a complex system of ranges, in its widest part more than 1000 miles broad. Of this Cordilleran region the Rocky Mountains (q.v.) form the eastern and the Sierra Nevada (q.v.) and Cascade Mountains (q.v.) and the Coast Ranges the western border. In the ranges of central Colorado alone nearly forty of the summits have an altitude of more than 14,000 feet. In the Wind River Mountains, in Wyoming, are the head-waters of the Colorado, the Columbia, and the Mississippi, the three great river-systems of the United States. Between the Wahsatch Range and the lofty masses of mountains in Colorado is a region furrowed by cañons or gorges, whose sides are nearly vertical; and the bed of the Colorado (q.v.) is in some places more than a mile and a quarter below the surface of the plateau. Between the Wahsatch Range and the Sierra Nevada lies the Great Basin (see GREAT SALT LAKE), much of it an absolute desert. The Sierra Nevada and the Cascade Range (q.v.) are topographically continuous. Most of the peaks of the Sierras are, however, of granite and metamorphic rock, while those of the Cascade Range are volcanic. The greatest altitude is attained in Whitney (14,898 feet); the sublimity of the scenery is justly celebrated (see YOSEMITE). From 40° there extends northward one of the most remarkable groups of extinct or faintly active volcanoes to be found anywhere in the world; the lava overflows in this region cover an area of upwards of 200,000 sq. m. The passage of the Columbia River is a grand cañon more than 3000 feet in depth. North of the Great Basin, between the Cascade Range and the Rocky Mountains, is the Northern or Columbian Plateau. The Shoshone Falls (q.v.) of the Snake River probably rank next to Niagara in grandeur. Between the Coast Ranges and the Sierra Nevada and Cascade Range is a series of broad valleys, in Oregon that of the Willamette, and in California those of the Sacramento and the San Joaquin.

Besides the chain of Great Lakes which forms a part of the northern boundary, there are thousands of lakes in the New England states and in New York, nearly ten thousand in Minnesota, and numerous mountain-lakes among the Cordilleras. The peculiar lacustrine character of the northern portion of the United States is undoubtedly a legacy of the glacial period. The drainage areas may be broadly classified as the Great Lake or St Lawrence, the Atlantic, the Pacific, and the Great Basin or interior systems of drainage. The Atlantic system might be subdivided into two classes, one comprising the streams flowing directly to the sea, the other comprehending those of the Central Valley, which discharge their waters into the Gulf of Mexico. Among the rivers of the Atlantic slope are the Penobscot, Kennebec, Merrimac, Thames, and Connecticut in New England, the Hudson, Delaware, Susquehanna, Potomac, James, Roanoke, Neuse, Cape Fear, Great Pedee, Santee, Savannah, Altamaha, and St John's. The Mississippi-Missouri, with its tributaries the Ohio, Platte, Arkansas, and Red rivers, is the chief stream of the Central Valley, and in length and extent of navigable water it surpasses all other rivers of the world. East of the Mississippi are the Mobile and Appalachicola, and to the west the Sabine, Brazos, and Rio Grande. The Colorado, the Sacramento and San Joaquin, the Willamette, and the Columbia are the chief rivers emptying into the Pacific. With its great extent and its diversified topography of the United States, there is every variety of climate characteristic of the temperate zone. The annual isothermal lines, except where they are influenced by the two great mountain-systems, pursue a fairly uniform east and west course across the country. A marked difference

is, however, observable in the disposition of these lines on maps representing respectively the summer and the winter temperatures. The influence of the oceans and of the Great Lakes is at once apparent, modifying both the heat of summer and the cold of winter, whereas in the interior and in the region of the Cordilleras the extremes of heat and cold are both abnormal. The warm ocean current of the Pacific, which bathes the western coast, produces a more uniform temperature than that of the Atlantic seaboard, along which flows a cold polar current. The annual range of temperature is very great. In winter there sometimes exists at the same instant between the northern and the southern borders a difference of 120°. In summer the diurnal variation of a single locality is in some instances from 40° to 50°. A narrow strip in the south, including the southern portions of Florida, New Mexico, and Arizona, has what may be called a tropical climate. Northern Florida, southern Louisiana, southern Texas, and portions of New Mexico, Arizona, and southern California have a subtropical climate. The sugar and rice regions have a mean annual temperature above 70°. The tobacco region lies between the isotherms of 50° and 60°. The annual temperature of the great cotton region ranges from 60° to 68°, and the prairie regions devoted to the raising of wheat and other hardy cereals seldom have an average temperature above 55°. The rainfall of the United States varies greatly in different sections, not only as to quantity, but as to distribution throughout the year. The eastern part of the country is well watered. The western portion, excepting the strip between the Sierras and the Cascade Range and the Pacific Ocean, and a few limited areas favoured by some peculiar features of topography, has an insufficient supply, and agriculture is dependent for success upon irrigation. Between the two regions is a belt, approximately following the meridian of longitude 100°, in which agriculture may sometimes be carried on without recourse to irrigation, but which in any season is liable to suffer from drought. For the rainfall of the Pacific Coast, see CALIFORNIA. The eastern portion of the United States is in the main well wooded. Forests also occur in northern California, Oregon, Washington, Wisconsin, and Minnesota (the scene of great forest fires in 1894), and in northern Idaho and Montana. The Cordilleran region and the Great Plains are treeless, except upon high plateaus and mountains. The distribution of forests very closely follows the distribution of rainfall.

Besides Alaska, there are fifty political divisions. Of these forty-five are states enjoying the full privileges afforded by the federal constitution; three are organised territories not yet admitted to statehood; one is an unorganised territory set apart as a home for Indian tribes, and one is a special district containing the capital of the nation. Of the total population, 96 per cent. of the inhabitants live in that part of the country which is drained to the Atlantic Ocean, and more than one-half live in that drained by the Gulf of Mexico. The greatest density of population is in the region having a mean annual temperature of from 50° to 55°. From this maximum the density rapidly diminishes with the increase or decrease of temperature. There are three cities, New York, Chicago, and Philadelphia, with over 1,000,000 inhabitants. Three, St Louis, Boston, and Baltimore, have each more than 500,000. There are thirty-two cities having between 500,000 and 100,000; forty between 100,000 and 50,000; and eighty-one between 50,000 and 25,000 inhabitants.

Political Divisions.	Date of Admission.	Area in sq. m.	Pop. in 1900.	Pop. per sq. m.
Alabama	1819	52,250	1,823,697	35·5
Alaska Territory	..	570,000	63,592	0·1
Arizona Territory	..	113,020	122,931	1·1
Arkansas	1836	53,850	1,311,564	24·7
California	1850	158,980	1,485,053	9·5
Colorado	1876	103,925	539,700	5·2
Connecticut	1788	4,990	908,420	187·5
Delaware	1787	2,050	184,735	94·3
Dist. of Columbia	..	70	278,718	4645·3
Florida	1845	58,680	528,542	9·7
Georgia	1788	59,475	2,216,331	37·6
Idaho	1890	84,800	161,772	1·9
Illinois	1818	56,650	4,821,550	86·1
Indiana	1816	36,350	2,516,462	70·1
Indian Territory	..	31,400	392,060	12·6
Iowa	1846	56,025	2,231,853	40·2
Kansas	1861	82,080	1,470,495	18·0
Kentucky	1792	40,400	2,147,174	53·7
Louisiana	1812	48,720	1,381,625	30·4
Maine	1820	33,040	694,466	23·2
Maryland	1788	12,210	1,188,044	120·5
Massachusetts	1788	8,315	2,805,346	348·9
Michigan	1837	58,915	2,420,982	42·2
Minnesota	1858	83,365	1,751,394	22·1
Mississippi	1817	46,810	1,551,270	33·5
Missouri	1821	69,415	3,106,665	45·2
Montana	1889	146,080	243,329	1·7
Nebraska	1867	77,510	1,066,300	13·9
Nevada	1864	110,700	42,335	0·4
New Hampshire	1788	9,305	411,588	45·7
New Jersey	1787	7,815	1,883,669	250·3
New Mexico Ter.	..	122,580	195,310	1·6
New York	1788	49,170	7,268,894	152·6
North Carolina	1789	52,250	1,893,810	39·0
North Dakota	1889	70,795	319,146	4·5
Ohio	1802	41,060	4,157,545	102·0
Oklahoma Ter.	..	39,030	398,331	10·3
Oregon	1859	96,030	413,536	4·4
Pennsylvania	1787	45,215	6,302,115	140·1
Rhode Island	1790	1,250	428,556	407·0
South Carolina	1788	30,570	1,340,316	44·4
South Dakota	1889	77,650	401,570	5·2
Tennessee	1796	42,050	2,020,616	48·4
Texas	1845	265,780	3,048,710	11·6
Utah	1894	84,970	276,749	3·4
Vermont	1791	9,565	343,641	37·6
Virginia	1788	42,450	1,854,184	46·2
Washington	1889	69,180	518,103	7·7
West Virginia	1863	24,780	958,800	38·9
Wisconsin	1848	56,040	2,069,042	38·0
Wyoming	1890	97,890	92,531	0·9
Total	..	3,595,500	76,149,386 *	25·15

* Including 129,518 Indians on Reservations outside of the Indian Territory, and 91,219 persons abroad in the service of the United States. The Hawaiian Islands Territory (154,001), Porto Rico (953,243), the Philippine Islands (8,500,000), Guam and Samoa (13,000), are also, more or less intimately, parts or dependencies of the United States. The census of 1900 does not, of course, recognise the incorporation of Indian Territory with Oklahoma (1905), or the (for a time debated) incorporation of New Mexico with Arizona, promoted to be a state (1905).

Coal, petroleum, and the burnable rock gases exist in remarkable quantities in the United States, particularly in the region to the east of the Mississippi River. The most important metallic resources of the United States are found in its iron ores, which exist in great quantities in various parts of its territory. Copper is also widely distributed, and so are lead ores, mainly in the form of galena. Oxide of manganese is found, and iron pyrites; ores of tin show at many points, but so far not of commercial value. Nickel has been mined in Pennsylvania and in Oregon. Platinum occurs, though it is not yet economically valuable. From the eastern face of the Rocky Mountains westward to the Pacific coast deposits of varied character containing silver and gold are extremely abundant. In fact this portion of the Cordilleran region appears to be the richest in precious metals of any equal

area in the world. The silver of this district generally occurs in combination with galena, and has thus been won so cheaply and in such quantities as greatly to lower the price of the metal in the world's markets. The Comstock lode of Nevada is remarkable for its great width and the surprisingly rich though widely separated pockets of ores of gold and silver which it afforded. The building stones of the United States are abundant, and include granites, slates, marbles, limestone, sandstone; also clays, cements, and rich phosphatic rocks (for manures). No valuable precious stones have been found in quantity. The mineral springs of the eastern States exhibit no great variety. Hot springs of much medicinal value occur at Little Rock, Arkansas. In the Cordilleran district the number of mineral springs and hot springs is exceedingly great. The country at large has no national system of education. By the constitution of the United States only such powers are vested in the federal government as concern the whole people. Education is left to the states, though the central government has contributed greatly to the encouragement of schools and the integration of systems. The public school system now is practically co-extensive with the nation; elementary denominational schools are neither numerous nor largely attended. But of 506 colleges entitled to grant degrees 382 are avowedly denominational. There are also (approximately) 200 superior institutions, independent of both church and state, varying greatly as to quality of work, empowered to grant degrees. Of the eight colleges of the first class for women seven are private foundations, and enrol more than 2000 students. Of the 132 degree-giving institutions for women included in the second class 59 are private organisations, and have an attendance of about 9000 students. Of the 12 university foundations five are independent corporations having 6000 students. Sixty-one of the 384 colleges for men alone or for both sexes are private, and enrol 10,000 students. In addition to these still, there are 32 independent schools of science with 8000 students. The schools of all grades enrol approximately 18,000,000 pupils. Of this number nearly 16,500,000, or 90 per cent., belong to public institutions; the remaining 10 per cent. to denominational and private schools. Among the professions medicine ranks first in number of schools (281), theology second (150), and law last (100). The schools of theology have nearly 7600 students, of whom over 180 are women. In the schools of law are 13,600 students, and in medicine (including surgery, dentistry, pharmacy, and veterinary science) there are as many as 40,000 students. There are also 48 schools of technology, with 15,000 students; 132 colleges for women, with 23,750 students; and 448 schools for nurses, with 11,600 students. There are besides schools for deaf-mutes, the blind, the feeble-minded, and reform schools for the wayward. The total amount expended on elementary and secondary public schools, from all sources (from permanent endowments, property-tax, local or general, &c.), is over $187,320,000; on the 472 universities and colleges, about $19,000,000; and on the 48 technical schools, $3,550,000. The number of teachers in common schools increased from 200,515 in 1870 to 430,000 in the first years of the twentieth century.

The first census of the Union was taken in 1790, when it comprised thirteen states; in 1820 there were twenty-three states and three territories; in 1860 thirty-three states and five territories; in 1880 thirty-eight states and nine territories; in 1900 forty-five states and five territories, not including Alaska and island dependencies. The table shows the population of the republic till 1900 (see p. 717).

Year.	White.	Free Coloured.	Slave.	Total.
1790	3,172,006	59,527	697,681	3,929,214
1820	7,862,166	233,634	1,538,022	9,633,822
1860	26,922,537	488,070	3,953,760	31,443,321
1880	43,402,970	6,580,793	..	50,155,783
1890	54,983,890	7,470,040	..	62,622,250
1900	67,308,998	8,840,388	..	76,149,386

In 1900, 13·7 per cent. of the population was foreign-born, 26·9 per cent. of these being from the United Kingdom, and two-thirds of these again from Ireland. There is no state church in the United States. In 1890 the Roman Catholics claimed to have over 6,250,000 of the population; the Methodists, nearly 5,000,000; Baptists, 4,300,000; Presbyterians, 1,230,000; Lutherans, 1,086,000; Congregationalists, 492,000; and the Episcopal Church, 480,000. In 1900 there were 5,739,657 farms, which had a total acreage of 841,201,546. Over 165,000,000 acres were under maize, wheat, and oats in 1904, and the total production was 3,914,477,000 bushels. Potatoes, rye, barley, buckwheat, rice, sugar, cotton, tobacco, hemp, flax, hops, are other crops. In 1905 there were—cattle, 61,241,907; sheep, 45,170,423; swine, 47,320,511; horses, 17,057,702; mules, 2,888,710. The total value of farm animals exceeds 3000 million dollars. The total area under cotton exceeds 27,000,000 acres, and the value of the crop amounts to nearly $419,000,000. There are over 1,037,000 acres under tobacco, and the value of the crop is over $55,500,000. The census for 1900 shows an increase in the textile industries over that of 1890 amounting to nearly $200,000,000, the total value of the product being $931,494,566. The pig-iron industry, which in 1885 produced 4,044,526 tons, produced in 1903 18,009,252 tons; steel in the form of ingots and direct castings aggregated 14,947,250 tons in 1902, against 1,711,920 in 1885. The total value of the manufactured products of the United States in 1900 was over $13,000,000,000. The minerals (chiefly pig-iron and coal, followed by silver, anthracite, and building stone) have a value of $1,260,500,000. In 1903 there were in the United States over 2500 miles of canals; of railways, 207,977 miles; of telegraphs, 250,000 miles; and of telephones, 3,500,000 miles of wire. The value of lumber is about $600,000,000 a year; of the fisheries, $50,000,000. The imports in 1904–5 were of the value of $1,117,512,629, and on these duty to the amount of $262,060,528 was paid. The exports for the same years amounted to $1,518,561,720. The chief trade is with Great Britain, which receives more than one-third of all the exports, and supplies nearly a fourth of the imports. The leading exports are bread-stuffs, cotton, meat and dairy produce, mineral oils, animals, iron and steel and manufactures, wood and manufactures, tobacco, &c.; the principal imports, sugar, coffee, iron and steel manufactures, flax, hemp, jute, and their manufactures, chemicals, and woollen and cotton goods. Foreign commerce of recent years has been carried on largely in foreign bottoms, but efforts are now being made to increase the United States mercantile marine. In 1903 there were registered 12,836 sailing-vessels of 1,965,924 tons, and 8054 steam-vessels of 3,408,088 tons; 888,776 tons was the burthen of all ships engaged in the foreign trade,

The navy has been to a great extent reorganised, and in 1905 comprised, besides old vessels, &c., 13 battle-ships, 22 cruisers of all kinds, with torpedo boats and destroyers and submarines, and 35 vessels of all classes building, with 1254 officers and 41,532 men, including marines. The standing army limit was raised in 1901 to 100,000 men. The militia is supposed to comprise all men in each state, from eighteen to forty-five, capable of bearing arms; the returns show only 9376 officers and 115,627 men. The federal revenue in 1904–5 was $697,101,270 (an increase of $12,886,896 on the previous year). In the same year the expenditure was $720,105,498. The gold, including reserve and trust funds, amounted to $739,898,600, and the outstanding principal of the public debt was $895,158,840.

The head of the executive of the United States is a president, who is commander-in-chief of the army, navy, and militia, and exercises a veto on the decisions of Congress. President and vice-president are chosen, for four years, by electors appointed by the several states of the Union. The president chooses a cabinet of eight members, each having charge of an administrative department, but none of them having a seat in Congress; the senate must approve the president's choice. The legislative power belongs to the Congress, which comprises a Senate and a House of Representatives. Senators are chosen, two from each state, by the several state legislatures, and hold office for six years. The Senate has the power of confirming or rejecting treaties with foreign powers. The House of Representatives is composed of members elected biennially by the several states, the franchise not being precisely similar in all the states. Usually the electors are all male citizens of 21 years of age. Wyoming, Colorado, Idaho, and Utah give women the privilege. The number of representatives for each state is proportional to population (after the census of 1900, in the proportion of one for 194,000 inhabitants). The territories send delegates who may speak but do not vote. Senators and representatives have a salary of $5000, with travelling expenses. Each state in the Union has its own constitution, which provides for a governor, legislature of two houses, and distinct judicial system. The details vary considerably in the various states, but are analogous to the constitution of the Union. The state legislature is supreme in all matters except those reserved for the Federal government.

The first settlements in North America north of Mexico were made by the Spaniards in Florida and the French on the banks of the St Lawrence. In 1607 the Virginia Company settled the first permanent English colony at Jamestown in Virginia. The Pilgrim Fathers arrived at New Plymouth in 1620; ten years later the colony of Massachusetts was established; and in 1643 Massachusetts, New Plymouth, Connecticut, and New Haven constituted the United Colonies of New England. Maryland, Carolina, New York, New Jersey, Pennsylvania were formed; and when in 1732 Georgia was founded, the coast was pretty well occupied by English colonies. The English area was enormously increased after the great struggle with France (1690–1763), when in 1763, by the peace of Paris, France gave up all her claims to Canada and all lands east of the Mississippi and north of Florida. Spain also ceded most of her holdings. In the great revolutionary struggle which followed on the Declaration of Independence (1776) there were thirteen states, the western boundary of the colonies being practically the Alleghanies; by the peace of 1783 the United States acquired all the land westwards to the Mississippi. In 1803, by the 'Louisiana Purchase,' the western part of the basin of the Mississippi passed to the republic. In 1819 Florida became part of the national territory. Texas was annexed in 1845; New Mexico, part of Arizona, and California were added in 1848. In 1787 it had been fixed that no states north of the Ohio should be slave-holding states. At all extensions of area there had arisen fierce struggles between those favourable and those hostile to the increase of the slave-holding area. The great question was finally settled by the civil war of 1861–65, when the southern states of Virginia, North and South Carolina, Georgia, Florida, Alabama, Tennessee, Mississippi, Arkansas, Louisiana, were overcome by the Union. In 1867 the United States purchased Alaska from Russia, and the boundary dispute with Britain was settled in 1903. The war with Spain in 1898–99 resulted in the loss to Spain of Cuba, and in the Philippine Islands, Porto Rico, and Guam (Caroline Islands) being made dependencies of the States; the Hawaiian Islands (1889) and Samoa (1900) have also been added.

See AMERICA and the articles on the several states; the U.S. census reports; *North America* in 'Stanford's Compendium,' by Hayden and Selwyn; Shaler's *Geography of North America;* works on the resources and industries of the U.S., by Bishop (1864), Bolles (1881), Patton (1888); works on the constitution, by Story, Kent, Wharton, Curtis, Cooley, De Tocqueville, and Bryce; histories of the literature, by Tyler (1878), Nichol (1882), Richardson (1888); and general histories by Gay, Bryant, Macmaster, Hildreth, Doyle, Payne, Goldwin Smith (1894), and others.

Unna (*Oon'na*), a Prussian town of Westphalia, 15 miles E. of Dortmund. Near by are the famous Königsborn salt-works. Pop. 14,950.

Unst, an island in the extreme north of Shetland, 38 miles N. by E. of Lerwick. It is 12½ miles long, 2 to 6 miles wide, 934 feet high, and 46¾ sq. m. in area. Pop. 1940.

Unterwalden (*Oonterval'den*), one of the four 'Forest Cantons' of Switzerland, forms part of the hill country round the Lake of Lucerne; area, 295 sq. m.; population, 30,000. It is divided into two parts, Upper and Lower; the capital of the Obwald is Sarnen, and of the Nidwald Stanz. See Sowerby's *Forest Cantons* (1892).

Unyanyem'be (*u* as *oo*), a district of German East Africa, between Tanganyika and the coast.

Unyo'ro (*u* as *oo*), a state of Central Africa between Uganda and the Albert Nyanza, with a pop. of 1,500,000, who are more uncultured than their neighbours and kinsmen of Uganda.

Uper'nivik. See GREENLAND.

Uphall, the parish containing Broxburn (q.v.).

Upholland, a Lancashire town, 4 miles W. of Wigan. Pop. 4773.

Upolu (*Oo'poloo*). See SAMOA.

Uppingham, a market town of Rutland, 2½ miles WNW. of Seaton by a branch-line (1894), 12 SW. of Stamford, and 83 NNW. of London. The parish church, of which Jeremy Taylor was rector, was mainly rebuilt in 1861; but the feature of Uppingham is its public school, founded in 1584 by Archdeacon Robert Johnson (1540–1625). With an endowment of only £1000 a year, it owes its development from a mere grammar-school to Edward Thring, its headmaster from 1853 to 1887. He found it with only 25 boarders, and

left it with 330; and to him was due the building of the great schoolroom, chapel, gymnasium, swimming-bath, &c. Pop. 2559. See the *Century Magazine* for September 1888.

Upsala (*Oopsâh'la*), the historic centre of ancient Sweden, stands on a little stream that runs down to Lake Mälar, 41 miles by rail N. by W. of Stockholm. Its existing importance is due to its being the seat of Sweden's only archbishop, and of the principal university. The Gothic brick cathedral was founded in 1289, completed in 1435, partly burned down in 1702, and only partly restored. It contains the tombs of Linnæus and Gustavus Vasa and some other Swedish kings. The university, founded in 1477, though new buildings were erected in 1877, is attended by 1400 students, and possesses a library (1620) of 300,000 volumes and 10,000 MSS., an observatory, botanical garden, &c. In the older town, around which on E. and N. new suburbs have been built, there stands the castle of Gustavus Vasa (1548). Pop. 23,800. About 3 miles NE. lies OLD UPSALA, where are three vast tumuli of the ancient legendary kings; and 4 miles SE. are the Mora stones, on which the old kings used to take the oaths of good governance.

Upton-on-Severn, a Worcestershire town, 5½ miles NNW. of Tewkesbury. Pop. 2220.

Ural (*Ooral*), a river of Russia, rises on the E. side of the Urals in Orenburg government, and runs 1450 miles SSW. to the Caspian, being practically the boundary between Europe and Asia. For the Ural Mountains, see RUSSIA, p. 603.

Uralsk (*Ooralsk*), a Russian town, on the Ural's right bank, 280 miles N. of its mouth in the Caspian Sea. Pop. 40,000.—Area of Uralsk *government*, 139,168 sq. m.; pop. 692,500.

Urbana, capital of Champaign county, Ohio, 95 miles NNE. of Cincinnati. It manufactures woollens, carriages, glue, &c. Pop. 6810.

Urbino (*Oorbee'no*; anc. *Urbinum Hortense*), a city of Central Italy, nestling among wooded hills, between the rivers Foglia and Metauro, 29 miles from Faro station (97 miles by rail SE. of Bologna). It is a town of narrow, tortuous streets, with an archbishop's cathedral; a magnificent ducal palace (1447; restored, and now housing the fine art institution); a free university (1564) with some 90 students; and the house in which Raphael was born, now the town museum. Urbino was the seat of a line of independent dukes from 1474 to 1631. Pop. (commune) 18,300.

Ure, a river in the North Riding of Yorkshire, flowing 50 miles E. and SE. till at Myton it joins the Swale to form the Ouse.

Urfa, a modern name for Edessa (q.v.).

Urga (*Oorga*), the religious capital of Mongolia, on the river Tola, 180 miles SE. of Kiachta, on the trade-route to Peking. Its college of Mongolian priests is the seat of the Bogdan or Lama of the Mongols. Pop. (partly living in tents outside the city proper) 30,000, of whom 6000 or 7000 are Chinese.

Urgel (or Seo de Urgel; *Oor-hel*), a town in the Catalonian province of Lerida, at the foot of the Pyrenees. Pop. 2835. See ANDORRA.

Urgenj. See KHIVA.

Uri (*Ooree*), one of the 'Forest Cantons' of Switzerland, forms part of the hill country which surrounds the Lake of Lucerne; area, 416 sq. m.; population, 20,000. It consists of the Reuss's valley, traversed by the great road and the railway into Italy over the St Gothard Pass. Altorf (q.v.) is the capital. See Sowerby, *The Forest Cantons of Switzerland* (1892).

Uriconium. See WROXETER.

Urie. See INVERURIE.

Urmia (*Oor'meea*), a town of the Persian province of Azerbijan, 10 miles W. of the Lake of Urmia; pop. 32,000. It was said to be Zoroaster's birthplace. The Lake (4500 feet above the sea) measures 90 miles by 25; contains numerous islands; has no outlet, but many feeders, some 80 to 150 miles long; is intensely salt; and is only 12 to 40 feet deep.

Urr Water, a Kirkcudbrightshire stream, flowing 27 miles S. by E. to the Solway Firth.

Uruguay (*Ooroogwī'*; formerly known as the *Banda Oriental* or 'Eastern Bank'—i.e. of the Uruguay) is the smallest of the South American republics, although its area—72,110 sq. m.—is three-fifths that of the United Kingdom. The Atlantic washes its shores for 120 miles, the Plate and Uruguay rivers for nearly 600 miles; the Rio Negro flows across the central portion. The country is full of low hills or ranges, the highest reaching only 1650 feet. Gold and copper mines are worked, but little has been done to exploit the varied mineral wealth of the country. The normal temperature is between 35° and 90° F. The pop., estimated at 684,000 in 1889, and at 964,000 in 1901, is made up mainly of half-breeds, including Gauchos; but the foreign element, largely Basques and Italians, is rapidly increasing. The leading industry is the raising of cattle and sheep; six-sevenths of all the exports is pastoral and saladero produce. Liebig's factory is at Fray Bentos (q.v.). Uruguay possesses some 17,000,000 head of sheep and 6,500,000 of cattle; the chief crops are wheat and maize. The imports have a value varying from $23,700,000 to $32,360,000 per annum; the exports from $27,700,000 to $29,000,000. Uruguay is divided into nineteen departments. The president is elected for four years, and with a strong military force (3500 men) he is practically master of the country. The navy has only 185 men and officers, manning three gunboats, seven steamers, &c. The revenue varies from $16,200,000 to $17,900,000; the expenditure statistics are not so reliable, but the accounts are supposed to balance, and the debt is $123,000,000 (largely for railways). The state religion is Roman Catholic, but all are tolerated. About 1000 miles of railway are open; and there are 4000 miles of telegraph lines. The chief towns are Montevideo (the capital), Paysandú, Colonia, and Minas. Uruguay was long a bone of contention between the Portuguese and Spaniards, and, after it became independent (1814), between Brazil and Argentina. In 1828 Brazil and Argentina guaranteed its independence; but a new series of wars began in 1839, and Montevideo sustained an eight years' siege. Uruguay, which has been shamefully misgoverned and plundered, joined Brazil and Argentina against Paraguay in 1868. See books on the Plate region by Mulhall and by Levey, and a work by W. H. Hudson (1885).

Uruguay River rises in Brazil, and flows nearly 1000 miles W. and S. to form with the Paraná the La Plata (q.v.) estuary. It separates Brazil and Uruguay from Argentina; is much encumbered by rapids; but is navigable to Salto (200 miles).

Urumiah. See URMIA.

Urumtsi (*Ooroomtsee*), the chief city in Chinese Zungaria, at the N. base of the Tian-shan Moun-

tains. It commands the main route from Mongolia into Eastern Turkestan. Pop. 20,000–30,000.

Usagara (*Oosagah'ra*), a territory in German East Africa, between Tanganyika and the coast.

Usedom (*Oo'zeh-dom*), a Prussian island at the mouth of the Oder, shutting off the Stettiner Haff from the Baltic. Area, 157 sq. m.; pop. 35,000. On its E. side is Swinemünde (q.v.), on the SW. the town of Usedom (pop. 1786).

Ushant (Fr. form *Ouessant*), an island off the W. coast of France, in the dep. of Finisterre, with an area of 20 sq. m. and a pop. (1891) of 2720. Off Ushant on 'the glorious first of June' 1794 Howe gained a great naval victory.

Ushaw, 4 miles WNW. of Durham, the seat of St Cuthbert's R. C. College, transferred hither in 1808 from Crook Hall, having fifteen years before been expelled from Douay.

Usk, a beautiful river of South Wales and Monmouthshire, rising at Talsarn, one of the Black Mountains, and winding 57 miles SE. to the Bristol Channel. The town of Usk, 12 miles SW. of Monmouth, has a ruined castle, and with Monmouth and Newport returns a member. Pop. 1477.

Uskub (*u* as *oo*), or Skoplie, a town of Turkey, 130 miles NW. of Salonica by rail. Pop. 30,000.

Uspallata. See Chili.

Ussuri. See Amur.

Ust Urt (*u* as *oo*), the desert plateau between the Caspian and the Sea of Aral.

Utah (*Yoota*), since 1894 a state of the American Union, in the Rocky Mountain region, 350 miles from N. to S., and 280 from E. to W., with an area of 84,970 sq. m. Idaho and Wyoming bound it N.; Colorado, E.; Arizona, S.; and Nevada, W. Utah lies in a great plateau region, having an average elevation of 5000 feet above the level of the sea. The Wahsatch Mountains (12,000 feet), running N. and S., and the Uintah Mountains (14,000 feet), an eastern spur, divide it into two portions differing widely in topography and climate. The division lying N. and W. of these ranges belongs to the great interior basin of the continent, from which no water escapes except by evaporation. The streams which flow from the mountains find their way toward the west, ultimately discharging their waters into Great Salt Lake (q.v.), or into some of the smaller saline lakes or sinks of the desert. In the valleys lying among the western spurs irrigation is practicable, if precarious, depending as it does on the melting snow of the mountains. The prevailing westerly winds are robbed of their moisture by the lofty peaks of the Wahsatch range; and to the E., in the basin of the Colorado River, the towering plateaus which overhang stupendous cañons have but a slight and irregular rainfall, and except in a few favoured valleys agriculture is almost an impossibility. The annual product of copper, lead, silver, and gold is valued at $11,000,000. There is also coal. Besides Salt Lake City, the important towns are Ogden, Provo, and Logan. Pop. (1870) 86,786; (1880) 143,963; (1900) 276,749. Utah formed a part of the territory acquired by the United States from Mexico in 1848, was developed by the Mormons, organised as a territory in 1850, and reduced to its present area in 1868. The polygamy of the Mormons formed the main difficulty in the way of the territory being admitted to the privileges of a state, and this did not take place till 1894, when Mormon supremacy had been abolished and after the Mormons had renounced plural marriages. See books by H. H. Bancroft (1888) and Lambourne (1891).

Utakamand'. See Ootacamund.

Utica (*Yoo'tica*), an ancient city of North Africa, 20 miles NW. of Carthage, originally a Phœnician colony on the coast (now 10 miles distant). Its ruins include an amphitheatre, an aqueduct, and the remains of quays. Here the younger Cato killed himself.

Utica (*Yoo'tica*), a city of New York, 232 miles by rail NNW. of New York City. Rising in a gentle slope from the south bank of the Mohawk River, and traversed by the Erie Canal, it contains a fine United States building, a city hall, state lunatic asylum, and a Masonic Home and School (begun in 1891), is a noted market for cheese, and manufactures boots and shoes, cottons and woollens, organs and pianos, machinery, starch, &c. Pop. (1880) 33,914; (1900) 56,383.

Utrecht (Dutch pron. nearly *Ee'trehht; Oude trecht*, 'old ford;' Lat. *Trajectum ad Rhenum*), the capital of a province of the Netherlands, on the 'Old' Rhine (q.v.), 23 miles SSE. of Amsterdam and 38 ENE. of Rotterdam. The walls were levelled in 1830, and formed into shady promenades, the present fortifications consisting of strong forts. St Martin's Cathedral, founded by St Willibrord about 720, and rebuilt in 1251–67, had its nave destroyed by a hurricane in 1674, so that the choir and the tower (321 feet high) now stand separate. The famous university, founded in 1634, numbers over 1000 students, and has a library of 260,000 volumes. Other edifices are the 14th-century Roman Catholic Cathedral, the town-hall (1830), the 'Pope's House' (built by Adrian VI., who was born here in 1459), the palace (in 1807) of Louis Bonaparte, &c. Utrecht since 1723 has been the headquarters of the Jansenists. The manufactures include tobacco and cigars, woollen fabrics and carpets, salt, furniture, chemicals, machinery, &c. Pop. of the town (1869) 59,299; (1901)106,800. Here was formed the famed union of the northern provinces for the defence of political and religious freedom in 1579; and at Utrecht nine distinct treaties were concluded in 1713, which brought to a close the war of the Spanish succession.

Utrecht, capital of a district in Natal, transferred in 1902 from the Transvaal, 30 miles NE. of Newcastle. Pop. 4000.

Utrera (*Ootray'ra*), an old town of Spain, 19 miles by rail SE. of Seville. Pop. 14,600.

Uttoxeter (*Ux'eter;* A.S. *Uttocceaster*), a market-town of Staffordshire, on an eminence above the Dove, 14 miles ENE. of Stafford. In its market-place Dr Johnson did penance bareheaded; and it has a modern church with an old tower and lofty spire, a town-hall (1855), a mechanics' institute, a free grammar-school (rebuilt 1859), and manufactures of iron, nails, ropes, beer, &c. Pop. 5130.

Uxbridge, a market-town of Middlesex, on the Colne, 16 miles W. of London. It has one church, St Margaret's, restored 1872; another, St Andrew's (1865), with a spire of 170 feet; a town-hall (1836); and a spacious corn exchange (1861). Pop. 8585. Commissioners met here fruitlessly in January 1645 to discuss terms of peace between Charles I. and the parliament. See Redford's *History of Uxbridge* (1818).

Uxmal (*u* as *oo*), a ruined city in the NW. of Yucatan, 40 miles SW. of Merida, with vast remains of ancient grandeur, temple-terraces, &c.

Vaal (*Vâhl*), a river of South Africa, rises in the Drakenberg, and flows 500 miles between the Transvaal and the Orange River Colony to the Orange.

Valais (*Valay;* Ger. *Wallis*), a mountainous Swiss canton, bounded S. by Italy. Area, 2036 sq. m.; pop. (1900) 114,438. Towns are Sion and Martigny.

Valdai Hills. See Volga.

Valdepeñas (*Val-de-payn'yas*), a town of Spain, 140 miles S. by E. of Madrid. Pop. 20,700.

Val de Travers (French pron. *Travayr'*), a valley in the Swiss canton of Neuchâtel, with great asphalt-mines.

Valdivia (*Val-dee-via*), capital of a southern province of Chili, on the Callecalle, 15 miles above its mouth in Valdivia Bay. Pop. 9850.

Valence (*Valon'ss*), capital of the French dep. Drôme, is on the left bank of the Rhone (crossed by an iron bridge), below the Isère's mouth, and 66 miles S. of Lyons. It has several interesting Renaissance buildings, an 11th-century cathedral, an 18th-century Protestant temple, and manufactures of silk, glass, iron, &c. Pop. 24,200.

Valencia (Span. pron. *c* as *th*), a seaport of Spain, on the Mediterranean, 200 miles SW. of Barcelona by rail. The picturesque walls, erected by Pedro IV. in 1356, were removed in 1871; and the recent houses are a striking contrast to those in the gloomy old town. The archiepiscopal cathedral, commenced in 1262, and 330 feet long, is classical within, and Gothic without. The university has a library of 42,000 vols., and there is a good picture-gallery. Silk-spinning and weaving are carried on, with manufactures of cloths, hats, glass, linen, leather, cigars, and Valencia tiles. Pop. (1877) 143,856; (1905) 215,000. —*Valentia*, or *Valencia del Cid*, dating from the 2d century B.C., was destroyed by Pompey, taken by the Goths in 413, by the Moors in 715, and by the Cid in 1094. Suchet captured it in 1812.—The old kingdom of Valencia is subdivided into the three provinces of Valencia (area, 4152 sq. m.; pop. 806,556), Alicante, and Castellon de la Plana.—(2) *Valencia de Alcántara*, a town, 250 miles WSW. of Madrid; pop. 9250.

Valencia, capital of Carabobo state in Venezuela, close to the beautiful Lake of Tacarigua, 34 miles by rail S. of Puerto Cabello. Pop. 38,654.

Valenciennes (*Va-lon'ss-yenn'*), a dark, ill-built manufacturing town and first-class fortress of France, in the dep. of Nord, stands at the entrance of the Rhonelle into the Scheldt (which flows through the town in several arms), by rail 155 miles NNE. of Paris and 58 SW. of Brussels. It possesses a citadel constructed by Vauban, a fine hotel-de-ville, and a modern Gothic church, with tower 272 feet high. The famous lace is no longer made here, only a coarse sort. Other manufactures are cambric, cotton yarn, hosiery, linseed-oil, beet-root sugar, and there are great iron-works. The country round about is a great coal-basin. Valenciennes (the *Valentinianæ* or *Valentiana* of the Romans) was ceded to France in 1678, and was taken by the Allies in 1793, after a siege of 84 days, but restored next year. It is the birthplace of Watteau and Froissart (statue, 1856). Pop. (1872) 22,118; (1901) 28,786.

Valentia, or Valencia, a rocky island (5 × 2 miles) off County Kerry, 42 miles by rail WSW. of Killarney, with cliffs nearly 900 feet high at the north end. It is the terminus since 1857–66 of more than one Atlantic telegraph. The name is most likely corrupted from the Irish *Fail-inis*.

Valenza (*Valent'za;* anc. *Valentia*), a town of N. Italy, on the Po, 9 miles by rail N. of Alessandria. Pop. 7466.

Valetta, since 1570 the chief town of Malta, on the NE. side of the island. It occupies a rocky tongue of land over 3000 yards long, on either side of which are two noble harbours, and is defended by fortifications of great strength, many of them hewn out of the solid rock. Noteworthy are the governor's palace—formerly that of the Grand-masters of the order of St John—plain without, but magnificent within; the superb cathedral; and the church of San Pubblio, with its famed *sotteraneo* ('vault') of embalmed monks and skeletons; the public library of 60,000 vols.; the university; the aqueduct, which brings water 8¾ miles from the far side of the island; and many of the palazzi of the Maltese nobles. There is a railway to Rabat in the interior. Valetta, though much earlier than his date, was named after the Grand-master La Valette. Pop. of Valetta with Floriana and Sliema suburbs, about 40,000; of the other 'three cities' or suburbs of Senglea, Cospicua, and Vittoriosa, 26,700; total, 66,700.

Valguarnera (*Val-gwar-nay'ra*), a town of Sicily, 16 miles E. of Caltanisetta. Pop. 14,000.

Valladolid (Span. pron. *Val-ya-do-leeth'*), a fortified city of Spain, sometime capital of the whole country, and still capital of a province of Old Castile, stands on the Pisuerga's left bank, 150 miles NW. of Madrid by rail, and 2200 feet above sea-level. The Classical cathedral (1585) was never finished; the Dominican monastery, of which Torquemada was prior, is now a house of correction, and that of the Benedictines is a barrack. The university dates from 1346. The Scots College here was long the only seminary for the education of Scottish Catholics. There are some manufactures of silk, cotton, and woollen stuffs, iron, jewellery, hats, paper, perfumery, chemicals, gloves, &c. Pop. (1877) 52,206; (1905) 69,500. Valladolid, the *Pincia* of Ptolemy, appears as *Vallisoletum* in 1072. Charles V. erected many splendid edifices here, Valladolid being then the most prosperous city in Spain, with 100,000 inhabitants. Formerly capital of Castile and Leon, it was still the usual residence of the kings of Spain. In 1560, under Philip II. (who was born here), Madrid was declared the only court; and Valladolid thenceforth declined. In 1808 it was sacked by the French.—Area of *province*, 2930 sq. m.; pop. 278,560.

Valladolid, a town of Yucatan, 90 miles ESE. of Merida. Pop. 5000. See also Morelia.

Valle Crucis Abbey. See Llangollen.

Vallejo (*Val-yay'ho*), a port of California, on San Pablo Bay, 31 miles NE. of San Francisco. On Mare Island is a navy-yard. Pop. 7970.

Valleyfield, a manufacturing town of Quebec, on the St Lawrence, 54 miles by rail SW. of Montreal. Pop. 11,060.

Vallombro'sa ('Shady Valley'), a celebrated abbey among the Apennines, 15 miles E. of Florence, in a valley surrounded with forests of fir, beech, and chestnut trees. Here an order of Benedictine monks was founded about 1038; the

present magnificent buildings were erected in 1673. In 1869 the monastery was suppressed; but the place is still much visited by tourists. Milton was here in 1639, Wordsworth in 1837.

Valls, a manufacturing town of Spain, 12 miles N. of Tarragona. Pop. 13,000.

Valmy (*Val-mee'*), a French village in the dep. of Marne, 20 miles NE. of Châlons. At the famous 'cannonade of Valmy,' 20th Sept. 1792, Dumouriez forced the Prussians to retreat.

Valparaí'so (*ai* as *ī*; 'Vale of Paradise'), the second city of Chili, and next to San Francisco the principal American port on the Pacific, is situated on the bay of the same name, 115 miles by rail WNW. of Santiago, and 881 W. of Buenos Ayres by the Trans-Andean Railway. The city is built chiefly upon a sloping plain, cut up by ridges terminating in steep bluffs. Its long streets, with imposing churches, trams, gas, and electric light, suggest a European city. The old town, El Puerto, contains the vast customs warehouses, huge elevators, the mole and harbour, wharves, the exchange, post-office, and municipal palace, with a bronze statue of Lord Cochrane; above it rises the Cerro Alegre. Batteries crown the heights. Valparaiso's imports exceed £6,000,000 and its exports £1,000,000. It suffered from earthquakes in 1822, 1851, and 1906, when 5000 persons perished; was bombarded by a Spanish fleet in 1866; and after a three days' battle in the civil war of 1891, fell to the insurgents. Pop. (1905) 145,000.

Valparaiso, the capital of Porter county, Indiana, 44 miles SE. of Chicago. Pop. 6280.

Valtelline (*Val'tel-leen*), the upper Adda's rich valley down to its influx into the Lake of Como.

Valtos, a crofter coast-village of Skye, 13½ miles N. by E. of Portree. Pop. 323.

Van, a walled town of Turkey in Asia, the capital once of an Armenian kingdom, near the SE. shore of Lake Van, 145 miles SE. of Erzerum. Pop. 35,000.—Brackish Lake Van (80 × 30 miles) has no visible outlet.

Vancouver, a town of British Columbia, the terminus of the Canadian Pacific Railway (1887), stands on Burrard Inlet (at its head is Port Moody, the former terminus; pop. 3000), 2906 miles by rail W. by N. of Montreal. Its site a dense forest till 1885, it now possesses miles of well-made streets, lit by gas and electricity, electric trams, a fine Anglican cathedral, a handsome opera-house, three parks, wharves and warehouses, smelting-works, &c., and has steamship connection with San Francisco, China, Japan, and the Australasian colonies. Pop. 26,250.

Vancouver Island, belonging to British Columbia, and separated from the mainland by Queen Charlotte Sound, Johnstone Strait, and Strait of Georgia, is 278 miles long, and 50 to 65 miles broad. Area, 12,760 sq. m.; pop. 40,000. The shores are marked by rocky promontories, sheltered coves, fine harbours, and on the W. deep fiord-like arms of the sea. The country is well wooded, the streams, which are nearly dry in summer, supplying power for mills. The climate resembles that of southern Britain, the warm Pacific Gulf Stream maintaining a mild temperature. Barely a tenth of the surface is suited for agriculture. Fruit-culture is profitably carried on. The island is very rich in minerals. Besides gold, silver, copper, iron, &c., it possesses great fields of excellent coal, at Nanaimo in particular. Another source of wealth is in the fisheries. The island was discovered in 1592 by Juan de Fuca, and visited in 1792 by Captain George Vancouver, R.N. (1758–98); but the first permanent settlement was made in 1843, when the Hudson Bay Company built a fort where Victoria, the capital, now stands.

Van Diemen's Land. See Tasmania.

Vannes (*Vann*), a French seaport, capital of the Breton dep. Morbihan, stands at the mouth of a tributary of the Gulf of Morbihan, 10 miles from the sea. It has a cathedral (13th to 15th centuries), an old Maison du Parlement, many carved houses, a rich museum of Celtic antiquities, and manufactures of woollens and ropes and some shipbuilding. Pop. 19,625.

Van Wert, the capital of Van Wert county, Ohio, 27 miles WNW. of Lima. Pop. 6430.

Var, a dep. of SE. France, with the three arrondissements of Draguignan (the capital), Brignoles, and Toulon. Area, 2349 sq. m.; pop. (1872) 293,757; (1901) 326,384.

Varal'lo, an Italian town, 35 miles NW. of Novara by rail. Pop. 3500.

Varanger Fiord (*Vah-rang'er*), a deep inlet of the Arctic Ocean into Finmark, the northernmost province of Norway.

Varasdin. See Warasdin.

Vardö, a Norwegian fishing-town on Vardö island, at the E. end of Finmark (pop. 2630).

Varennes (*Varenn'*), a town in the French dep. of Meuse, 18 miles NW. of Verdun. Here Louis XVI. and his family were captured making for the frontier, 22d June 1791. Pop. 1200.

Varese (*Varay'zay*), a town of N. Italy, at the end of Lake Varese (7 sq. m.), 18 miles by rail W. of Como. Pop. 5872.

Varinas (*Vareenas*), a town of Venezuela, 100 miles SE. of Lake Maracaybo. Pop. 7000.

Varna, a Bulgarian Black Sea port, 115 miles SE. of Rustchuk by rail. The French and British encamped here in 1854. Pop. 35,450.

Varzin (*Var-tzeen'*), a Pomeranian village of 1200 inhabitants, 25 miles SE. of Köslin. Near it is a seat of the Bismarcks.

Vasa (*Vâh-sa*), a county or *län* of Finland, on the Gulf of Bothnia.

Vasarhely (*Vasarhay'lee*). See Maros-Vasarhely.—Hódmezö Vasarhely, a Hungarian town, 20 miles NE. of Szegedin by rail. Pop. 60,830.

Vassilkov, a town of Little Russia, 18 miles SW. of Kieff. Pop. 18,000.

Vatnajoküll (*Vatnayo'keel*). See Iceland.

Vaucluse (*Vo-clüs'*), a dep. of SE. France. Area, 1370 sq. m.; pop. (1872) 263,451; (1901) 236,949.—At the village of Vaucluse (*Vallis clausa*), 19 miles E. of Avignon, lived Petrarch.

Vaud (*Vo*; Ger. *Waadt*), a W. canton of Switzerland, between the Jura and the Bernese Alps. Area, 1244 sq. m.; pop. 283,000, French-speaking and Protestant.

Veglia, an Austrian island in the Adriatic, SE. of Trieste. Area, 165 square miles; pop. 21,140.

Vejle, a port of Denmark, at the head of a fiord on the east coast of Jutland. Pop. 14,600.

Velbert, a town in the Rhine province of Prussia, 15 miles NE. of Düsseldorf. Pop. 17,500.

Vel'des, a summer-resort on a lake in the Austrian province of Carniola, 30 miles NW. of Laibach. It is famous for its sun-baths. Pop. 500.

Veleï'a, an ancient Ligurian city, overwhelmed by a landslip (*c.* 280 A.D.). Its ruins, 20 miles S. of Piacenza, were uncovered in 1760–65.

Vélez-Málaga (*Vay'layth-Mal'laga*), a Spanish town 16 miles E. of Malaga. Pop. 23,479.

Velletri (*Vel-lay'tree*), a cathedral city, 25 miles SE. of Rome by rail. Pop. 19,532.

Vellore, a town of British India, 80 miles W. of Madras by rail. Pop. 43,540.

Venaissin (*Venayssan^g*), an ancient county of France, between the Rhone and the Durance, now included in Vaucluse.

Vendée (*Von^{g}day*), La, a French dep., bounded W. by the Bay of Biscay. Area, 2588 sq. m.; pop. (1886) 434,808; (1901) 441,311. Its three arrondissements are La Roche-sur-Yon (the capital), Fontenay-le-Comte, and Sables-d'Olonne. The Vendeans stoutly resisted the Revolution.

Vendôme (*Von^{g}dōm*), a town of the dep. Loir-et-Cher, on the Loir, 42 miles NNE. of Tours and 111 SW. of Paris. Pop. 8450.

Vener. See Wener.

Venetia, the large 'compartimento' or division of NE. Italy, between the Alps and Adriatic, of which Venice (q.v.) is the historical centre.

Venezuela, United States of (Span. pron. *Venaythooay'la*), a northern tropical republic of South America, on the Caribbean Sea. The total area is slightly over 417,000 sq. m.; the official returns (extending the area at the expense of Colombia and British Guiana) make it 594,000 sq. m. Trinidad and Tobago islands belong to Britain. Venezuela is a land of mountains and valleys in the west and north, of lower mountains and wooded hills in the south, of llanos between the Orinoco and the northern ranges, and of lake and swamp and forest (much of it pestiferous and uninhabitable) in the north-west. The Andes enter the country south of Lake Maracaybo, and push north-eastward as the Cordillera de Merida (15,500 feet). In Mount Roraima (q.v.) the frontiers of Guiana, Brazil, and Venezuela meet. Innumerable streams find a way over waterfalls and rapids to the Orinoco (q.v.), chief of the eight river systems of the country. The climate is moist; the temperature varies from freezing-point above the snow-line to great heat in the coast-towns, valleys, and llanos. There are no active volcanoes, but earthquakes have done great damage—as in 1893 at Merida. Almost everywhere the country is abundantly watered. Vegetation in the hotter region is luxuriant beyond description. In the temperate region coffee is produced. The people are mostly half-breeds—mulattoes or mestizoes (i.e. of crossed white and Indian blood). Pure negroes (mainly on the coast) or whites are few: the latter form perhaps 1 per cent. of the pop.

Venezuela contains rich mineral deposits, as yet scarcely tapped, except for the Yuruari gold-mines, the Aroa copper-mine, the government salt-mines, and coal near Barcelona. Near Lake Maracaybo there are great supplies of petroleum and coal. Gold to the value of £349,234 was produced in 1890, but in 1900 the total was only £63,904. In 1902 there were about 530 miles of railway, besides 3900 miles of telegraph lines and several telephone systems. Most of the over-sea trade is in the hands of foreigners, German and other. The chief export (over two-thirds of the total exports) is coffee; next follow cocoa, gold, hides, cattle, sugar, cotton, copper, dye-woods, &c. The imports (over a fourth from Britain) are flour, cotton, linen, woollen, and jute goods, iron, machinery, &c. The exports have an annual value of about £5,000,000, the imports over £3,000,000. In 1881 Venezuela—formerly comprising twenty-one states and their territories—was redivided into eight large states, eight territories, and the federal district of Carácas (the capital). The pop. in 1881 numbered 2,075,245; in 1891, 2,323,527; of these 326,000 are Indians, and 35,000 foreigners. The revenue (mostly from customs duties) and the expenditure nearly balance each other at from £1,500,000 to £1,800,000. The national debt is £4,572,000. The army numbers 7280, and there is a militia. The principal cities are Carácas, Valencia, Maracaybo, Barquisimeto, Tocuyo, Maturin, and La Guayra. The coast was visited by Columbus in 1498, and next year the name Venezuela ('Little Venice') was given to an Indian village built on piles seen by Ojeda and Amerigo Vespucci. Settlements were made in the 16th and 17th centuries, and the country was plundered by Spanish governors till 1810, when the revolt began which under Bolívar's guidance ended in 1821 in independence of Colombia, Ecuador, and Venezuela. The only tolerably good government was in 1870–77 under Blanco, president and dictator. See a German work by Sievers (1888) and a French work by Cazeneuve and Harani (1888).

Ven'ice (Ital. *Venezia—Ven-etz'ya*), the 'Pearl' or 'Queen' of the Adriatic. In the 5th c. the Veneti, expelled from the mainland by Lombards and Goths, found refuge in the islands of the lagoons. Tradition places the nucleus of Venice on the site of the Basilica of St Mark; now it covers more than seventy-two islets, or rather mud-banks, its foundations being piles ('time-petrified') and stone. Through its two unequal portions winds for over two miles the Grand Canal, spanned by the Rialto Bridge (of stone) and two others (of iron), and into it flow 146 lesser canals, all bridged at frequent intervals. This vast network of waterway is patrolled by countless gondolas, while the pedestrian has his choice of innumerable lanes (calli). A railway viaduct (1845) 2⅛ miles long connects Venice with the mainland, it being 165 miles E. of Milan and 181 NNE. of Florence. Its population, from well-nigh 200,000 in the 15th c., dwindled to 100,000 in the 18th, but has since increased to (1905) 153,500. Its industries are its famous glass manufacture; jewellery and embroidery in gold and silver; lace, velvets, and silks; candles, soap, sugar, and confectionery. Printing is reviving; while the shipbuilding now includes ironclads. Venice imports from Great Britain coal, iron, fish, and manufactured goods. The shallowing lagoon, which at low ebb looks like so many acres of mud, is connected with the sea by the Lido, Malamocco, and two other entrances. With the drinking-water now supplied from the mainland the health of the city is improving. The Piazza to the W. of St Mark's church is still the centre of civic and social life. Its north side is formed by the Procuratie Vecchie (1517), surmounting an arcade of fifty arches. The Procuratie Nuove, on the south side of the Piazza, now constitute a portion of the Palazzo Reale. Of this the library hall is a masterpiece of Sansovino, its ceiling decorated by the seven best Venetian artists of the time (1582), while Titian, Paul Veronese, Bassano, and Tintoretto contributed splendid work to other parts of the interior. The Campanile, begun 902, and completed by the belfry 1510, collapsed in July 1902, but was rebuilt in 1903–8. The clock-tower

gives entrance to the Merceria or main business quarter. In front of St Mark's itself rise three red flagstaffs, from which once floated the silk and gold banners typifying Candia, Cyprus, and the Morea, the three possessions of the republic. The Doge's Palace, dating from the 10th and 11th centuries, has been extended, modified, and restored. It comprises the Sala del Maggior Consiglio, with paintings by Titian, Bassano, Tintoretto, Paolo Veronese, and Palma Giovane; the celebrated library, transferred (1817) from the Palazzo Reale, with 120,000 volumes and 10,000 MSS.; the Museo Archeologico; the Sotto Piombi ('under the leads') where Casanova and Silvio Pellico languished; the Pozzi ('wells') which shadow many a page of Venetian history; and the Bridge of Sighs, leading to the Carceri or public prisons. The Zecca or Mint (now the Bourse) and the granite columns, one bearing the Lion of St Mark, the other St Theodore, have infinitely less to detain us than the Basilica di S. Marco itself, placed by Canova above the cathedrals of Pisa and Sienna as, on the whole, the first of the three finest churches in Italy, whose external mosaics, bronze horses, interior (also ennobled by its mosaics), choir, sacristy, north transept, baptistery, treasury, and pavement have each their special votaries. Dwarfed by comparison, the remaining churches of Venice need be noticed only in groups, of which there are four—the first, Gothic in style, exemplified in the plain, massive, and solemn church of the Frari; the second, the so-called Lombard (really a revival of Romanesque), of which the church of the Miracoli is the type; the third, seen at its best in the Palladian Redentore; and the fourth, or modern Italian, ornate to excess, represented by the church of the Salute. Near SS. Giovanni e Paolo is the statue of Bartolommeo Colleoni, general of the republic (1475), which, designed by Verocchio and cast by Leopardi, is reckoned the finest art-product of its kind in the world. The Scuola of the church of San Rocco is rich in magnificent Tintorettos. The Accademia delle Belle Arti has a wealth of Bellinis (Gentile and Giovanni), Carpaccios, Giorgiones, Palmas (Vecchio and Giovane), Paolo Veroneses, Tintorettos, and Titians; while the Museo Civico attracts the lover of majolicas, gems, carvings, autographs, and miniatures. Interest of a sterner kind clings to the arsenal, founded in 1104, now employing 2000 workmen as the third dockyard of Italy. Its museum forms a running commentary on Venetian history, containing the model of the Bucentaur from which the doge every Ascension Day solemnly espoused the Adriatic. On the Grand Canal, down to the Rialto, are the Palazzo Manzoni (15th c.), Palazzo Corner (16th c.), Palazzo Rezzonico, Palazzo Foscari, Palazzo Pisani a S. Polo, Palazzo Contarini, three Mocenigo palaces, Palazzo Corner Spinelli, and Palazzo Grimani. The Palazzo Moro is the traditional abode of Shakespeare's Othello. In theatres Venice is comparatively poor, La Fenice being the principal one; but in public gardens and islets adapted for holiday purposes it abounds. The Littorale di Malamocco, facing the city across the lagoon (the so-called 'Lido'), is an immensely popular resort. This and the islets Murano (renowned for its glass), Torcello, and Burano (employing 300 girls in the celebrated lace-industry) are easily accessible by steamers and steam-launches.

Venice rises to historic importance in 697 A.D., when the tribunes were superseded by a duke or doge, and gradually obtained a foothold on the mainland and increasing political influence. In the 9th c. Istria and Dalmatia were conquered, and Venice became a dominant power in the Levant, taking an active share in the Crusades; in the 12th it conquered Tyre, Rhodes, and many of the Cyclades, Sporades, and Ionian islands. The Doge Enrico Dandolo (1192–1205) brought about the partition of the empire, and secured for Venice a large slice of Greece and the Greek islands, part of the Balkan countries, and districts on the Hellespont and in Constantinople. Worsted and weakened by Genoa in the 13th c., in the 14th Venice crushed its rival for ever, and became supreme at sea in war and merchandise, commanding the bulk of trade with the East. Next Venice was triumphant on the Italian mainland, and in the 15th c. waged war with Turkey and with France. The Cape route to India and the discovery of America told injuriously on Venetian commerce, and constant wars exhausted the treasury. In the 17th c., however, the republic crushed the Turks in Candia (Crete) and the Morea, but lost both in the 18th. Its policy became utterly feeble, its commerce irretrievably decayed, and when in 1796 Napoleon invaded the republic, it was but the shadow of its former self. In 1798 Austria secured possession, confirmed in 1815. The revolt in 1848 led up to its final cession (1866) to Napoleon III., who handed it over to Victor Emmanuel to become a part of the kingdom of Italy. See books by Yriarte (1879), Daru (Paris, 1853), Horatio Brown (1887–1905), A. J. C. Hare (1884), Mrs Oliphant (1887), Wiel (1894), Molmenti (Florence, 1897), Okey (1903), and Menpes (1904).

Ven'lo, a Dutch frontier town on the Meuse, 20 miles W. of Crefeld. Pop. 14,400.

Vennachar. See KATRINE, LOCH.

Veno'sa (anc. *Venusia*), Horace's birthplace, S. Italy, 25 miles N. of Potenza. Pop. 8414.

Ventimiglia (*Ventymeel'ya*), a fortified town of the Italian Riviera, near the French frontier, and 3 miles E. of Mentone by rail. It has a cathedral and a small harbour. Pop. 11,500.

Vent'nor, the principal town on the south shore of the Isle of Wight, 11 miles by rail S. by W. of Ryde. Situated amid the finest of the fine scenery of the Undercliff, it has a southern exposure, well sheltered from the north, and so possesses a mild climate, suitable for invalids. Hence from a small fishing-hamlet it has grown since 1830 to a favourite watering-place, with an esplanade (1848), numerous hotels and lodging-houses, and the National Consumption Hospital (1872). The beach is composed of beautiful yellow shingle; and fossils abound in the vicinity. Pop. (1861) 3208; (1901) 5866.

Vera Cruz (*Vayra Croos* or *Crooth*), the principal port of Mexico, on the E. coast, 263 miles by rail E. of the capital. A moist, hot, unhealthy place, with a cathedral, it was founded as *Villa Nueva de la Vera Cruz* ('New City of the True Cross') by Cortes in 1520. Pop. 29,000.

Vercelli (*Ver-chel'lee*), a town of N. Italy, 40 miles SW. of Milan, with a modern cathedral, and manufactures of machinery, candles, matches, soap, and musical instruments. Pop. 20,165.

Verd, Cape. See CAPE VERD.

Ver'den, a town of Hanover, on the Aller near the Weser, 20 miles SE. of Bremen. Pop. 9850.

Verdun (*Ver-dun''*), a fortified French town in dep. Meuse, 35 miles W. of Metz by rail. It has a cathedral, and manufactures iron, liqueurs,

sweetmeats, leather, and beer. Pop. 13,100. The fortress has been often beseiged—in 1870 by the Germans for six weeks, when it capitulated.

Vere. See CAMPVERE.

Verkhoy'ansk, a small town (pop. 300) of Siberia, 400 miles NE. of Yakutsk.

Vermejo (*Ver-may'ho*). See PARAGUAY (river).

Vermont', the only entirely inland state of New England, lies west of New Hampshire, with Canada on the N., and Lake Champlain on the W. Its length from north to south is 140 miles, its width 40 to 90 miles; and its area 10,200 sq. m. The Green Mountains (Verd Mont—whence the name of the state) extend its entire length, and in four peaks exceed 4000 feet. The mountains are mostly clothed with trees to their summits. The hills furnish the best of pasturage, and, for the most part, can be cultivated to their tops. Vermont is rich in quarries of granite, marble, and slate, which are extensively worked. Steatite, verd-antique, sulphuret of iron, manganese, kaolin, and iron exist. A larger area is devoted to cereals than in any other New England state. The annual production of maple sugar is nearly one-third of the total production of the country. The butter and cheese are of superior quality. The state is divided into fourteen counties, and returns two representatives to congress. Montpelier is the capital. Samuel Champlain, in 1609, was the first white man who looked upon Vermont. The first permanent settlement was made at Brattleboro in 1724. Vermont was received into the Union, March 4, 1791, as the fourteenth state. In the civil war it furnished 35,242 soldiers, or one-half of all its able-bodied men. Pop. (1800) 154,465; (1880) 332,286; (1900) 343,641.

Vernon (*Vayr-non^g'*), a French town, on the Seine, 15 miles NW. of Mantes. Pop. 7960.

Vernon, a town of Connecticut, 12 miles ENE. of Hartford. Pop. 8607.

Vero'na, a city of Italy, on the Adige, at the base of the foot-hills of the Alps, 72 miles W. of Venice by rail, is a fortress of the first class, a member of the famous Quadrilateral. Its strength now depends on outlying forts. The amphitheatre (2d or 3d c. A.D.) has a lesser diameter of 404 feet. Other Roman remains are gateways, part of a theatre, and some mosaics. The streets are wide, especially the Corso; there are four principal squares, of which the Piazza dei Signori contains the palace of the Della Scala (1370) and the superb Palazzo del Consiglio. The cathedral dates from 1187, and has an altarpiece by Titian; the Romanesque basilica of St Zeno is larger and more interesting. The palaces are numerous and fine. The ancient castle of Theodoric is a barrack; the Castle of the Scalas (1355) is a barrack and arsenal. The picture-gallery is especially rich in pictures of the Paduan, Venetian, and Veronese (Pisano, Morone, &c.) schools. Paul Veronese, though a native, belonged to the Venetian school. Among the glories of the place are the tombs of the Scala family, with their wondrous wrought-iron railing (1350–80). There is a large transit trade with Germany by the Brenner railway, and manufactures of silk, woollens and cottons, furniture, musical instruments, &c. Pop. 75,300. Verona, long the Lombard capital, was afterwards torn by the struggles of Ghibellines and Guelphs, being the home of Shakespeare's Capulets and Montagues. From 1260 to 1387 the Scala or Scaliger family exercised a brilliant tyranny over the city. It fell then to Milan, in 1405 to Venice, and with Venice passed under Austrian domination till 1866.

Versailles (French pron. nearly *Ver-sī'*), a city of France, capital of the dep. Seine-et-Oise, 11 miles SW. of Paris by rail. A city more of pleasure than of industry, it covers a large area in proportion to its population, and is remarkably regular. It is the see of a bishop, and contains a public library of 50,000 volumes, many palatial edifices, public fountains, spacious squares, and elm-planted avenues. Louis XIII. built here on the site of an old priory a hunting-lodge, afterwards extended into a château. Louis XIV. devoted enormous sums to its embellishment, or rather reconstruction, under the care of Mansard. Here was signed in 1783 the peace of Versailles between England and the United States. Versailles continued a court-residence down to the Revolution, which great event had its beginning here in the meeting of the States-general in May 1789. At this date the pop. was 100,000; the palace, its park, the perfection of formal landscape gardening, and its fountains have been the model of many capitals. Louis-Philippe transformed the palace of Louis XIV. into a museum. The most interesting pictures are those by David (illustrating Napoleon's career), Horace Vernet, Ary Scheffer, and Delacroix. From September 1870 till the conclusion of peace in 1871 Versailles was the German headquarters; there King William was proclaimed Emperor of Germany, and there the capitulation of Paris was signed. After the peace it was the seat of the government till 1879, and headquarters of the army during the Commune. Pop. (1876) 49,522; (1881) 48,324; (1901) 44,563.

Versecz (*Ver-shetz'*), a Hungarian town, 45 miles S. of Temesvar by rail. Pop. 25,200.

Ver'ulam. See ST ALBANS.

Vervick. See WERWICQUE.

Verviers (*Verv-yay'*), a Belgian town, on the Vesdre, 15 miles ESE. of Liége. It is of recent growth, and depends almost wholly on its cloth manufactures. Pop. (1876) 37,828; (1900) 49,067.

Vervins (*Ver-van^g'*), a town (pop. 3150) in the French dep. of Aisne, 25 miles NE. of Laon.

Vesoul (*Vezool'*), capital of the French dep. Haute-Saône, 40 miles W. of Belfort. Pop. 8460.

Vesu'vius, the most striking object seen from the Bay of Naples, a mountain (4206 feet) of dense tufa. The higher Apennine-offshoot, Monte Somma (anc. *Mons Summanus*), surrounds it on the N. and E. Vesuvius first (63 A.D.) became convulsed by earthquakes, repeated at intervals till 79, when its earliest known eruption occurred (see POMPEII). This was followed by others, as in 472, when its ashes alighted in Constantinople; in 512, when they were wafted to Tripoli; in 1036; in 1500; in 1631; in 1793; in 1822; in 1855; in 1861; in 1871–72; and in April 1906, when lava streams issued and ashes covered a large area, destroying two villages, and breaking down roofs in Naples. The fertility of the slopes of Vesuvius is proverbial, especially in wine. Its observatory (1844) is famous. The first funicular railway to near the summit was opened in 1880. See works by Prof. Phillips (1869) and Lobley (1889).

Veszprim (*Vess-preem*), a Hungarian city, 25 miles SW. of Stuhlweissenburg. Pop. 14,584.

Vev'ay, or VEVEY (Ger. *Vivis*), a Swiss town in the canton of Vaud, a lovely health-resort, on the N. shore of the Lake of Geneva, 11 miles E. of

Lausanne. In St Martin's church (date 1498) Ludlow and Broughton, the regicides, are buried. Cigars are made and exported. Pop. 11,790.

Vézelay (*Vay'ze-lay'*), a small town (pop. 800) in the French dep. of Yonne, 5 miles SE. of Auxerre. Its abbey church was restored in 1868. Hither Becket retired in 1168; here St Bernard in 1145 preached the Crusade; and here Cœur de Lion and Philip Augustus united their forces in 1190 for the third crusade. Beza was a native.

Via-Mala (*Veea-Mah'la*), a remarkable gorge in the Swiss canton of Grisons, on the course of the Farther Rhine. The roadway (1823) runs for 2 miles in half-open galleries or in a tunnel; the rock-walls on either hand rising to 1600 feet.

Vian'na, a seaport of Portugal, at the Lima's mouth, 45 miles N. of Oporto by rail. Pop. 9816.

Viareggio (*Veeared'jo*), an Italian health-resort on the Mediterranean, 15 miles NW. of Pisa by rail. Pop. 17,190.

Viat'ka. See VYATKA.

Viborg (*i* as *ee*), capital of a division of Finland, at the head of an inlet from the Gulf of Finland, 75 miles NW. of St Petersburg, with Transund, 8 miles distant, for its port. Pop. 33,000.—The Danish Viborg, 45 miles NW. of Aarhuus, has but 9100.

Vicenza (*Vee-chent'za;* anc. *Vicentia*), an Italian city surrounded by a moat and half-ruined walls, 42 miles W. of Venice by rail. In the Piazza dei Signori, a remarkably fine square, is a slender campanile, 270 feet high. Palladio was a native; and Vicenza owes to him many fine buildings, as the prefect's palace. The Gothic Duomo was built in the 13th c. Silk, linen, earthenware, paper, and velvet are manufactured. Pop. 44,800.

Vich, or VIQUE (*Veetch* or *Veekay*), a Spanish city, 40 miles N. of Barcelona. Pop. 12,600.

Vichy (*Vee-shee'*), a town in the heart of France, dep. Allier, on the river Allier, 30 miles SSE. of Moulins by rail. It is the most frequented bathing-resort in France. The alkaline, acidulous springs (54°–113° F.) which rise at the foot of the volcanic mountains of Auvergne, are used both for drinking and bathing. Millions of bottles of Vichy water are exported annually. Its virtues were known in Roman times, as is testified by the remains of marble baths; its modern repute it owes to Napoleon III. Now this town of (1901) 14,050 inhabitants is visited yearly by 20,000 to 30,000 persons. See a work by Cormack (1887).

Vicksburg, the largest city of Mississippi, stands on a high, uneven bluff above the Mississippi River, 235 miles NNW. of New Orleans. Cotton is shipped, and railroad cars and iron are manufactured. The place was strongly fortified by the Confederates, but after a nine weeks' siege by land and water, surrendered on 4th July 1864, with nearly 30,000 men. Pop. 14,840.

Victoria, the smallest state, after Tasmania, in the Australian Commonwealth. It was sighted by Captain Cook in 1770, and the harbour of Port Phillip was discovered in 1801; but it was not permanently colonised till 1835. Port Phillip was administered from Sydney from 1836 till 1851, when it was constituted the colony of Victoria. Victoria occupies the south-east of Australia (separated from New South Wales by the Murray River), and has an extreme length from E. to W. of 420 miles, while its greatest breadth is only 250; its coast-line is 600 miles, and its area 87,884 sq. m. (almost exactly the same as England, Wales, and Scotland). Gold was discovered in 1851, and attracted many immigrants; the first railway was opened in 1854; and responsible government was introduced in 1857. A chain of varying height, the Dividing Range, traverses the greater portion of the colony from E. to W. 60 to 80 miles from the coast; the eastern portion, termed the Australian Alps (with peaks touching 6500 feet), divides the watershed of the Murray from Gippsland. Most of the rivers rise here; those on the north find their way into the Murray, which has a total length, including bends, of 1300 miles, 980 of which form the northern boundary of the colony. The principal streams flowing north are the Mitta Mitta, 175 miles long; Ovens, 140; Goulburn, 345; Loddon, 225; Avoca, 163; and Wimmera, 228; the last mentioned losing itself in Lake Hindmarsh. The chief of the southern streams are the Snowy, Glenelg, Yarra, and Latrobe. Many of these rivers are in the summer season mere chains of water-holes, and only the Murray and Yarra are navigable. The principal lakes are Victoria (45 sq. m.) and Wellington (54) in Gippsland, Corangamite (90; salt), in the Western District, and Hindmarsh (47; brackish) and Tyrrell (66; salt), in the Wimmera or NW. District.

The greater portion of Victoria was in its natural state an open forest, but in the W. there were large plains, and a portion of the extreme NW. is covered with a dense scrub of dwarf eucalyptus (mallee). At Melbourne the maximum temperature is 105°, minimum 30°, mean 57° 3′, and the average annual rainfall is 25·26 inches. North of the Dividing Range the temperature is rather higher and the rainfall rather less. Most of the gold-fields are in the central districts. Gold was first worked at Clunes, Ballarat, Forest Creek, and Bendigo. Originally the workings were shallow and alluvial, but most of the gold is now obtained from quartz reefs (some being 2500 feet deep). The total yield of gold up to 1904 was over 67,557,353 oz. (value £269,970,746), more than half the produce of all Australasia. Copper, silver, tin, coal, and antimony have been found, and brown coal is abundant. There are more than 11,000,000 sheep, and 1,600,000 cattle. The chief crop is wheat; the other cereals are grown, with potatoes, hops, and tobacco; and of late much wine, brandy, grapes, and raisins are produced. All the English fruits grow in Victoria, besides those of southern Europe. There are over 3000 miles of railway, in five systems, which connect with Adelaide and Sydney. The fiscal policy is protective. The value of total imports in 1898–1903 fluctuated between £16,770,000 and £18,927,340; that of exports fluctuated from £15,872,246 to £19,707,070 (including in order gold, wool, live-stock, cereals, butter, hides, and meat). The exports to Britain average above £6,000,000 annually; the imports thence range from £4,700,000 to near £8,000,000. The revenue, over 8 millions in 1891, had decreased, owing to a commercial crisis, to about 6 millions during 1893–98, but in 1901–4 had recovered to over 8 millions; the expenditure being a little less. The debt, incurred for public works, was upwards of £51,500,000 in 1904.

The executive government is in the hands of a governor chosen by the sovereign, assisted by a ministry appointed by the governor, but responsible to the legislature. The legislative council consists of thirty-five members, who must possess, and are elected by persons who enjoy, a property qualification; and a legislative assembly of sixty-eight members, who have no qualification, and are elected practically by universal suffrage of all male adult residents of British nationality.

Members of the legislative assembly receive a salary of £300 per annum. The state is divided into thirty-seven counties, but for purposes of administration it consists of sixty urban municipalities, called cities, towns, or boroughs, and 148 rural municipalities or shires. The defence force includes 5000 officers and men of all arms; the naval flotilla comprises one ironclad, six gunboats, and some torpedo boats. The fleet consists of fourteen vessels. Educational establishments are of four kinds: the Melbourne University, with affiliated Anglican, Presbyterian, and Wesleyan colleges; technical schools and colleges, including five schools of mines; an agricultural college, and working-men's college; and private and primary state schools. Primary education is free, secular, and compulsory. There is no state church. Melbourne and Ballarat are the sees of Anglican bishops, and the R. C. Church has an archbishop of Melbourne and bishops of Ballarat, Sandhurst, and Sale. Episcopalians number 432,704, and Catholics 263,710. The pop. at the census of 1901 was 1,200,914—98 per cent. British subjects by birth. Aborigines and Chinese had much decreased since last census. In 1903 there were 52,756 immigrants and the exceptionally large number of 66,159 emigrants. Three-fifths of the pop. live in towns—Melbourne, the capital (with two-fifths of the total pop.), Ballarat, Sandhurst, Geelong, &c. See AUSTRALIA and books there cited, and works on Victoria by Hayter, Thomson, Walch, Brough Smith, M'Coy, Jenks, Bonwick, Labillière, Shillinglaw, Westgarth, and Turner.

Victoria. See HONG-KONG; also CAMEROONS.

Victoria, capital of British Columbia, near the SE. extremity of Vancouver's Island. Esquimalt (q.v.) is 2 miles distant. Victoria possesses government buildings, a cathedral, public library, hospitals, electric trams and lighting, and factories. Pop. (1881) 5925; (1901) 20,816.

Victoria, (1) a seaport of Brazil, on an island in Espirito Santo Bay; pop. 10,000.—(2) Capital of Tamaulipas state in Mexico; pop. 14,575.—(3) A town of Guzman Blanco state in Venezuela; pop. 12,000.

Victoria, or FORT VICTORIA, a British station in Mashonaland (founded 1890), 150 miles N. of the Limpopo, on the trade-route to Salisbury.

Victoria Falls. See ZAMBESI.

Victoria Lake, or ALEXANDRINE LAKE, a shallow lake of South Australia. See MURRAY.

Victoria Nyanza (*y* consonantal), a great freshwater lake in East Central Africa, situated on the Equator, and on the meridian of 33° E., lies 3820 feet above sea-level, and has an area of over 30,000 sq. m., or about the size of Ireland. The water is good and fresh, although somewhat insipid, and often dirty white. The lake is drained by the Nile, and its chief feeders are the Kajera, the Nzoia, the Shimiyu, and the Katonga. Tides have been noticed, the rise lasting from 30 to 60 minutes. The lake, whose native name is Ukerewe, was discovered by Speke in 1858, visited by him and Grant in 1861–62, and subsequently explored by Stanley (1875), Mackay, Thomson, &c.

Vidin. See WIDDIN.

Vien'na (Ger. *Wien;* pron. *Veen*), the capital of the Austrian empire, is situated in Lower Austria, on the Danube Canal, a south branch of the Danube, here joined by the small river Wien. Vienna proper (pop. in 1880, 726,000; in 1890, 831,472) consists of the Inner City and eight suburban districts surrounding it, almost wholly encircled by fortifications known as the Lines; beyond which again are nine populous suburbs included (since 1890) within the Vienna police-district, which has a total area of 51 sq. m., and pop. (1900) of 1,674,957. The irregular hexagon formed by the Inner City was until 1858 enclosed by an inner line of fortifications, the site of which is now occupied by the Ringstrasse, a series of handsome boulevards. Though Vienna contains buildings of the 14th and even of the 13th century, it is, in its present form, essentially a modern city. The Inner City and the Ringstrasse are the handsomest and most fashionable quarters. In the former are the cathedral of St Stephen (1300–1510), with a steeple 450 feet high; the Hofburg or imperial palace, a large and irregular pile of very various dates; and many palaces of the nobility. On one side or other of the Ringstrasse rise the Exchange; the University (1874–84); the huge Gothic Rathhaus (1873–83); the Parliament House; the Supreme Law Courts; the Imperial Museums of Natural History and of Art (1872–86), twin buildings on either side of the imposing monument of the Empress Maria Theresa (unveiled 1888); the imperial Opera-house; the Academy of Art; the Austrian Museum of Art and Industry, &c. In other parts of the city are the Arsenal; the Josephinum, a medical college founded in 1784; and the Votive Church, an admirable specimen of modern Gothic, built in 1856–79 to commemorate the emperor's escape from assassination in 1853. Vienna is well provided with public parks, the largest being the Prater (7 sq. m.), one of the finest parks in Europe, opened in 1766. The university, founded in 1365 and renowned throughout the world as a medical school, has a teaching-staff of 350 and over 6000 students. The magnificent public picture-gallery, now in the Museum of Art, is specially famous for its unrivalled examples of the Venetian school, Rubens, and Dürer. The Public Hospital, with 2000 beds, is perhaps the largest hospital in Europe. Vienna is the chief industrial city in the empire. Machinery, scientific and musical instruments, artistic goods in bronze, leather, terra-cotta, porcelain, &c., furniture, meerschaum-pipes, &c. are among the noted manufactures. As a centre of trade and finance Vienna is no less important. Over 2½ million pounds were spent in 1868–81 in regulating the channel of the Danube.

The Roman *Vindobona* was established in 14 A.D. as the successor of the Celtic *Vindomina*. Its present importance dates only from the Crusades. In 1276 it became the capital of the Hapsburg dynasty. The Turks besieged Vienna from July 14 to September 12, 1683, when John Sobieski of Poland relieved it. Treaties have been concluded here in 1738, 1864, and 1866. The Congress of Vienna (1814–15) re-arranged the map of Europe, disturbed by the French Revolution and Napoleon, somewhat on the old lines.

Vienne, a dep. of W. France, formed mainly out of Poitou. Area, 2691 sq. m.; pop. (1881) 340,295; (1901) 333,896. The Vienne, an affluent of the Loire, is the chief river. The arrondissements are Poitiers (the capital), Châtellerault, Civray, Loudun, Montmorillon.

Vienne (*Vee-enn'*), a town in the French dep. of Isère (far away from that of Vienne), on the Rhone's left bank, 19 miles S. of Lyons by rail, where the Gère joins the Rhone. Vienne was the chief town of the Allobroges, and in the time of the Roman empire the rival of Lyons. Besides water-conduits, &c., of Roman construc-

tion, there are a Corinthian temple, remains of a theatre, and an obelisk, called L'Aiguille, 72 feet high. The archiepiscopal cathedral was built in 1107–1251; St Peter's dates from the 6th c. In a council held here (1312) Pope Clement V. suppressed the Templars. Vienne manufactures woollens, silk, paper, leather, and iron goods. Pop. (1872) 21,430; (1901) 22,770.

Vienne, Haute, a French dep. SE. of Vienne. Area, 2130 sq. m.; pop. (1872) 322,447; (1901) 374,212. The arrondissements are Limoges (the capital), Bellac, Rochechouart, and Saint-Yrieix.

Viersen (*Feer'sen*), a town of Rhenish Prussia, 20 miles NW. of Düsseldorf. It manufactures plush, silk, cotton, and flax. Pop. 24,800.

Vierzon-Ville (*Vee-er-zon[g]'*), a French manufacturing town in dep. Cher, 20 miles NW. of Bourges. Pop. 11,559.

Vigan, Le (*Vee-gon[g]'*), a town of France, dep. Gard, 45 miles WNW. of Nîmes. Pop. 4050.

Vigevano (*Veejay'vano*), a cathedral city of Italy, 20 miles NW. of Pavia. Pop. 14,000.

Vigo (*Vee'go*), a seaport and health-resort of NW. Spain, on a deep bay (20 miles), 20 miles SW. of Pontevedra by rail; pop. 23,000. Vigo was taken by Drake in 1585 and 1589, by Lord Cobham in 1719; and in 1702 the Spanish galleons, defended by a French fleet, were captured or destroyed here by the British and Dutch.

Vijayanagar (*Vee-jī'a-nug'gar*), a ruined city in Madras province, 40 miles NW. of Bellary.

Villafranca, a town of Italy, 9 miles SW. of Verona by rail, where in 1859 peace was concluded between Austria and France. Pop. 7500.

Villareal (Span. pron. *Veel-ya-ray-al'*), a Spanish town 40 miles NE. of Valencia. Pop. 16,500.

Villa Rica, second town of Paraguay, is 70 miles SE. of Asuncion, with 25,000 inhabitants and a large trade in tobacco and maté.

Villefranche (*Veel-fron[g]sh'*), or Villafranca, a French fortified port in the dep. Alpes Maritimes, 3 miles E. of Nice. Pop. 3860.—(2) Villefranche de Rouergue, in Aveyron, 70 miles NE. of Toulouse by rail; pop. 7588.—(3) Villefranche-sur-Saône, in the dep. Rhone, 20 miles NW. of Lyons, has cotton manufactures; pop. 14,030.

Villena (*Veel-yay'na*), a town of Spain, 25 miles NW. of Alicante by rail. Pop. 14,100.

Villeneuve (nearly *Veel-nehv'*), the name of numerous French towns, the largest Villeneuve-sur-Lot, or d'Agen, in Lot-et-Garonne, 15 miles N. of Agen by rail; pop. 12,890.

Vil'na, capital of a government of W. Russia, on the Vilia, 430 miles SW. of St Petersburg by rail, with a trade in timber and corn; population, 158,000. It was the Lithuanian capital.

Vimeiro (*Vee-may-ee'ro*), also spelt Vimiera, a Portuguese town (pop. 1800), 30 miles N. of Lisbon, where in 1808 Wellington defeated Junot.

Vinaroz (*Veenaroth'*), a port of Spain, 45 miles NE. of Castellon by rail. Pop. 9920.

Vincennes (*Van[g]senn'*), an eastern suburb of Paris, just outside the fortifications, whose park, the Bois de Vincennes, is the pleasure-ground of eastern Paris. The ancient castle (14th c.) was long a state-prison, and in 1834 was made a fort. In its moat the Duc d'Enghien was shot.

Vincennes (*Vinsenns'*), the oldest town (1735) in Indiana, on the navigable Wabash, 52 miles by rail N. of Evansville. It contains a R. C. cathedral, steam flour-mills, &c. Pop. 10,250.

Vindhya Mountains. See India.

Vin'egar Hill (389 feet high), close to Enniscorthy, County Wexford, scene of the rout of the Irish rebels by General Lake, June 21, 1798.

Vinnit'za, a Russian town, in Podolia, stands on the Bug, 120 miles SW. of Kieff. Pop. 28,733.

Vionville (*Veeon[g]veel*), a village of Lorraine (pop. 450), 20 miles W. of Metz. In the great cavalry battle named from it or the next village of Mars-la-Tour, the French were driven back on Metz, August 16, 1870.

Viramgam, a town of Bombay Presidency, 27 miles W. of Ahmedabad by rail. Pop. 23,209.

Vire (*Veer*), a town in the Norman dep. Calvados, on the Vire, 35 miles SW. of Caen. Pop. 6635.

Virgin'ia, a middle Atlantic state of the American Union, separated from Maryland by the Potomac River and Chesapeake Bay, and bounded S. by North Carolina and Tennessee, W. and NW. by Kentucky and West Virginia. Its greatest length from E. to W. is 475 miles; its greatest width 190 miles; and its land area 40,125 sq. m., with a water area of 2325. The surface consists of a series of belts parallel to the coast on the E. and the Appalachian Mountains on the W. The fifth and highest of these belts, styled 'Appalachia,' is a series of long narrow valleys 2000 feet or more above the sea, enclosed between the ranges of the Alleghany Mountains. The chief rivers are the Potomac, Rappahannock, York, James, Blackwater, and Roanoke. A seventh of the state is drained by the Kanawha or New River, Holston, and Clinch, which feed the Ohio. Virginia is famous for its mineral springs, and has its Natural Bridge, in Rockbridge county, and many caverns. Except on the swampy coast the climate is pleasant and healthful. The soils are mostly fertile, and the state contains extensive forests. Waterfowl, partridges or quails, pigeons, grouse, wild turkeys, and deer are plentiful. The fisheries supply large quantities of fish; oyster-culture is important. Indian corn, oats, and barley are extensively grown. Tobacco has always been a staple crop, and the 'Virginia leaf' is noted throughout the world. Among the mineral products are building stones, iron, lead, and zinc ores, gold (once largely worked), and bituminous and anthracite coal. Virginia has 100 counties and eighteen cities independent of county government. The chief cities are Richmond (the capital), Norfolk, Petersburg, Roanoke, Newport News, Lynchburg, Portsmouth, Danville, and Alexandria. The history of Virginia is specially romantic and heroic. It was here that the first lasting colony was established in 1607 by the English. At Jamestown was held the first representative assembly in America. With its early period are associated the names of Captain John Smith and Pocahontas. Such was the prosperity of the colony that at the end of the colonial period Virginia was the most populous and wealthy of the thirteen colonies. In the protest against the Stamp Act and the encroachments of Great Britain Virginia took the lead, and in the revolutionary struggle furnished such noted sons as Washington, Jefferson, Patrick Henry, the Lees, and Madison. At Yorktown Cornwallis's surrender put an end to the contest. In the civil war Virginia furnished the Confederate commander, Robert E. Lee, and on its soil the last battle was fought and the final surrender made. Of the first twenty-one presidents seven were Virginians. Pop. (1800) 880,200; (1860) 1,596,318; (1870, after the separation of West Virginia) 1,225,163; (1880) 1,512,565; (1900)

1,854,180 (660,722 coloured). See *The New Virgintans* (2 vols. Edin. 1881); and other works by Bruce (Richmond, 1891) and Drake (1894).

Virginia, West. See West Virginia.

Virginia City, capital of Storey county, Nevada, is built, 6200 feet above the sea, on the eastern side of Mount Davidson, 21 miles by rail NNE. of Carson. It owes its existence to its silver-mines—the Comstock Lode, the Big Bonanza, &c. Pop. (1880) 10,917; (1900) 2695.

Virginia Water, an artificial lake, nearly 2 miles long, formed in 1746 by the Duke of Cumberland in the Great Park at Windsor, is 5 miles S. of the castle.

Virgin Islands, a group of fifty West Indian islands. The total area is 261 sq. m., and the pop. is nearly 45,000. Three, St Thomas, Santa Cruz, and St John, belong to Denmark (area, 130 sq. m.; pop. 31,000). Bieque, or Crab Island (pop. 3000), and Culebra were ceded by Spain to the United States in 1898. The others are British; total area, 58 sq. m.; pop. (1881) 5287; (1891) 4639, of whom only about 150 are whites. The chief of the British Islands are Tortola, Virgin-Gorda, and Anegada.

Vishni-Volotchok (*-ni* as *-nee*), a town of Russia in the government of Tver, 230 miles SE. of St Petersburg by rail. Pop. 16,590.

Visnagar, a town of NE. Baroda. Pop. 21,376.

Visp (*Veesp;* Fr. *Viège*), a Swiss village (pop. 900) in Vaud, at the opening of the Visp valley to the Rhine, 42 miles E. of Martigny.

Vis'tula (Lat.; Polish *Vistla;* Ger. *Weichsel*), the great river of Poland, rises in Austrian Silesia, 3600 feet above sea-level, amongst the outliers of the Carpathians. Formed by three head-waters, the White, Little, and Black Vistulas, it flows 650 miles northward, but with many bends, and receiving the Bug and other tributaries, past Cracow, Warsaw, Plock, Lipno, Thorn, Kulm, Graudenz, and Danzig, till it enters the Baltic Sea by several mouths.

Vitebsk', capital of a government of W. Russia, on the Western Dwina, 380 miles S. of St Petersburg by rail. Pop. 65,880 (many Jews).—Area of *government*, 17,440 sq. m.; pop. 1,489,250.

Viter'bo, a city in a volcanic region on the slopes of Monte Cimino, 50 miles NW. of Rome by rail, with an ancient cathedral, fine palazzi, beautiful fountains, &c. Pop. 15,279.

Viti Islands. See Fiji.

Vitré (*Veetray*), a walled Breton town, dep. Ille-et-Vilaine, on the Vilaine, 24 miles E. of Rennes by rail. Rochers, the residence of Madame de Sévigné, is 3½ miles S. Pop. 9207.

Vitry-le-François (*Veetree-leh-Fron²swah*), a fortified town, in the French dep. Marne, on the Marne, 127 miles E. by S. of Paris. Pop. 7984.

Vitto'ria, capital of the Basque province of Alava, 120 miles NE. of Valladolid. The cathedral dates from the 12th c. Pop. 33,650. Wellington here defeated the French, June 21, 1813.

Vitu. See Witu.

Vizagapatam' ('city of Visakha,' the Hindu Mars), a seaport in the Northern Circars, Madras, on the Bay of Bengal, 100 miles NE. of the mouth of the Godavery. Pop. 43,000.

Vizeu (*Veezay'oo*), a city of Portugal, 50 miles NE. of Coimbra, with a fine cathedral and Roman and Moorish remains. Pop. 8956.

Vizianagram', a town of Madras, 35 miles NE. of Vizagapatam. Pop. 38,500.

Vlaardingen (*Vlahr'ding-en*), a town of Holland, 5 miles W. of Rotterdam, near the New Maas, with a large herring-fleet. Pop. 16,670.

Vladikav'kaz, capital of the Terek province of Cis-caucasia, and a railway terminus, at the foot of the main Caucasus chain. The pop. has rapidly increased from 8000 to 43,850.

Vladimir (*Vladimeer'*), a town of Russia, on the Kliasma's left bank, 120 miles NE. of Moscow by rail. Founded in the 12th c., it was in the 14th c. practically capital of Russia. It contains many historical remains, as the Kreml and the 'Golden Gate' (1158). Pop. 19,305.—Area of *government*, 18,864 sq. m.; pop. 1,570,730.

Vladivostok, a town of E. Asiatic Russia, near the north limit of Corea, on Peter the Great Bay. It has one of the finest harbours in the world, is a naval station, with an arsenal, and the terminus of the overland telegraph by Irkutsk and Kiachta; here, too, in 1891 the Czarevitch cut the first sod of the great Trans-Siberian railway. Founded in 1861, it had at the outbreak of the Russo-Japanese war (1904–5) a pop. of 30,000.

Vliessingen (*Vleess'ing-en*). See Flushing.

Vode'na, a town of Turkey, on a mountain-slope, 46 miles WNW. of Saloniki. Pop. 15,000.

Vogesen. See Vosges.

Voghera (*Vo-gay'ra;* anc. *Iria Augusta*), a town of Northern Italy, on the Staffora, 16 miles by rail SW. of Pavia. Pop. 12,794.

Voil, Loch, in Balquhidder parish, Perthshire, 3¼ miles W. by S. of Lochearnhead station. An expansion of the Balvag, it lies 414 feet above sea-level, and measures 3½ miles by 3 furlongs.

Voiron (*Vwah-ron⁸*), a town of the French dep. Isère, 15 miles NW. of Grenoble. Pop. 8287.

Volga (Slav 'river'), the greatest river in Russia and the longest in Europe, having a course of over 900 miles as the crow flies, or, following its principal sinuosities, of 2400 from its source among the Valdai Hills in Novgorod to its seventy mouths in the Caspian. Over a mile broad about the middle of its course, it is navigable from near its source, and a system of canals and its numerous tributaries make it one of the most important waterways in the world, communicating with the White Sea, Euxine, Baltic, and Gulf of Finland, as well as with the Don, Dniester, Dnieper, Dwina, and other rivers. Some 15,000 vessels, including 500 steamers, navigate the Volga. Traffic ceases in winter, when the waters are frozen. The fisheries (sturgeon, carp, and pike) are of great importance. The navigation is impeded by shoals and banks. The principal tributaries are the Oka, Kama, Mologa, and Viatka. The chief towns on the Volga are Jaroslav, Kostroma, Nijni Novgorod, Kazan, Simbirsk, Stavropol, and Samara.

Volhynia (*Volhee'nia*), a government of W. Russia; area, 27,743 sq. m., or larger than Greece; pop. 3,000,000. The capital is Zhitomir.

Volo, a port of Thessaly, on the Gulf of Volo, 37 miles by rail SE. of Larissa. Pop. 16,230.

Vologda, capital of a NE. province of Russia (stretching to the Urals), on the river Vologda, 260 miles NE. of Moscow by rail. Pop. 27,391.—Area of *government*, 155,498 sq. m.; pop. 1,420,000.

Volsk, a town of Russia, on the Volga's right bank, 70 miles NE. of Saratoff. Pop. 37,832.

Volta, a river of Upper Guinea which, rising in the Kong highlands, runs S. between Ashantee and Dahomey to the Bight of Benin.

Volterra (anc. *Volaterræ*), a town 35 miles SW. of Pisa, with Etruscan remains. Pop. 7500.

Voltri (*i* as *ee*), a coast-town of Italy, 9 miles W. of Genoa by rail. Pop. 7358.

Vorarlberg (*Foar'arl-berg*). See TYROL.

Voronej, or VORONEZH, capital of a Russian government (area, 25,443 sq. m.; pop. 2,546,260), on the right bank of the Voronej, 300 miles SE. of Moscow by rail. Pop. 81,150.

Vosges (*Vozh'*; Ger. *Vogesen*), a range of mountains separating Alsace from the French deps. of Vosges and Meurthe and the German Lorraine, and lying partly in NE. France and W. Germany; highest summits, 4100–4677 feet.

Vosges, a mountainous dep. of NE. France, formed out of the south part of the old province of Lorraine, and bounded E. by German Alsace. Area, 2266 sq. m.; pop. (1901) 419,784.

Vostit'za, a Greek town on the Gulf of Corinth, 25 miles by rail E. of Patras. Pop. 5311.

Vranja (*Vrahn'ya*), a town of Servia, ceded by Turkey in 1878, 60 miles S. of Nisch by rail. Pop. 11,930.

Vratza, capital of a district in Bulgaria, 60 miles NW. of Sofia, with a bishop, a school of sericulture, and a growing trade. Pop. 15,000.

Vryburg (*Vrī'burg*; meaning in Dutch 'Free town'), capital of British Bechuanaland, near a head-stream of the Vaal River, 145 miles N. of Kimberley by rail (1890). It has government buildings, churches, schools, hospitals, hotels, &c. Pop. 5000.

Vryheid, capital of a coal-bearing district now in the extreme north-east of Natal, transferred in 1902 from the Transvaal. Pop. 5000.

Vulcano (*Vool-kah'no*). See LIPARI ISLANDS.

Vultur'nus (mod. *Volturno*), a river of Campania, on which stood *Vulturnum* city.

Vyas'ma (*y* consonantal), a town of Russia, 110 miles ENE. of Smolensk by rail. Pop. 15,148.

Vyat'ka (*y* consonantal), capital of a Russian government (area, 59,117 sq. m.; pop. 3,005,795), on the river Vyatka, 280 miles NE. of Nijni-Novgorod. Pop. 24,998.

Vyernyi. See SEMIRETCHINSK.

Vyrn'wy, a river which rises on the borders of Merioneth and Montgomery and joins the Severn 8½ miles above Welshpool. In 1881–92 its upper waters were impounded for the water-supply of Liverpool, 68 miles off; creating an artificial lake of 1121 acres, 4¾ miles long by 1½ broad, and containing 2103 million cubic feet of water.

WAAL (*Waul*). See RHINE.

Wabash (*Waw'bash*), capital of Wabash county, Indiana, on the Wabash River, 89 miles by rail NNE. of Indianapolis. Pop. 8620.—The Wabash River rises in western Ohio, and flows 550 miles to the Ohio River. The Wabash and Erie Canal, which passes the town, is the longest (476 miles) in the States.

Waco (*Way'ko*), 'the geyser city' of Texas, capital of McLennan county, on the Brazos River, crossed by a suspension bridge, 186 miles NW. of Houston. It has Baylor University, sixteen artesian wells (104° F.), and manufactures of woollens, mattresses, and saddlery. Pop. 20,686.

Wadai (*Wah-dī*), a state of the central Soudan (q.v.), in the French sphere between Bagirmi and Dar-Fûr. Pop. 1½ million; capital, Abesher.

Wadebridge, a small Cornish seaport, on the Camel, 7 miles NW. of Bodmin.—Pop. 2186.

Wadelai (*Wah-de-lī*), a British post on the Upper Nile, 40 miles below its exit from the Albert Nyanza.—Old Wadelai, on the west bank, a Belgian-Congo station.

Wady (*Wah'dee*), an Arabic word signifying a river, a river-course, a ravine, or valley.—WADY HALFA is a place (pop. 3500) on the Nile's right bank, just below the second or great cataract. After the Soudanese rebellion this was taken as Egypt's southward limit.—WADY MUSA is the modern name of PETRA.

Wagga Wagga, a pastoral and agricultural town of New South Wales, 309 miles SW. of Sydney by rail, with a great railway bridge over the Murrumbidgee River. Pop. 5100.

Wagram (*Vah'gram*), a village 10 miles NE. of Vienna, where, on 5–6th July 1809, the Austrians were defeated by Napoleon.

Wahsatch' Mountains. See UTAH.

Waigatz (*Vī'gats*). See NOVA ZEMBLA.

Waikato (*Wī-kah'to*), the principal river of the North Island of New Zealand, flows first into Lake Taupo, and then out of it northward to Port Waikato, 25 miles S. of Manakau Harbour, with a total course of 170 miles.

Wainad. See WYNAAD.

Wainfleet, a Lincolnshire town, on the Steeping, 19 miles NE. of Boston. Pop. 1246.

Waitomo Caves, New Zealand, on the Waitomo River, running to the Waikato (q.v.).

Waitzen (*Vīte'zen*; Magyar *Vácz*), a town on the Danube, 20 miles N. of Pesth. Pop. 16,800.

Wakamatsu, a town of the main island of Japan, 55 miles SE. of Niigata, with manufactures of lacquer-ware. Pop. 31,500.

Wakayama, a town of the main island of Japan, 35 miles SW. of Osaka, with important cotton trade. Pop. 70,700.

Wakefield, the capital of the West Riding of Yorkshire, stands on the Calder at a convergence of railways, 9 miles SSE. of Leeds, 27 SSW. of York, and 19 NW. of Doncaster. In 1888 it was constituted the seat of a bishopric—its cathedral the fine Perpendicular parish church, which, enlarged and reconsecrated in 1329, and again enlarged about 1470, was restored in 1857–86 from designs by Sir G. G. Scott at a cost of £30,000, and has a tower and spire 247 feet high. On the nine-arch bridge over the Calder is a beautiful Decorated chapel (1357); it also was restored in 1847. At the grammar-school, chartered in 1591, and removed to new buildings in 1855, were educated Dr Radcliffe, Archbishop Potter, the Benedictine Cressy, and Bentley, the first two natives. The town-hall, French Renaissance in style, was erected in 1880 at a cost of £72,000; and other buildings are the corn exchange, fine art institute, Clayton hospital, and lunatic asylum. Though not the great 'clothing town' it was formerly, Wakefield still manufactures woollens, worsteds, and hosiery, as also agricultural implements, machinery, &c. It was incorporated in 1848, and made a parliamentary borough in 1832. Pop. (1851) 22,065; (1881) 33,240; (1901) 41,544. Here the Yorkists were defeated in 1460.

Wakefield, a manufacturing town of Massachusetts, 10 miles N. of Boston. Pop. 9970.

Wakhan. See BADAKHSHAN, AFGHANISTAN.

Wakkerstroom, capital of a district in the north of Natal, 150 miles N. of Pietermaritzburg, mostly transferred from the Transvaal in 1902. Pop. 3000.

Walcheren (*Wahl'hher-en*; usu. *Waul'sher-en*), a Dutch island at the Scheldt's mouth, with 50,000 inhabitants. The disastrous British *Walcheren Expedition* was undertaken in 1809.

Wald, a town of Rhenish Prussia, 7 miles SW. of Elberfeld, with ironworks. Pop. 19,600.

Waldeck (*w* as *v*), or WALDECK-PYRMONT, a small German principality controlled since 1867 by Prussia, consists of two parts, Waldeck, between Westphalia and Hesse-Nassau, and Pyrmont, a patch between Lippe, Westphalia, Brunswick, and Hanover. The country is high-lying and poor. Total area, 438 sq. m.; pop. (1900) 57,918—8636 in Pyrmont. The capital is Arolsen (q.v.). Pyrmont, 15 miles E. of Detmold (pop. 1410), has famous mineral springs.

Waldenburg, a town of Silesia, 43 miles SW. of Breslau. Pop. 16,300.

Wales, a great peninsula in the west of the island of Britain, bounded by the Irish Sea, St George's Channel, and the Bristol Channel, and touching the (now English) counties of Cheshire, Shropshire, Hereford, and Monmouth (q.v.). The area is 7363 sq. m., about a fifth larger than Yorkshire. The principality of Wales, administratively a part of England, though differing more or less widely in blood, language, national character, and religious temper, is a mountainous land, and contains Snowdon (q.v.), the highest point in South Britain; North Wales is especially picturesque. The minerals are extremely valuable, and South Wales contains some of the most important coal and iron industries in the United Kingdom. Copper, zinc, lead, tin, and gold are also found. The physical geography, geology, climate, &c. are dealt with at GREAT BRITAIN. The established church is a part of the Church of England, with four episcopal sees; Nonconformists, especially Calvinistic Methodists, Congregationalists, Baptists, and Wesleyans, are very numerous, and claim to be a large majority of the total population (many of them eager for disestablishment); but the proportions are much disputed. There are university colleges at Aberystwith, Bangor, and Cardiff, and theological colleges at Lampeter, &c. A Welsh university for the affiliation of the colleges was created in 1894. See the articles on the several Welsh counties, and on the towns, Cardiff, Swansea, &c. The following table shows the area and population of the twelve Welsh counties:

County.	Acres.	Pop. in 1881.	Pop. in 1901.
Anglesey	193,511	51,416	50,590
Brecknockshire	460,158	57,746	59,906
Cardiganshire	443,387	70,270	60,273
Carmarthenshire	594,405	124,864	135,325
Carnarvonshire	369,477	119,349	126,835
Denbighshire	425,038	111,957	129,935
Flintshire	161,807	80,441	81,725
Glamorganshire	516,959	511,433	860,022
Merionethshire	384,717	51,967	49,130
Montgomeryshire	495,089	65,710	54,892
Pembrokeshire	391,181	91,824	88,749
Radnorshire	276,552	23,528	23,263
Total	4,712,281	1,360,505	1,760,609

Of the total, 278,892 persons were set down as speaking Welsh only, 615,242 as speaking both Welsh and English; so that 894,134 (50·8 per cent.—as against 70 per cent. in 1881) did or could speak Welsh.

Walfish. See WALVISCH.

Walham Green, a district of Middlesex, 6 miles WSW. of St Paul's.

Walker, a town of Northumberland, on the Tyne, 3 miles E. of Newcastle. Pop. 14,500.

Walkerburn, a Peeblesshire village, with woollen factories, on the Tweed, 1¾ mile E. by N. of Innerleithen. Pop. 1160.

Walla'chia. See ROUMANIA.

Wallasey, a Cheshire township, 3½ miles NNW. of Birkenhead.

Walla Walla, capital of a county in Washington, on the Walla Walla River, 204 miles SSW. of Spokane Falls. Pop. 11,000.

Wallingford, a town of Berkshire, 15 miles NW. of Reading and 13 SSE. of Oxford, on the right bank of the Thames, which is crossed here by a bridge 300 yards long, built in 1809 at a cost of £14,000. It has Roman earthworks, a fragment of a Norman castle, which figured prominently in King Stephen's wars, and was taken by Fairfax and dismantled (1646); three—formerly thirteen—churches, in one of which Blackstone is buried; a grammar-school; a short branch-line; and a great July wool sale. A borough since Edward the Confessor's time, it returned two members till 1832, and then one till 1885. Pop. 2800. See works by Crofts (1870) and Hedges (2 vols. 1882).

Wallingford, a borough of Connecticut, on the Quinepiac River, 13 miles by rail NNE. of New Haven, with manufactories of buttons and Britannia and silver ware. Pop. 6738.

Wallsend', a town of Northumberland noted for its collieries, 4 miles NE. of Newcastle. It is named from its being at the end of Hadrian's Wall (q.v.); and many Roman relics have been found here. Pop. (1901) 20,918.

Walmer Castle, in Kent, 2 miles S. of Deal, is the official residence of the Lord Warden of the Cinque Ports (q.v.), and is a round-towered castle, built by Henry VIII. It was the favourite residence and the death-place of the Duke of Wellington; and its relics of him, of Pitt, and of other Lord Wardens were in 1892 secured to the nation by the son of the late Right Hon. W. H. Smith. The adjoining town of Walmer is a favourite watering-place, has barracks, and is a member of the Cinque Port of Sandwich. Pop. 5650. See Elvin's *Records of Walmer* (1894).

Walsall (*Waul'saul*), a municipal, parliamentary, and county borough of Staffordshire, is situated on an eminence above a small feeder of the Tame, 8 miles NNW. of Birmingham, 6 E. of Wolverhampton, and 123 NW. of London. An ancient place, but of modern development, it stands on the edge of the South Staffordshire coalfield, and manufactures saddlers' ironmongery and all kinds of saddlery, carriages, iron and brass, leather, &c., whilst in the vicinity are coal-pits, limestone-quarries, and brickyards. The public buildings include an Italian Renaissance guildhall (1867), county court-house (1869), post-office (1879), public library (1859), grammar-school (1554; rebuilt 1850), and cottage hospital (1878); and in 1886 a statue was erected of 'Sister Dora' (Miss Pattison). Walsall was the scene in 1891–92 of an Anarchist conspiracy, for which four dynamiters were convicted. It became a

municipal borough in Henry IV.'s reign; a parliamentary borough, returning one member, in 1832; and a county borough in 1888. Pop. (1851) 25,680; (1881) 54,402; (1901) 86,440. See Willmore's *History of Walsall* (1887).

Wal'sham, North, a market-town of Norfolk, 14 miles N. by E. of Norwich. It has a large Perpendicular church with a ruined tower, and a market-cross (rebuilt 1600). Pop. 4000.

Wal'singham, a small town of one long street and 1000 inhabitants in the north of Norfolk, 5 miles N. by E. of Fakenham. The ruined Augustinian priory (1016) contained a famous image of 'Our Lady of Walsingham.' Henry VIII. made the pilgrimage to it barefoot, and Erasmus' *Peregrinatio religionis ergo* records his own visit.

Walsoken, a NE. suburb of Wisbeach.

Wal'tham, a market-town of Essex, on the Lea, 13 miles N. by E. of London. Called also Waltham Abbey and Waltham Holy Cross, it retains the nave of a stately Norman church, which, rebuilt by Harold in 1060 for a collegiate chapter, served from 1177 for an Augustinian abbey. A miraculous cross had been brought here from Montacute in Somerset; and here probably Harold was buried. Both the nave and a Decorated lady chapel have been restored; they serve for the parish church, of which Bishop Hall and Thomas Fuller were incumbents. Waltham has memories also of Cranmer and Henry VIII. Waltham Cross, erected by Edward I. in 1290 in memory of Queen Eleanor, and restored in 1890, is 1½ mile W., in Hertfordshire; and 1 mile farther W. is Theobalds (q.v.). The Lea's many channels form a network of islands, on which are vast government powder-mills. Enfield (q.v.), in Middlesex, is also near, and market-gardening is largely carried on. Pop. (1851) 2329; (1901) 6547. See works by Fuller (1655; ed. by Nichols, 1837) and Bishop Stubbs (1860).

Waltham, a town of Massachusetts, on the Charles River, 10 miles by rail WNW. of Boston, with manufactories of watches. Pop. (1880) 11,712; (1900) 23,481.

Wal'thamstow, an Essex parish, 6 miles NE. of St Paul's. William Morris, the poet, was born here. Pop. (1851) 4959; (1901) 95,125.

Walton-on-Thames, a Surrey village, 17 miles (by water 28) SW. of London. Its church has some interesting monuments, and Lilly, the astrologer, is buried here. Pop. 10,329.

Walton-on-the-Naze, an Essex watering-place, 7 miles S. of Harwich. Pop. 2014.

Walvisch Bay (Dutch, 'Bay of Whales'), anglicised as Walfish or Walwich Bay, a territory of 480 sq. m. on the W. coast of Africa, 420 miles N. of the Orange River's mouth. Declared British in 1878, and annexed to Cape Colony in 1884, it is surrounded by German Damaraland. The bay affords a safe anchorage. Pop. 1020.

Wandsbeck (*Waunds'beck*), a NE. suburb of Hamburg. Pop. 30,000.

Wandsworth, a metropolitan borough of the city of London. Pop. (1901) 232,034.

Wanganui (*Wang-ga-noo'ee*), a port of New Zealand, 135 miles NW. of Wellington. Pop. 7330.

Wanks. See Honduras.

Wanlockhead, a mining village of Dumfriesshire, 8½ miles ENE. of Sanquhar. Pop. 624.

Wansbeck. See Morpeth.

Wanstead, an Essex urban district, 7 miles NE. of London. Pop. (1901) 9179.

Wan'tage, a market-town of Berkshire, in the Vale of the White Horse, 26 miles W. of Reading. A steam tramway (1875), the first in England, and 2½ miles long, connects it with Wantage Road station; and it has a good 14th-century church, a corn exchange (1865), a grammar-school (1597; rebuilt 1850), an Anglican home for penitents, and a marble statue (1877) of King Alfred, who was born here, by Count Gleichen. Bishop Butler was also a native. Wantage manufactures farm implements. Pop. 3850.

Wantsome. See Thanet.

Wapping, a Thames-side parish of E. London.

Warasdin (*Varasdeen'*), an Austrian cathedral city in Croatia, on the Drave's right bank, 35 miles NE. of Agram. Pop. 13,700. Warasdin-Töplitza warm sulphurous spring is 7 miles SW.

Wardour Castle (*a* as *o*), Wiltshire, 15 miles W. of Salisbury, the Grecian mansion (1789) of Lord Arundell of Wardour.

Ware, a market-town of Herts, on the Lea, 2½ miles ENE. of Hertford. It has a fine cruciform church, remains of a priory (1233), great malting establishments, and memories of Godwin and 'John Gilpin.' St Edmund's Catholic College (1769), with a chapel of 1850 by Pugin, is at Old Hall Green, 5 miles NNE.; and the Great Bed of Ware was in 1869 removed to Rye House. Pop. (1851) 4882; (1901) 5573. See, for the college, a work by the Very Rev. B. Ward (1893).

Ware, a town of Massachusetts, on Ware River, 74 miles by rail W. of Boston, with cotton and woollen factories. Pop. 8329.

Wareham, a small but very ancient market-town of Dorsetshire, stands between the rivers Piddle and Frome, 15 miles E. of Dorchester. It was a British town, and afterwards a Roman station, and is surrounded by a grassy vallum, still 30 feet high and perfect on three sides. A fire destroyed two-thirds of Wareham in 1762, and a Norman castle and a priory have disappeared; but St Mary's church retains an interesting chapel, that marks the resting-place for two years of Edward the Martyr. Superseded by Poole as a port, Wareham now depends chiefly on extensive clay-works. It is a municipal borough (incorporated 1886), and till 1832 returned two members, then till 1885 one (with Corfe Castle, Arne, &c.). Horace Walpole is claimed falsely as a native. Pop. 2000.

Wark Castle, a Northumberland ruin, on the Tweed, 2½ miles W. by S. of Cornhill.

Warkworth (*Waurk'worth*), a small seaport (pop. 700) in Northumberland, near the mouth of the Coquet, 7 miles SE. of Alnwick by rail. The Percies' castle, mostly ruinous, dates from the 12th c. The Norman church has been restored. The Benedictine priory was founded in 1256, and the hermitage, 'deep hewn within a craggy cliff,' of Bishop Percy's ballad, is 1 mile above the castle. The trade, exporting coal, is carried on at Amble, 1 mile SE. on the coast.

Warminster (*a* as *o*), an ancient Wiltshire market-town, 19½ miles NW. of Salisbury. It has a free school (1707) and a theological college (1860). Pop. 5600.

Warnsdorf, a town in the north of Bohemia, 60 miles N. of Prague, with great textile and other manufactures. Pop. 23,000.

Warren, (1) capital of Trumbull county, Ohio, 52 miles SE. of Cleveland, with rolling and flour mills, and manufactories of linseed-oil, cottons, &c. Pop. 8973.—(2) Capital of Warren county, Pennsylvania, on the Alleghany River, 66 miles

SE. of Erie. It manufactures engines, boilers, wooden wares, and leather. Pop. 8050.

Warrenpoint, a Down port, at the head of Carlingford Lough, 83 miles N. of Dublin. Pop. 1817.

Warrington (*a* as *o*), a municipal and parliamentary borough and manufacturing town of Lancashire, on the Mersey's right bank, 18 miles E. of Liverpool, 16 WSW. of Manchester, and 182 NW. of London. Though of recent development, it is an ancient place, the *Wallintun* of Domesday; and, acquiring strategic importance through its bridge (1496) over the Mersey, it was the scene of defeats of the Scots (1648), the royalists (1651), and a portion of Prince Charles Edward's forces (1745). To a dissenting academy, founded in 1757, it owes its memories of Drs Aikin, Priestley, Taylor, &c.; and Lucy Aikin was a native. There are still some old timbered houses; and the parish church, St Elphin's, with a spire 300 feet high, is a fine cruciform Decorated structure, restored in 1859–67 at a cost of over £15,000. The town-hall was the former seat (1750) of Col. Wilson Patten, purchased in 1872 for £20,000; and other buildings are the Royal Court Theatre (1862), post-office (1876), hospital (1876), museum and library (1857), school of art (1882), public baths (1866), grammar-school (1526; rebuilt 1857), &c. There are also public gardens and a park. The manufactures include iron, wire, pins, files, cottons, glass, leather, and soap. Warrington was constituted a parliamentary borough, returning one member, in 1832, a municipal borough in 1847, and became a county borough under the Act of 1888. Pop. (1851) 22,894; (1881) 45,253; (1901) 64,242.

Warrnambool, a seaport of Victoria, 166 miles SW. of Melbourne. Pop. 6482.

Warsaw (Polish *Warszawa*), long the capital of Poland and now capital of a government of Russian Poland, stands on the Vistula's left bank, 330 miles E. of Berlin by rail and 700 SW. of St Petersburg. Two iron bridges lead to the suburb of Praga, on the opposite bank. Standing on a navigable river, with great railway lines to Moscow, St Petersburg, Vienna, Danzig, and Berlin, Warsaw is one of the most important cities of eastern Europe, being smaller only than St Petersburg and Moscow. Corn and flax are largely exported, and coal and manufactured goods imported. Warsaw itself manufactures electroplate, machinery, boots, woollens, pianos, carriages, tobacco, sugar, chemicals, beer, and spirits. Of over one hundred Catholic churches the cathedral of St John is the most notable; there are also six Greek churches, two Lutheran ones, and many synagogues. The castle is an imposing building, and there are many fine private palaces. The university, suppressed in 1832, was reopened in 1864, and has seventy-five professors (who teach in Russian) and over 1100 students. Pop. (1872) 276,000; (1905) 641,500.—Area of *government*, 5623 sq. m.; pop. 1,945,000.

Warsop, a town of Notts, 5 miles NNE. of Mansfield. Pop. 2132.

Wartburg (*Vahrt'boorg*). See EISENACH.

Warthe (*Var'teh*), the Oder's chief affluent, rises on the SW. frontier of Poland, flows N. and W. into Prussia, then N. (past Posen) and W. again, and enters the Oder at Küstrin. Length, 445 miles (230 in Prussia, and 265 navigable).

Warwick (*Wor'rick*), the county town of Warwickshire, on the Avon, 21 miles SE. of Birmingham, 45 NNW. of Oxford, and 107 NW. of London. In spite of a great fire in 1694, it has preserved much of its mediæval character, and, besides a good deal of antique domestic architecture, retains two of the old gates with chapels above their archways. St Mary's church is a large cruciform structure, largely rebuilt after that great fire, with a Norman crypt, the superb Beauchamp chapel (1464), and a wealth of interesting monuments. But Warwick's chief glory is its stately castle, on a rocky elevation, 40 feet high, overhanging the river. Ethelfleda, King Alfred's daughter, built a fortress here about 915; but the present edifice, which extends over 3 acres, is all of post-Conquest erection, its oldest portion the huge Cæsar's Tower (147 feet high), whilst Guy's Tower (128 feet) was built in 1394. Having passed ere then, with the earldom of Warwick, to the Beauchamps, Nevilles, Plantagenets, Dudleys, and Riches, it had long been ruinous when in 1605 it was granted to Sir Fulke Greville, whose descendant, Lord Brooke, was in 1759 created Earl of Warwick, and who spent at least £20,000 in repairing and beautifying it. It stood a memorable siege by the royalists during the Great Rebellion, and its great hall was gutted by fire on 3d December 1871; but by 1876 the damage had been repaired at a cost of £18,000, and Warwick Castle is one of the few feudal residences still tenanted. Besides relics of Guy of Warwick, the 'King-maker,' and Cromwell, it has paintings by Van Dyck, Rubens, Holbein, and other masters, the 'Grimani table,' valued at £10,000, and the Greek 'Warwick vase,' 7 feet in diameter, from Hadrian's Villa at Tivoli. It has welcomed many royal visitors, as Queen Elizabeth, James I., William III., and (in 1892) the Prince of Wales and the Duke of York. The Leycester Hospital was founded in 1571 by Robert Dudley, Queen Elizabeth's favourite, for twelve poor brethren; the king's school (1546) occupies fine modern buildings erected at a cost of over £13,000. The manufactures include art furniture, gelatine, and agricultural implements. Landor was born here. Warwick, which was chartered by Henry VIII. as a municipal borough, lost one of its two members in 1885, when the parliamentary boundary was extended so as to take in Leamington (q.v.), the borough being called that of Warwick and Leamington. Pop. of mun. borough (1851) 10,973; (1901) 11,889; of parl. borough (1901) 39,075.

Warwick, a township of Rhode Island, on Narragansett Bay, 10 miles SW. of Providence. Pop. 23,350.

Warwickshire, a west midland county of England, bounded by the counties of Stafford, Derby, Leicester, Northampton, Oxford, Gloucester, and Worcester. It has an extreme length from N. to S. of 52 miles, an extreme breadth of 33 miles, and an area of 881 sq. m., or 563,946 acres. In the south are spurs of the Cotteswolds, as the Edge Hills (826 feet); but elsewhere the surface is varied only by gentle undulations, formerly covered by the Forest of Arden. The Avon, flowing south-westward towards the Severn, is the principal river; but in the north is the Tame, a tributary of the Trent. A coalfield, 16 miles by 3, extends from near Coventry to the Staffordshire boundary east of Tamworth; and Warwickshire also produces some fireclay, ironstone, limestone, &c. About seven-eighths of the total area is in crops and permanent pasture; woods and plantations occupy nearly 21,000 acres. The great industries are noticed under Birmingham and Coventry; other towns are Warwick, Rugby, Leamington, Stratford-on-Avon,

and Nuneaton. The county, which comprises four hundreds, 256 parishes with parts of seven others, and four parliamentary divisions, is mainly in the diocese of Worcester. The antiquities include a stone circle (the 'Rollright Stones'), Roman stations and roads, and a wealth of mediæval remains, as Warwick and Kenilworth castles. The battlefield of Edgehill must also be noticed; whilst of Warwickshire worthies may be mentioned Shakespeare, Baskerville, Samuel Butler, David Cox, Drayton, Dugdale, 'George Eliot,' Landor, Dr Parr, and Priestley. Pop. (1801) 206,798; (1841) 401,703; (1881) 737,339; (1901) 897,678. See Dugdale's *Antiquities of Warwickshire* (1656; new ed. 2 vols. 1730), and histories by W. Smith (1830), West (1830), Burgess (1876 and 1893), and Timmins (1889).

Wash, a wide estuary on the east coast of England, between the counties of Lincoln and Norfolk, is 22 miles in length and 15 in average breadth. With low and marshy shores, it is largely occupied by sandbanks, dry at low water, and receives the rivers Witham, Welland, Ouse, Nen, and Nar. On both sides of the Ouse's channel much land has been reclaimed; and a proposal of Rennie's to drain the Wash, and so reclaim 150,000 acres, was revived in 1893.

Wash'ington, the most north-western state of the American Union, is bounded by British Columbia, Idaho, Oregon, and the Pacific. It is 350 miles long (E. to W.), 200 miles wide, and 69,180 sq. m. in area. The Cascade Range (q.v.) traverses the state from N. to S. The summits of several of the volcanic cones are covered with perpetual snow, and their glaciers rival in beauty those of Switzerland. Western Washington is mountainous, interspersed with fertile valleys. The Coast Range to the west of the Cascades extends in broken masses from the S. to the Strait of Juan de Fuca. This strait and the great inland sea of Puget Sound afford some of the best harbours in the world. Central Washington, between the Cascade Range and the Columbia River, is a lofty plateau region, its surface, like that of Eastern Washington, largely covered with lava, and carved into deep and picturesque cañons by the tributaries of the Columbia. East of the Columbia the plateaus and plains are cut by the valleys of Clark's Fork and the Spokane and Snake rivers. The whole of Eastern and a portion of Western Washington are drained by the Columbia River, which for nearly 300 miles forms the boundary with Oregon. In Western Washington the winters are very mild, and the rainfall is the heaviest in the United States. Western Washington is heavily wooded, and lumbering a leading pursuit. Portions of Central and Eastern Washington are well adapted for wheat-growing and grazing. There are extensive coalfields around Puget Sound. The coast fisheries and the salmon-canneries on the Columbia are valuable. Washington was organised as a territory in 1853, reduced to its present limits in 1863, and admitted as a state in 1889. Towns are Seattle, Tacoma, Spokane, Walla Walla, and Olympia (the capital). Pop. (1870) 23,955; (1880) 75,116; (1900) 518,103.

Washington, name of over 200 cities, towns, townships, villages, and hamlets in the United States: (1) the capital of Daviess county, Indiana, 173 miles W. of Cincinnati, with coal-mines near by; pop. 8550.—(2) the capital of Fayette county, Ohio, 77 miles ENE. of Cincinnati; pop. 5742.—(3) the capital of Washington county, Pennsylvania, 31 miles SW. of Pittsburgh, with many mills and cigar-factories, coal-mines, and the Washington and Jefferson College (Presbyterian; founded 1802). Pop. 7663.

Washington City, the capital of the United States, in the District of Columbia (q.v.), on the Potomac River, in 38° 53′ lat., 77° 2′ long., 226 miles SSW. of New York, 136 of Philadelphia, and 40 of Baltimore. More than half the area of the city proper is permanently free from the encroachment of buildings; and besides the numerous small parks, Washington has a zoological park of 140 acres, and the Rock Creek Park of over 1500 (purchased in 1892 for $1,200,000). Streets and avenues are thickly planted with shade-trees. The architecture of the older city is commonplace, but in the newer Washington is of striking variety and attractiveness. The government buildings are mostly fine and imposing structures. Conspicuous on an eminence is the Capitol, built in 1818–59 at a cost of $14,000,000, and 751 feet long; its iron dome, crowned by a bronze figure of Liberty, is 285 feet high. The hall of the House of Representatives has desks for 356 members, and the galleries seat 1500 spectators. The Senate Chamber accommodates 1000 spectators. The National Memorial Hall in the Capitol is to receive statues contributed by each state to commemorate two of its distinguished citizens. The Treasury Department at Pennsylvania Avenue and Fifteenth Street (of freestone and granite) cost $7,000,000. The Interior Department occupies an entire square in the heart of the city, and is constructed of white marble, in pure Doric, costing $3,000,000. The Post-office Department opposite is a Corinthian marble edifice. The granite building for the departments of state, war, and navy, in Renaissance style, is the largest public edifice in Washington, covers 4½ acres, has 566 rooms, and cost $11,000,000. The Congressional Library building, on Capitol Hill, cost $6,000,000. The president's house and executive mansion is a plain edifice of freestone, in classic style, painted white (whence called 'the White House'). The Smithsonian Institution is built of red sandstone, in the Byzantine style, with picturesque towers. The national monument to Washington (1885) is an obelisk of white marble, 555 feet high, beside the Potomac, erected at a cost of $1,230,000. The National Soldiers' Home, 2 miles above the city, founded in 1851, has 600 acres of park and forest, which serve as a public driving park and rural resort. The Columbian University (1814), Georgetown College (R. C.; 1789), the National University, and Howard University (for coloured students) have each departments of law and medicine. The Catholic University of America (1887) has fine stone buildings just outside the city limits. The Methodist American University has its grounds above Georgetown. Other buildings are the Naval Observatory, the National Deaf-mute College, and the Gonzaga (Catholic) College. The National Museum, originally established to exhibit the rich contributions given to the government by various countries from the World's Fair at Philadelphia in 1876, has become a most extensive and instructive collection of antiquities, ethnology, geology, and natural history generally; and there are many museums, libraries, art galleries, &c. Few of the 200 churches are remarkable. Hardly a public square or circle is without its monument. The city is abundantly supplied with pure water, by a conduit 15 miles long, from the Great Falls of the Potomac. The various bureaus employ between 6000 and

7000 persons. The number of hotels and boarding-houses is very great; and a steadily increasing number of people of wealth and taste are building residences at the national capital. The absence of smoky manufactories, the genial and salubrious climate, the pleasant situation and attractive suburbs, with the wide and smooth streets, contribute to render a residence in Washington agreeable during all but the torrid heats of summer. The original plan of 'the city of magnificent distances,' as it has been called, was drawn out by a resident French engineer, L'Enfant, and largely copied from Versailles. Its characteristic features are the crossing of the rectangular streets by frequent broad transverse avenues, 160 to 120 feet wide, and the numerous circles and triangular reservations interspersed as little parks throughout the city. Originally called Federal City, it was named after Washington in 1791, and became the capital in 1800. In 1814 the Capitol was burned by the British. After the civil war of 1861–65 Washington began to move forward in a new career of prosperity, and was transformed in a few years to a beautiful and attractive city. Pop. (1800) 3210; (1830) 23,364; (1860) 61,122; (1880) 147,293; (1900) 218,196.

Washita (*Wosh-e-taw'*), a tributary of the Red River (q.v.), noted for its whetstones.

Wast Water, Cumberland, 14 miles SSW. of Keswick, is a lake 3 miles long, ½ mile wide, 204 feet above sea-level, and 258 feet deep.

Watchet, a small Somerset seaport, on the Bristol Channel, 16½ miles NW. of Taunton.

Waterbury, a city of Connecticut, 33 miles by rail SW. of Hartford, on the Naugatuck River. It manufactures brass wares, and its cheap watches that have carried its name round the world. Pop. (1880) 17,806; (1900) 45,859.

Waterford, an Irish county of Munster, E. of Cork. Its greatest length from E. to W. is 52 miles; its breadth 28; and its area 721 sq. m., or 461,552 acres. The surface is mountainous, the chief ranges, Knockmeledown (2609 feet) and Cummeragh (2478). The Suir and Blackwater are the chief rivers. The climate is moist, and the soil much of it marshy; but the uplands are well suited for tillage, and the lower pasture-lands produce excellent butter. Lead, iron, copper, marble, and potter's clay are found. There are some cotton manufactures, and the fisheries are of some importance. The chief towns are Waterford, Dungarvan, Tramore, Portlaw, and Lismore. Before 1885 the county and the boroughs returned five members; now the county sends two and Waterford city one. Pop. (1841) 196,187; (1901) 87,187—82,576 Catholics. The county is rich in Celtic, Danish, and Anglo-Norman antiquities.

Waterford, the county town, itself a county of a city and a municipal and parliamentary borough, is on the river Suir, at the head of the tidal estuary, Waterford Harbour, 97 miles SSW. of Dublin by rail. The city, on the Suir's right bank, is connected with its suburb of Ferry-bank by a wooden bridge of thirty-nine arches. The quay admits vessels of 2000 tons; there is a shipbuilding yard and dock on the Kilkenny bank; but the place has not a thriving look. The chief public buildings are the Protestant and R. C. cathedrals, the Protestant episcopal palace, the (Catholic) college of St John, the city and county court-houses, besides hospitals, &c. The chief trade is with England in the export of agricultural produce. Waterford is originally of Danish foundation, but in 1171 was taken by assault by Strongbow. It received a charter from John. Pop. (1881) 22,457; (1891) 21,693; and (1901) on extended area, 26,769 (of whom 24,571 were Catholics). See Ryland's *History of Waterford* (1824).

Waterloo (Flemish pron. *Wah-ter-lō'*), a Belgian town (pop. 3600), 11 miles S. of Brussels, which gives name to Wellington's decisive victory over Napoleon, fought near it on Sunday the 18th June 1815. The French numbered 72,247; the allies 69,894 (25,389 British); and the loss of the former was 32,000 (including prisoners), of the latter 22,500. By Frenchmen the battle is named after the village of Mont St Jean; by Prussians, after the farm of La Belle Alliance. See Ropes's *The Campaign of Waterloo* (1893).

Waterloo, a town of Iowa, on the Cedar River, 93 miles W. of Dubuque. Pop. 12,580.

Waterloo-with-Seaforth, a Lancashire watering-place, 4 miles N. by W. of Liverpool. Pop. (1851) 9118; (1901) 23,102.

Watertown, (1) a town of Massachusetts, on the Charles River, 8 miles W. of Boston, with a national arsenal. Pop. 9706.—(2) Capital of Jefferson county, New York, on Black River, 12 miles by rail E. of Sackett's Harbour, on Lake Ontario. The rapids supply power for factories of spring-wagons, sewing-machines, paper, woollens, &c. Pop. 21,696.—(3) A city of Wisconsin, on Rock River, 44 miles W. by N. of Milwaukee, with manufactories of flour, beer, chairs, blinds, &c., and a Lutheran university (1864). Pop. 8455.

Waterville, a village of Maine, on the Kennebec, 19 miles N. by E. of Augusta. Pop. 9480.

Watervliet (formerly West Troy), a city of New York, on the left bank of the Hudson River, opposite Troy. It has a U.S. arsenal. Pop. 15,500.

Watford (*a* as *o*), a market-town of Hertfordshire, on the Colne, 15 miles (by rail 18) NW. of London. The Perpendicular church, restored in 1871, contains some interesting monuments of the Morrisons and Cassells, Earls of Essex, whose seat, Cassiobury, is close to the town; and there are also the London Orphan Asylum (inst. 1813; transferred hither, 1871), the Salters' Company's almshouses (1873), the endowed schools (1874), the public library and school of art (1874), &c., besides manufactures of silk and paper. Pop. (1851) 6546; (1881) 12,162; (1901) 29,327.

Wath-upon-Dearne, a Yorkshire town, 6 miles N. of Rotherham. It has collieries, ironworks, &c. Pop. (1851) 1495; (1901) 8515.

Watling's Island, one of the Bahamas (q.v.), the probable landfall of Columbus.

Watling Street, one of the great Roman highways of Britain, ran from Dover to Canterbury, Rochester, London, Chester, and York, thence branching to Carlisle and Newcastle.

Watlington, a market-town of Oxfordshire, 8 miles NE. of Wallingford. Pop. of parish, 1734.

Watton, a Norfolk market-town, 12 miles N. of Thetford. Near it is Wayland Wood, the scene of the 'Children of the Wood.' Pop. 1365.

Wauke'gan, capital of Lake county, Illinois, on the west shore of Lake Michigan, 36 miles by rail N. by W. of Chicago. Pop. 9345.

Wau'kesha, capital of a county, Wisconsin, on Fox River, 19 miles W. of Milwaukee. Pop. 7321.

Wausau (*Waw'saw*), a town of Wisconsin, 210 miles NW. of Milwaukee. It sends much lumber down the Wisconsin River. Pop. 12,360.

Wave'ney, a river of Norfolk and Suffolk,

flowing 50 miles ENE. to the Yare, 4½ miles WSW. of Yarmouth.

Waverley. See FARNHAM.

Wavertree, a SE. suburb of Liverpool.

Wavre (*Vahvr*), a Belgian town, 15 miles SE. of Brussels; pop. 8432. Here on 18th June 1815 the Prussians prevented Grouchy from joining Napoleon at Waterloo.

Wayland Wood. See WATTON.

Wazan', a town of Morocco, 90 miles SE. of Tangier; pop. 20,000. It is a sacred city, the headquarters of the Grand Shereef.

Wazirabad', a town of the Punjab, 21 miles N. of Gujranwala by rail. Pop. 15,462.

Waziristan', a highland country between the Kurram and Gomul passes. Formerly Afghan, it was transferred to British India in 1894; but a military expedition had to be despatched thither in Jan. 1895.

Weald. See KENT, SUSSEX.

Wear, a river of Durham (q.v.), 65 miles long. See also SUNDERLAND.

Weaver, a Cheshire river flowing 45 miles to the Mersey, 2½ miles below Runcorn.

Webb City, a town of Missouri, 9 miles SW. of Carthage. Pop. 9200.

Wedmore, a Somerset parish (pop. 3060), 8 miles WNW. of Wells. Here peace was signed in 878 between King Alfred and Guthrum the Dane.

Wed'nesbury (locally *Wedgebury*), a town of S. Staffordshire, 8 miles NW. of Birmingham. Crowning a hill at the north end of the town is the cruciform Perpendicular church of St Bartholomew, supposed to occupy the site of a temple of Woden—whence the Anglo-Saxon name, *Wodnesbeorh*. It seems to have been built in the 11th, and rebuilt in the 15th c., and was much altered and restored between 1766 and 1885. Here, too, in 916 the Princess Ethelfleda, Edward the Elder's sister, founded a castle. Modern buildings are the town-hall (1872), public baths and free library (1878), and art gallery and museum (1891). One of the great iron towns of the Black Country, in a district abounding in coalpits, ironworks, railways, and canals, Wednesbury has manufactures of boiler-plates, bar-iron, steel, gas and steam tubes, edge tools, &c. In 1886 it was incorporated as a municipal borough, and in 1867 was made a parliamentary borough, returning one member, and till 1885 including West Bromwich (q.v.). Pop. (1851) 11,914; (1901) 26,544.

Wednesfield, a NE. suburb of Wolverhampton.

Wei-hai-wei, a harbour in the Chinese peninsula of Shantung, 40 miles E. of Che-foo, secured by Britain on a lease of twenty-five years, as Port Arthur (q.v.) had been by Russia. Pop. of ceded strip round the bay, 200,000.

Weimar (*Vī-mar*), the capital of the German grand duchy of Saxe-Weimar-Eisenach, on the Ilm's left bank, 31 miles E. of Gotha and 155 SW. of Berlin. The lustre conferred on it by the residence of Goethe, Schiller, Herder, and Wieland, at the court of Karl-August, has faded, and the interest of the place (Thackeray's 'Pumpernickel') is almost wholly derived from its monuments, traditions, and associations. The town church (*Stadtkirche*), dating from 1400, contains the tombs of Bernhard of Weimar, Herder, &c. Other buildings are the handsome ducal palace, rebuilt in 1790–1803 after the fire of 1774; the Rothes Schloss (1574); the Grünes Schloss, with a library of 180,000 volumes, and relics of Luther and Gustavus Adolphus; the court theatre (rebuilt 1825), where Liszt produced Wagner's *Lohengrin;* and the houses of Cranach, Goethe, Schiller, and Herder. Pop. (1871) 15,998; (1900) 28,330.

Weissenburg (*Vīse'en-boorg*). See WISSEMBOURG.

Weissenfels (*Vīse'en-fels*), a town of Prussian Saxony, 35 miles SW. of Leipzig. Pop. 28,200.

Welbeck Abbey, the seat of the Duke of Portland, in Notts, 3 miles S. of Worksop. Occupying the site of an old Premonstratensian abbey, it stands in a park 10 miles in circumference, and is a stately Palladian edifice of the 17th and 18th centuries, greatly enlarged about 1864 by the fifth duke, to whom it owes its semi-underground picture-gallery, ball-room, and riding-school, the last 385 feet long, 104 wide, and 51 high.

Welland, a river flowing 70 miles to the Wash.

Welland Canal. See ERIE.

Welle (*Wel'leh*), a great river of Equatorial Africa, rising in the Monbuttu country and flowing westward to 19° W., then south-westward, and as the Mobangi or U-banghi entering the Congo. Schweinfurth, Stanley, and Grenfell have explored it.

Wellesley. See PENANG.

Wellingborough, a market-town of Northamptonshire, on a declivity near the confluence of the Ise with the Nen, 10½ miles ENE. of Northampton. Almost destroyed by fire in 1738, it has a chalybeate spring (the 'Red Well'), said to have been resorted to by Charles I.; a large parish church (restored 1861–74); a corn exchange (1861); a grammar-school (1595; new buildings, 1880); and boot-making, iron-smelting, &c. Pop. (1851) 5061; (1901) 18,412.

Wellington, (1) a market-town of Shropshire, 2 miles NE. of the conspicuous Wrekin (1320 feet) and 10 E. of Shrewsbury. It stood near the ancient Watling Street, hence its name 'Watling Town.' Situated in a populous mining and agricultural district, it has manufactures of farm implements, &c., an Italian town-hall built in 1867 at a cost of £10,000, and a corn exchange (1868). Pop. (1851) 3926; (1901) 6283.—(2) A market-town of Somerset, 7 miles SW. of Taunton, near the Tone and the foot of the Black Downs (900 feet), which were crowned in 1817 by a Wellington obelisk. The 'Great Duke' took for some unknown motive his titles from this place; and its manor (held formerly by King Alfred, Asser, Aldhelm, the Protector Somerset, the Pophams, &c.) was purchased for him in 1813. Serges and other woollen goods are manufactured. Pop. (1851) 4601; (1901) 7282. See Humphrey's *History of Wellington* (1890).

Wellington, the capital of New Zealand, on Port Nicholson, an inlet of Cook Strait, on the southern coast of the North Island, 150 miles by sea ENE. of Nelson. The fine harbour is 6 miles long and 5 broad. Wellington was settled in 1840, and after the removal of the seat of government hither in 1865 made rapid progress; it has good public buildings, including Government House, the Houses of Legislature, Anglican and R. C. cathedrals, a college, museum, &c. Amongst the industries are tanning, brewing, candle and soap works, boot-factories, meat-preserving, and shipbuilding. There is a public park, and the botanical gardens have an area of 100 acres. The suburb of Newton or South Wellington is connected by tramway. Pop. (1871) 13,488; (1901) 43,638, or with suburbs, 49,344.

Wellington College, Berkshire, 4 miles SSE.

of Wokingham, a public school, founded in 1853 in memory of the Duke of Wellington. Queen Victoria laid the foundation stone in 1856, and opened it in 1859. It has 90 scholarships for sons of deceased army officers and over 400 boys.

Wells, the city of Somerset, pleasantly situated at the foot of the Mendip Hills, 20 miles SW. of Bath and 20 (30 by rail) S. of Bristol. Here, near St Andrew's Well, from which and other springs the place took its name, King Ina in 704 established a house of secular canons; but the see was first founded in 909 by Edward the Elder. It was translated to Bath during the first half of the 12th c., and still is styled Bath and Wells, though Bath's connection has been purely titular since the Reformation. Among its seventy bishops have been Jocelin (1206–42), the 'second founder' of the cathedral, Fox, Wolsey, Barlow, Laud, and Ken. That cathedral, though one of the smallest yet perhaps the most beautiful of English cathedrals, is mainly Early English in style, and is 371 feet long, by 123 across the transept, while the height of the central tower is 160 feet, of the two western towers 130. Its principal glory is the west front, with its matchless sculptures (600 figures in all, of which 151 are life-size or colossal); but other features are the north porch, the inverted tower arches, the east Jesse window with its splendid old glass, the exquisite lady chapel, and the octagonal chapter-house. Other buildings, all of extreme interest, are the moated episcopal palace, with an undercrypt of about 1220; the deanery (*temp.* Edward IV.); the archdeaconry, now a theological college; the gateways; and St Cuthbert's church, with a noble west tower. Chartered by King John in 1202, Wells lost one of its members in 1867, and the second in 1868. Pop. (1851) 4736; (1901) 4849. See works by Britton (1821), Cockerell (1851), Parker (1860), Freeman (1870), Reynolds (1881), and Jewers (1892).

Wells-next-the-Sea, or WELLS, a Norfolk seaport, 31 miles NE. of Lynn. Pop. 2555.

Wellsville, a town of Ohio, on the Ohio River, 48 miles by rail WNW. of Pittsburgh, with steel and terra-cotta works. Pop. 6500.

Welshpool, a town of Montgomeryshire, North Wales, near the Severn's left bank, 20 miles W. by S. of Shrewsbury. It has a parish church (restored by Street), a town-hall and market (1873) with a clock-tower 90 feet high, and the Powysland Museum (1874); whilst 1 mile south is Powis Castle, dating from the 12th c., with a fine picture-gallery and park—the seat from Elizabeth's time of the Herberts, as now of their and Clive's descendant, the Earl of Powis. The flannel manufacture has migrated to Newtown. Incorporated by James I. in 1615, Welshpool is one of the six Montgomeryshire (q.v.) boroughs. Pop. (1851) 6564; (1901) 6121.

Welwyn, a parish of Herts, 5 miles N. of Hatfield. Young thought his *Night Thoughts* here, and here lies buried.

Wem, a market-town of Shropshire, on the Ellesmere Canal, 11 miles N. by E. of Shrewsbury. Here Hazlitt passed his boyhood, and here met Coleridge. Pop. 2150.

Wembly, Middlesex, 2½ miles ESE. of Harrow, has been constituted an urban district, and has a pop. of 5000.—Wembly Park, a Londoners' pleasure-resort, was opened in 1894 with a great revolving wheel, &c.

Wemyss (*Weems*; Gael. *Uaimh*, 'a cave'), a S. coast parish of Fife, 2 miles NE. of Dysart, containing the villages of East and West Wemyss, with pops. of 2550 and 1260.

Wemyss Bay, a small Renfrewshire watering-place, on the Firth of Clyde, just N. of Skelmorlie, and 30½ W. of Glasgow.

Wen-chow (*Wan-chau*), a Chinese treaty port in Cheh-kiang province. Pop. 80,000.

Wen'dover, a parish of Bucks, under the Chiltern Hills, 5 miles SE. of Aylesbury. It sent members to parliament till 1832. Pop. 2036.

Wener, LAKE (*Vayner*), a lake of SW. Sweden, after Ladoga and Onega the largest in Europe. It is 93 miles long, 50 miles in greatest breadth, 300 feet in greatest depth, and 150 feet above sea-level; area, 2408 sq. m. From the NW. and S. shores, peninsulas project to within 15 miles of one another; the part SW. of this is called Dalbo Lake. There are many islands.

Wenham Lake, Massachusetts, 22 miles NNE. of Boston, yields large quantities of ice, as does another Wenham Lake (named after the American one) in Norway, at Drobak, near Christiania.

Wenlock, a municipal borough of Shropshire, extending over more than 50 sq. m., and comprising Much Wenlock, Broseley, Coalport, Madeley, Ironbridge, and Coalbrookdale. It was incorporated by Edward IV. in 1448, and till 1885 returned two members. Much Wenlock, under the NE. end of Wenlock Edge, 12 miles SE. of Shrewsbury, has a quaint guildhall (restored 1848), a market-hall (1879), a corn exchange (1852), a museum, and interesting remains of a Cluniac abbey. Pop. of borough (1861) 19,699; (1901) 15,866—2210 in Much Wenlock district.

Wensum, a Norfolk stream flowing 30 miles SE. to the Yare at Norwich.

Wentwood Forest, Monmouthshire, 4½ miles SSE. of Usk.

Wentworth Castle, Yorkshire, the Wentworths' seat (1730–68), 3 miles SSW. of Barnsley.

Wentworth-Woodhouse, in the West Riding of Yorkshire, 4¾ miles NW. of Rotherham, the seat of Earl Fitzwilliam, as its predecessor was of his great ancestor, the Earl of Strafford.

Weobly (*Web'ly*), a town, till 1832 a parl. borough, 12½ miles NW. of Hereford. Pop. 804.

Werdau (*Vayr-dow*), a Saxon cloth-making town, 45 miles S. of Leipzig. Pop. 19,665.

Werden, a town of Rhenish Prussia, on the Ruhr, 16 miles NE. of Düsseldorf. Pop. 9970.

Wernigerode (*Vayr-neh-ge-ro'deh*), a town of Prussia, at the N. foot of the Harz Mountains, 50 miles SW. of Magdeburg. Pop. 12,500.

Werwicque (*Ver'veek*), a Belgian town on the French frontier, with a 14th-c. church, and great tobacco manufacture. Pop. 9000.

Wesel (*Vay'zel*), a strongly fortified town of Prussia, at the Lippe's confluence with the Rhine, 35 miles NW. of Düsseldorf. Cloth, pottery, machinery, &c. are manufactured. Pop. 24,550.

Weser (*Vay'zer*), a river of Germany, formed at Münden by the Werra and Fulda, and flowing N. through Prussia, till, passing Bremen, it forms for 40 miles the boundary between Oldenburg and Prussia, and enters the North Sea by a wide but shallow estuary, after a course of 280 miles.

Wessex, the ancient kingdom of the West Saxons, comprising Berks, Hants, Wilts, Dorset, Somerset, Devon, and Cornwall. Mr Thomas Hardy, whose native county is Dorsetshire, has made the name once more familiar.

West Australia. See WESTERN AUSTRALIA.

West Bay City, a town of Michigan, on the Saginaw River, opposite Bay City, with a very large trade in lumber, &c. Pop. 13,120.

West'borough, a manufacturing town of Massachusetts, 32 miles by rail W. by S. of Boston, with a state reform school. Pop. 5429.

West Brom'wich, a Staffordshire town, one of the most important in the 'Black Country,' 5½ miles NW. of Birmingham, 90 SSE. of Liverpool, 93 NNE. of Bristol, and 113 NW. of London. The *Bromwic* of Domesday, and the seat in the 12th c. of a Benedictine priory, it yet is of modern growth, having risen within the last hundred years from a mere village on a barren heath, in consequence of the rich coal and iron mines near, of the industries to which these give rise, and of the transport facilities by rail and canal. The public buildings, erected in 1875 at a cost of £30,000, comprise a town-hall with a fine organ, a tower 130 feet high, a market-hall, free library, public baths, &c. There are also the institute (1886), All Saints Church (rebuilt 1872), Christ Church (1829), with a tower 114 feet high and twelve bells, the West Bromwich district hospital (1867–82), and a public park of 65½ acres, with a boating and bathing pool, and commanding a beautiful view. The last was presented to the town in 1878–87 by the Earl of Dartmouth, whose ancestor purchased the manor in 1823. The manufactures comprise all departments of Birmingham hardware, as gun-barrels, axle-boxes, locks, swords, bayonets, fire-irons, fenders, saucepans, safes, cooking-ranges, gas-stoves, &c. Puddling and sheet-iron rolling, sheet-glass making, coal-mining, and brick-making are also carried on. In 1867 West Bromwich was included within the parliamentary borough of Wednesbury, but since 1885 itself has returned a member. It was made a municipal borough in 1882, a county borough in 1888. Pop. (1801) 5687; (1841) 26,121; (1881) 56,295; (1901) 65,172. See a work by Joseph Reeves (1836).

West'bury, a market-town of Wiltshire, 16½ miles SSE. of Bath and 25 NW. of Salisbury. Returning till 1832 two members, and then till 1885 one, it has lost its clothing industry, but has iron-smelting works. The fine church has memories of Walter Map and Mackonochie. Westbury White Horse, on the S. slope of Westbury Down (775 feet), is 175 feet long, and was restored in 1778 and 1853. It probably commemorates Alfred the Great's victory of Ethandún (Edington) in 878. Pop. of urban district, 8305.

West Calder. See CALDER.

West Chester, a town of Pennsylvania, 27 miles W. of Philadelphia. Pop. 9630.

West Derby, a NW. suburb of Liverpool.

West Drayton. See DRAYTON.

Westerham, a market-town of Kent, 5 miles W. of Sevenoaks. General Wolfe was a native. Pop. of parish, 2900.

Westerkirk, a Dumfriesshire parish, 6 miles NW. of Langholm. Telford was a native.

Westerly, a village of Rhode Island, 44 miles SSW. of Providence. Pop. 7550.

Western Australia embraces the western third of Australia, to the W. of South Australia and its Northern Territory. It extends from 13° to 35° S. lat. and 113° to 129° E. long., being 1500 miles long by 1000 broad. The area is 1,060,000 sq. m., or 678,400,000 acres—i.e. nearly twenty times the size of England. While the central portions are stony or sandy, with the north and south coasts poor in soil, there is good land at the west and in the north-east. Less hilly than eastern Australia, it is not so well watered. The Darling Range, 300 miles in length, has few peaks of 3000 feet; Koikyennerup, north of King George's Sound, is 3500 feet; and the King Leopold Mountains are north-east. Few rivers run in the dry season. There are shallow salt lakes inland, and a number of islands off the coast. Perth, the capital (pop. 36,274), has Fremantle (pop. 20,450) for its port. Albany (3600), the port on King George's Sound, is 261 miles SE. of Perth by rail. The climate is dry, bright, and free from miasma, though the N. and NW. are uncomfortably hot. Perth varies from 38° to 106° in the shade; its average annual rainfall is 33 inches. Pop. (1870) 25,353, including 1790 convicts; (1881) 29,708; (1901) 194,890, besides about 5260 aborigines.

The natural history is not unlike that of the rest of Australia (q.v.). Trepang or bêche-de-mer furnishes an export. Timber of excellent quality (mainly eucalyptus, including the jarrah, wandoo, &c.) abounds to the SW. There are 150 acacias, and sandalwood grows. There are six pastoral districts in the colony. The desert has some good oases. Of 130,000 acres in crop, wheat and other cereals do well. The gardens have twenty-five sorts of fruits, grapes being fine and abundant. But the western portion only has moisture enough for ordinary husbandry. Granite and recent limestone are the great geological features. There are many workable seams of good coal and lignite. Geraldine, in the Victoria district, had lead and copper mines in 1842. The Greenbushes yield tin. Magnetite and hematite iron occur in immense lodes; manganese and antimony are found. A little gold was found in 1868 and succeeding years, in larger quantities since 1885 in the districts of Kimberley, Yilgarn, Southern Cross, Pilbarra, Ashburton, Roebourne, and Murchison, and in 1892–93 at Coolgardie (q.v.), where the finds have surpassed all previous Australian experience. Lack of water hampers mining progress, and the sinking of artesian wells and making of tanks is being carried out. The imports for 1892 were £1,391,000; the exports (gold, silver, copper, wool, skins, jarrah, pearls, tin, and karri), £882,148. In 1903 these had increased to £6,769,922 and £10,324,732 respectively. Revenue (1880), £180,050; (1892) £543,889; (1903) £3,996,499. Expenditure (1880), £204,337; (1892) £550,616; (1903) £3,886,802. The debt in 1903 was £15,627,298. The railways extend to upwards of 2100 miles (1520 government property, about 600 in private hands). Spaniards and Portuguese had the western and northern coasts in their maps about 1530. The Dutch (Dirk Hartog, Edel, De Witt, &c.) rediscovered these parts in 1616–27. A temporary settlement was made from Sydney, at the Sound, in 1825. A private association in 1828 obtained land from the government, and in 1829 founded the Swan River Settlement at Fremantle, Perth also dating from the same year. Transportation hither began in 1850, and ceased in 1867. Responsible government was granted in 1890; and the former colony is now one of the federated states of the Australian Commonwealth (1901). See books by Giles (1889), Bonwick (1890), Hart (1893), Calvert (1894), J. M. Price (1896), and the annual handbooks and bluebooks.

Westfield, a town of Massachusetts, 9 miles by rail W. of Springfield. Pop. 12,310.

Westgate-on-Sea, a western extension of Margate (q.v.), with an asylum for inebriates.

West Ham. See HAM, WEST.

West Hartlepool. See HARTLEPOOL.

Westhoughton, a town of Lancashire, 5 miles E. of Wigan, with manufactures of silk, cotton, and nails, and neighbouring collieries. Pop. (1851) 4547; (1901) 14,377.

West Indies, the great archipelago which extends in a vast curve from Florida in North America to the north coast of South America, separating the Atlantic Ocean from the Mexican Gulf and the Caribbean Sea. The name still bears testimony to the belief cherished by Columbus that when he reached in the Bahamas (q.v.) the outlying portion of the New World he was actually on or close to that old-world India he was seeking. The name Antilles (q.v.), which is applied to the whole of the islands save the Bahamas, retains a trace of the belief in the old submerged continent of Antiglia. The table gives their area, population, and political connection (see also the several articles thereon):

WEST INDIAN ISLANDS.	Area.	Pop.
Hayti	10,204	1,347,150
Dominican Republic	18,045	610,000
Cuba	40,000	1,572,845
Porto Rico (United States)	3,606	953,243
Jamaica (British)	4,373	795,398
Trinidad (British)	1,754	281,120
Barbadoes (British)	166	197,792
Windward Islands (British)—		
Grenada	133	66,762
St Vincent	133	48,424
Tobago	114	18,880
St Lucia	233	51,881
Leeward isles (British) —		
Antigua and Barbuda	170	34,904
Montserrat	32	12,894
St Kitt's (and Anguilla)	100	34,271
Nevis	50	13,306
Dominica	291	29,924
Part of Virgin Islands	57	5,115
Bahamas	4,404	53,735
Guadeloupe, &c. (French)	503	179,243
Martinique, &c. (French)	381	203,781
St Bartholomew (French)	8	2,700
Curaçao, Saba, &c. (Dutch)	403	53,046
Danish Islands (in Virgin group)—		
St Thomas	23	35,156
St Croix	73	
St John	20	
Total	85,276	6,601,570

Calcareous rocks predominate, in some cases overlying granite and other igneous rocks; some of the minor Antilles are wholly volcanic; coral-reefs are found on many of them. All the islands except the northern Bahamas are tropical, and are liable to severe hurricanes. The productions are luxuriant and varied. Great events were the discovery (1492); the Spanish occupation; the introduction of negro slaves (1525) to take the place of the native Carib Indians, decimated by forced labour on the plantations; the development of the sugar industry; the gradual intrusion in the 17th century of French, English, and Dutch. Between 1635 and 1719 France secured Guadeloupe, Martinique, Grenada, and St Vincent; in 1632 Tobago and Curaçao became Dutch; in 1623–1763 England obtained possession of St Christopher, Barbadoes, Antigua, Dominica, and the Grenadines. England's growing power at sea forced France to cede St Lucia, Grenada, and St Vincent; and there was fierce fighting in these regions, Rodney's defeat of the French fleet off Dominica in 1782 being one of the great naval battles of the world. The West Indies were long haunted by the Buccaneers, and some were used by Britain as penal settlements. The abolition of slavery in the English islands (1834–38), however creditable to the public conscience, was regarded by the planters and their friends as the main reason for the great decline in prosperity, from which the islands have but partially recovered. See works by M. G. Lewis (1834), Champlain (1859), Trollope (1859; new ed. 1869), Bates (1878), Kingsley (1869), Acosta (Hakluyt Soc. 1880), Eden (1881), Eves (new ed. 1891), Froude (1888), Paton (1888), Bulkeley (1890).

Westland, a provincial district (capital, Hokitika) of New Zealand, occupies the W. portion of South Island. Area, 4641 sq. m.; pop. 15,887.

Westmeath, an inland county of Leinster, Ireland, between Meath and Roscommon. Greatest length NE. and SW., 45 miles; greatest breadth, 25 miles; area, 453,468 acres. The surface is for the most part level, the hilly district in the north not exceeding 710 feet. Of the numerous lakes, one chain belongs to the basin of the Shannon, which river forms with them the western boundary; the other, towards the east, flows into the basin of the Boyne. The Royal Canal traverses the county. The soil is a deep loam, producing good pasture for cattle. There is little tillage. The chief towns are the capital, Mullingar, and Athlone, which is partly in Roscommon. The county returns two members. Westmeath anciently formed a portion of the kingdom of Meath (q.v.), but in Henry VIII.'s reign was erected into a separate county, and at first included Longford and part of King's County. Many Anglo-Norman and some Celtic antiquities are found in this picturesque county. Pop. (1841) 141,578; (1861) 90,879; (1881) 71,798; (1901) 61,629—56,673 Catholics.

Westminster. See LONDON, p. 424.

West'morland, a northern county of England, bounded by Cumberland, Durham, Yorkshire, and Lancashire. With a very irregular outline, it has an extreme length from N. to S. of 32 miles, an extreme breadth from E. to W. of 40 miles, and an area of 505,864 acres or 790 sq. m. The surface is mountainous, the highest summits being Helvellyn (q.v., 3118 feet) on the Cumberland boundary, Bow Fell (2959), Fairfield (2950), Dufton Fell (2803), and Dun Fell (2780). The western portion of the county belongs to the Lake District (q.v.), its lakes including Windermere (q.v.) on the Lancashire boundary, and Ullswater (q.v.), on that with Cumberland, besides Grasmere, Howes Water, Rydal Water, &c. The moorlands—to which Westmorland owes its name—are numerous and extensive; but along the courses of the Kent in the S. and the Eden in the N. (the principal streams) there are tracts of fertile land. Of the 400,000 acres in cultivation less than 90,000 are under corn; woods and plantations cover 17,000 acres. The climate is moist and mild, but with often much snow in winter. Coal, lead, copper, slate, and graphite are the chief mineral productions. Westmorland, which is in the diocese of Carlisle, comprises four wards, 109 parishes, and the towns of Appleby, Ambleside, and Kendal. It returns one member apiece for the Northern or Appleby and the Southern or Kendal division. Worthies have been Bernard Gilpin, Catharine Parr, Ann Clifford, Countess of Pembroke, Bishop Watson, Wordsworth, Prof. Wilson, Hartley Coleridge, Dr Arnold, Miss Martineau, and Sir J. G. Wilkinson; and Clifton Moor was the scene of a Jacobite skirmish (1745). Pop. (1801) 40,805; (1841) 56,454; (1881) 64,191; (1901) 64,305. See the *Quarterly Review* for January 1867; works cited there and at LAKE DISTRICT; and others by E. Bellasis (2 vols. Kendal, 1892), and R. S. Ferguson (1894).

Weston-super-Mare (*May'reh*), a fashionable watering-place of Somerset, on the Bristol Channel, 20 miles SW. of Bristol. Grown from a fishing-village since 1805, it is sheltered by rocky, fir-clad Worle Hill (306 feet); commands a splendid view over to Wales; and has an esplanade (begun 1825) 3 miles long, a promenade pier (1867) 1040 feet long, the Prince Consort gardens, potteries, &c. Pop. (1901) 19,847.

Westphalia, a former duchy and kingdom, a Prussian province, named from the *Westfalen*, a western tribe of Saxons, as distinguished from the Ostfalen, nearer the Elbe. About 1180 it came under the Archbishops of Cologne, as Dukes of Westphalia. It was the headquarters of the Vehmgerichte. In 1807 Westphalia, with parts of Hesse, Hanover, Brunswick, and Saxony, was made into a kingdom for Jerome Bonaparte; in 1813 the kingdom came to an end, and the Congress of Vienna assigned the present province to Prussia. It has an area of 7892 sq. m. (larger than Wales) and a pop. (1900) of 3,187,777, of whom 1,616,377 were Catholics. The northern portion belongs to the great North German plain, and is not fertile; the south is hilly, with fertile valleys. Westphalian hams are still in high repute; but Westphalia's peculiar wealth lies in its mineral treasures—iron, zinc, copper, sulphur, with lead, antimony, &c. Iron-working is largely carried on, and linen-weaving has been an important industry since the 14th century—Bielefeld being the great centre. Münster has cotton-works.

West Point, the U.S. Military Academy, on the Hudson's right bank, 48 miles by rail N. of New York. Established in 1802, on the site of an older fort, it occupies a plateau 188 feet above the river, surrounded by the bold scenery of one of the finest river-passes in the world.

Westport, a Mayo seaport, at the head of Clew Bay, 13 miles SW. of Castlebar. Pop. 3890.

West Prussia. See Prussia.

Westray, an Orkney Island, 10½ miles NNE. of Pomona. Area, 24¼ sq. m.; greatest height, 556 feet; pop. 1956.

West Troy. See Troy, U.S.

West Virginia is the most irregular in form of all the states of the American Union; nearly all the boundary lines follow the courses of rivers or the crests of mountain-ranges. It borders on Virginia, Kentucky, Ohio, Pennsylvania, and Maryland. Area, 24,780 sq. m. In the NE. a small portion of the state belongs to the Shenandoah valley. The 'mountain region' is formed by the western ridges of the Appalachian system. In the north the streams are tributary to the Potomac; but toward the south they frequently cut through the mountain-ridges in deep gorges, flowing W. or NW. to the Ohio River. The 'hilly region' is a portion of the Appalachian or Cumberland plateau. Much of the state is well wooded. The climate is equable, the rainfall abundant. The soil is mostly fertile. In the mountain region there is an abundance of fine pasturage, and the annual product of butter and cheese is very large. The great Appalachian coalfield covers almost the entire state. West Virginia ranks fourth among the states in its coal output, and second in the production of coke; the pig-iron and steel products are increasing. Salt and petroleum-oil are also products. Of the mineral springs the White Sulphur Springs are the most widely known. The chief cities are Wheeling, Charleston (the capital), Huntington, and Parkersburg. At Morgantown is the state university. Until the Secession, this state was included in Virginia; but the inhabitants of the northern and western counties remained loyal to the federal government, and in 1863 West Virginia was admitted to the Union as a separate state. Pop. (1870) 442,014; (1900) 958,800.

Westward Ho, on the coast of North Devon, 2½ miles W. of Bideford, owes its name and its existence to Charles Kingsley's Elizabethan romance (1855); this pretty cluster of villas and lodging-houses, with its church, hotel, clubhouse, and college, having sprung up since 1867. The bathing facilities are excellent, and it is a great resort of golfers. The village is in the urban district of Northam (pop. 5355).

Wetherby, a Yorkshire town, on the Wharfe, 12 miles NNE. of Leeds. Pop. of parish, 2050.

Wetter, Lake (*Vetter*), after Lake Wener (q.v.) the largest lake in Sweden, lies in Gothland, 25 miles SE. of Lake Wener. Surrounded by lofty shores, it is 70 miles long, 13 miles broad, 850 sq. m. in area, 370 feet deep, and 270 feet above sea-level. It receives about ninety small tributaries, and sends off the Motala River eastward to the Baltic. Its waters are of a beautiful clear green. It is remarkable for an irregular alternation of risings and fallings, and for an occasional violent undulation in perfectly still weather.

Wetterhorn (*w as v; 'Peak of Tempests'*), a mountain of the Bernese Oberland, E. of the Grindelwald, 10 miles SE. of the Lake of Brienz. Its three peaks are 12,149, 12,165, and 12,110 feet high, and were first ascended in 1844 and 1845.

Wetzlar (*w as v*), a cathedral city of Rhenish Prussia, 40 miles N. of Frankfort. Here is laid Goethe's *Sorrows of Werther*. Pop. 9050.

Wexford, a maritime county of Leinster, bordering on Wicklow, Carlow, Kilkenny, and Waterford. Greatest length, 55 miles; greatest breadth, 30 miles; area, 573,200 acres. The coast-line is irregular and dangerous; Carnsore Point is the SE. extremity of Ireland. The greater part of the surface is level, but Mount Leinster, on the border, is 2610 feet high. The chief river, the Slaney, enters the sea through Wexford Harbour; the Barrow is part of the boundary. The soil varies from light and sandy to stiff clay, but the county has a verdant luxuriance. The fisheries are valuable. The principal towns are Wexford, Enniscorthy, New Ross, and Gorey. The maritime position of Wexford laid it open early to the incursions of the Danes, and it was the first landing-place of the English. In the insurrection of 1798 it formed the theatre of the only serious conflicts. There are many old castles, and the monasteries of Dunbrody, Tintern, and Ross. Wexford returns two members. Pop. (1841) 202,196; (1861) 143,594; (1901) 104,104—95,435 Catholics.

Wexford, the capital, a seaport and municipal borough, is situated at the Slaney's mouth, 93 miles S. of Dublin by rail. The estuary of the Slaney forms Wexford Harbour, which, though spacious, is shallow and impeded by a bar. Parts of the old fortifications and of St Selsker's priory remain. The town was taken by Cromwell in 1644. Till 1885 it returned a member. Pop. (1881) 12,163; (1901) 11,168. See works by R. Fraser (1807) and M. Doyle (1868).

Wey (*Way*), a river of Hants and Surrey, flowing 35 miles NE. to the Thames at Weybridge.

Weybourne, a Norfolk coast parish, 13 miles ENE. of Walsingham. England, according to a rhymed prophecy, is to be conquered hence.

Weybridge, a Surrey Thames-side parish, 3½ miles SE. of Chertsey. Pop. 5330.

Weyhill. See ANDOVER.

Weymouth, a fashionable watering-place of Dorset, 7½ miles S. of Dorchester, 77 S. of Bristol, and 145 WSW. of London (128 by road). It lies at the mouth of the little Wey, on a beautiful bay, bounded E. by St Albans Head and W. by the 'Isle' of Portland (q.v.), and here divided by the projecting Nothe into Weymouth Bay and Portland Roads. The Wey, after widening into the tidal 'Backwater,' enters the sea, and separates the two quarters of the town—old Weymouth proper on the south, and modern Melcombe-Regis, facing the bay, on the north. Both were separate boroughs till 1571, and they still returned two members apiece till 1832, then two conjointly till 1885. A bridge, reconstructed in 1881, connects them; and Melcombe-Regis, which rose into repute through George III.'s frequent visits from 1789, has capital sands, an esplanade over a mile long, statues of King George (1809) and Sir H. Edwards (1885), numerous hotels, and a pile pier 1050 feet long, constructed in 1859 at a cost of £12,000. The Nothe has been strongly fortified since the Crimean war. Steamers run to the Channel Islands, and there is an export trade in Portland stone and Roman cement. Thomas Love Peacock was born here, and here Southey first saw the sea. Pop. (1821) 6622; (1851) 9458; (1901) 19,831. See works by G. A. Ellis (1829) and Robert Damon (1860).

Weymouth, a township of Massachusetts, on Massachusetts Bay, 12 miles SSE. of Boston, with the four villages of Weymouth, and East, North, and South Weymouth. Pop. 11,350.

Whalley, a Lancashire village, on the Calder, 3¾ miles S. by W. of Clitheroe, with a ruined Cistercian abbey (1296).

Whalsay, a Shetland island, 13½ miles NNE. of Lerwick. Area, 7¾ sq. m.; greatest height, 393 feet; pop. 977.

Whang-hai. See YELLOW SEA.

Wharfe, a Yorkshire river, flowing 60 miles ESE. to the Ouse near Cawood.

Wharncliffe, a Yorkshire village, 6½ miles NNW. of Sheffield.

Wharncliffe Viaduct, on the Great Western, at Hanwell (q.v.), is 896 feet long and 70 high.

Wheeling, the principal city of West Virginia, on the left bank of the Ohio River, and at the mouth of Wheeling Creek, at the foot of steep hills, 67 miles by rail and 92 by river SW. of Pittsburgh. The National Road here crosses the Ohio, by a wire suspension bridge, 1010 feet in span; and a fine railway bridge connects the city with Bellaire, Ohio. For ten years (1875–85) Wheeling was the state capital. The hills around are full of bituminous coal; and there are blast-furnaces, foundries and forges, nail-factories, glass-works, woollen, flour, and paper mills, &c. Pop. (1880) 30,737; (1900) 38,878.

Whickham, a manufacturing town of Durham, 3½ miles SW. of Gateshead. Pop. 12,852.

Whidah. See DAHOMEY.

Whit'adder, a Berwickshire stream, flowing 34 miles to the Tweed, 2½ miles above Berwick.

Whitby, a seaport and watering-place in the North Riding of Yorkshire, 54½ miles by rail (by road 45) NNE. of York and 22 NNW. of Scarborough. It stands, looking northward over the German Ocean, at the mouth of the Esk, which here emerges from its wooded dells and forms a wide tidal pool, walled in by jet-veined cliffs of alum shale. A stone bridge (rebuilt 1835), 172 feet long, with a swivel by which vessels are admitted to the inner harbour, connects the two halves of the town. Its older portions on the east side, with steep narrow streets and red-tiled houses, climb tier upon tier up the cliff, where stand the ruined abbey of St Hilda and the ancient parish church of St Mary. St Hilda (614–680) founded in 657 the monastery of Streanshalh, which has memories of Cædmon and St John of Beverley, and where in 664 was held the great 'Council of Whitby.' It was burned in 867 by the Danes (who changed the name of the place to *Prestebу* or *Whyteby*, 'priests' or white town'), but in 1078 was refounded as a Benedictine abbey for monks. The stately ruins of the church, which was 300 feet long, comprise choir, north transept, and part of the nave, the great central tower having fallen in 1830. Between the abbey and the cliff is the parish church, originally Norman, gained from the town by nearly 200 steps; and on the south side is Whitby Hall (*c.* 1580). Of modern buildings may be mentioned the town-hall (1788), the museum (1823) on the west pier, and the Saloon (1878), in Queen Anne style, with concert-room, promenade, &c., on the side of the West Cliff, which is surmounted by the fashionable terraces of Hudson, the 'Railway King' (1845). The west and east piers, 300 and 800 yards long, protect the outer harbour; and at the extremity of the former is a lighthouse (1831), 83 feet high, like a Doric column. The whale-fishery (1733–1837) belongs to the past, but the shipping is still considerable. Iron shipbuilding is carried on by one firm, though Captain Cook, who was a 'prentice here, might no longer choose Whitby-built ships as 'the stoutest bottoms' in England. The herring and other fisheries are actively prosecuted; but Whitby's specialty is the (decayed) manufacture of jet. It returned one member from 1832 till 1885. Pop. (1851) 10,989; (1901) 11,748. See works by Charlton (1779), Young (1817), F. K. Robinson (1876), and Canon Atkinson (1894).

Whitchurch, (1) a Hampshire town, 12 miles N. of Winchester. Till 1832 a parl. borough, it manufactures silk, serges, and shalloons. Pop. 2230.—(2) A Shropshire town, 19 miles N. by E. of Shrewsbury. Malting and brewing are carried on. Pop. (1851) 3519; (1901) 5220.

Whitechapel. See LONDON, p. 423.

Whitefield, or STAND, a town of Lancashire, 5½ miles N. of Manchester. Dating from 1826, it has many fine residences, cotton manufactures, and neighbouring collieries. Pop. 6588.

Whitehall, a town of New York, at the head of Lake Champlain, and the end of the Champlain Canal, 78 miles N. by E. of Albany. Pop. 4346.

Whiteha'ven, a municipal borough and seaport of Cumberland, 80 miles NW. of Lancaster. Dating from 1633, it has owed its well-being to great collieries and hæmatite iron mines. There are blast-furnaces, iron-shipbuilding yards, iron and brass foundries, and manufactures of coarse linen, sail-cloth, ropes, soap, and earthenware. The harbour has a wet-dock of five acres, two piers constructed in 1824–41, and a lighthouse; and steamers ply to Liverpool, Dublin, Belfast, and Ramsey. Whitehaven was attacked by Paul Jones in 1778, and suffered from a mining subsidence in 1791. It has returned one member since 1832. Pop. (1851) 18,916; (1901) 19,325.

White Horse, the name applied to a figure of a horse on a hillside, formed by removing the

turf, so as to show the underlying chalk. The most famous is that at Uffington, Berkshire, 4 miles SE. of Shrivenham. It measures 355 feet from nose to tail and 120 from ear to heel; is traditionally supposed to commemorate Alfred the Great's victory of Ashdown (871); is mentioned about Henry II.'s time as existing prior to 1084; and has been periodically 'scoured'—fourteen times during 1755–1857, then not till 1884. Other White Horses are at Bratton Hill, Westbury (175×107 feet), Cherhill (129×142 feet), Marlborough (62×47 feet), Pewsey (180×167 feet), &c. See a work by Plenderleath (new ed. 1892).

Whitekirk, a Haddingtonshire coast parish, 4¼ miles SE. of North Berwick, with a church that was a great resort of pilgrims.

White Mountains, an Appalachian (q.v.) group, in New Hampshire (q.v.). Mount Washington has a carriage-road and an hotel on its summit, with a powerful electric light.

White River rises in Arkansas, and flows 800 miles (300 navigable) through it or Missouri, NE., E., SE., and S., to the Mississippi near the mouth of the Arkansas.

White Sea (Russian *Bjeloje More*), a branch of the Arctic Ocean penetrating 350 miles into Archangel province, N. Russia. It narrows to less than 50 miles, widens again, and forms the Kandalak Gulf, that of Archangel, into which the Dwina falls, and that into which the Onega falls. The sea-route hither was discovered by Chancellor in 1553; Archangel (q.v.) is the chief emporium on its shores. Usually frozen from the beginning of September till the end of May, it has direct water communication with the Dnieper and Volga, and so with the Black Sea and Caspian.

White Sulphur Springs, a watering-place of West Virginia, 227 miles by rail W. of Richmond.

Whithorn, a royal burgh in Wigtownshire, 3¼ miles NW. of the Isle of Whithorn, and 12¼ S. of Wigtown by rail. The *Leukopibia* of the Novantæ, Latin *Candida Casa*, and Old English *Hwitaern*, it was here that St Ninian founded a church (397), and here he was buried in 432. An Anglic bishopric (727–96) was re-established as the see of Galloway, the church of a Premonstratensian priory becoming the cathedral. It was a great place of pilgrimage. There remains now only a roofless, ivy-grown ruin. Pop. 1188.

Whiting Bay. See ARRAN.

Whitney, MOUNT, the highest mountain (14,898 feet) of the United States outside of Alaska, is in the Sierra Nevada in southern California.

Whit'stable, a long, straggling village in Kent, on the south shore of the Thames estuary, at the Swale's mouth, 6 miles NNW. of Canterbury. Its oysters are famous, the large artificial beds being regularly farmed. Pop. 7086.

Whittinghame (*Whit'in-jame*), a Haddingtonshire parish, 3 miles SSE. of East Linton, with the seat of the Right Hon. A. J. Balfour.

Whittlesey, a Cambridgeshire town, 5½ miles E. by S. of Peterborough. *Whittlesey Mere*, a former shallow lake (2 by 1 mile) in Hunts, 4 miles SW. of Whittlesey, is drained. Pop. (1851) 4972; (1901) 3909.

Whitwick, a Leicestershire town, 5½ miles E. by S. of Ashby-de-la-Zouch. Hosiery is manufactured. Pop. of parish, 4564.

Whitworth, a town of Lancashire, 3 miles N. by W. of Rochdale, with cotton mills. Pop. 9566.

Whydah, or WHIDAH. See DAHOMEY.

Wiborg. See VIBORG.

Wichita (*Wish'e-taw* or *Wi-shee'taw*), a city of southern Kansas, capital of Sedgwick county, on the Arkansas River's left bank, 505 miles W. by S. of St Louis and 228 SW. of Kansas City. It is the meeting-point of four great railway systems, and contains many other mills, &c. It was founded in 1870. Pop. (1880) 4911; (1900) 24,671.

Wick, the county town of Caithness, on the Wick River, at its entrance to Wick Bay, 161 miles by rail (1874) NNE. of Inverness. The royal burgh, with its suburbs Louisburgh and Boathaven, lies N. of the river, and Pultneytown (1808) on the S. bank. The harbour is tidal. Wick is a great centre of the herring-fishery. Pop. (1841) 5522; (1901) 7911.

Wickham Market, a Suffolk town, 5 miles NNE. of Woodbridge. Pop. of parish, 1537.

Wicklow, a maritime county of Leinster, borders on Dublin, Carlow, Kildare, and Wexford. Its greatest length is 40 miles, and greatest breadth 33; the area being 781 sq. m., or 500,178 acres, of which 118,000 are under tillage. The coast-line, in many parts precipitous, is obstructed by sandbanks. The Wicklow Mountains culminate in Lugnaquilla (3039 feet), and the glens are exceedingly picturesque, especially Glendalough, Glendalure, Imail, the Glen of the Downs, and Avoca. Some plains lie on the eastern and southern shores. The lakes, although strikingly beautiful, are few and small; and the rivers are mountain-streams, except the Liffey and the Slaney, which rise in Wicklow. Lead, copper, sulphur, and iron are raised, with some silver; a little gold has been found. Slates, limestone, and marl are likewise wrought. The fisheries are neglected; and the manufacture of flannels is nearly extinct. The county is divided into eight baronies. The principal towns are Wicklow, the capital, part of Bray, and Arklow. The county returns two members. Pop. (1841) 126,162; (1881) 70,386; (1901) 60,824, of whom 48,083 were Catholics. Wicklow was in 1605 erected into a separate county. It has many Celtic and ecclesiastical remains, at Glendalough (q.v.), &c.—The county town, Wicklow, at the Vartry's mouth, 28 miles ESE. of Dublin, attracts many visitors for sea-bathing. Pop. 3283.

Wickwar, a Gloucestershire town, 4 miles N. of Chipping-Sodbury. Pop. 933.

Widdin, a town of NW. Bulgaria, on the Danube's right bank, 20 miles from the Servian frontier. For centuries the 'Virgin Fortress' was a strong Turkish post, famous in the Russo-Turkish war of 1877–78. Pop. 15,400.

Wid'nes, a borough of Lancashire, on the Mersey, 13 miles ESE. of Liverpool by rail, with manufactures of iron, copper, soda, soap, candles, manures, &c. Widnes, incorporated in 1892, is opposite Runcorn (q.v.). Pop. (1861) 4803; (1891) 30,011; (1901) 28,580.

Wieliczka (*Vyay-litch'ka*), a town of Austrian Galicia, 10 miles SE. of Cracow by rail, with remarkable salt-mines. Pop. 6289.

Wiener-Neustadt, a manufacturing town of Lower Austria, 70 miles S. of Vienna. Pop. 29,300.

Wiesbaden (*Vees-bâh'den*), chief town of a Prussian district in the province of Hesse-Nassau, was formerly capital of the independent duchy of Nassau. One of the oldest and most famous of the German watering-places, it is delightfully situated on the south slopes of Mount Taunus, 5 miles NW. of Mainz. It has been called 'a city of lodging-houses;' the principal buildings are the

palace (1840); the Kursaal (1810), with delightful park and gardens; the new town-hall (1888); the museum, picture-galleries, and library; the handsome Protestant church (1853–62); the superb Greek chapel (1855), built by the Duke of Nassau as a mausoleum for his duchess; the Catholic church; the synagogue, &c. Of its twenty hot-springs, which were known to the Romans, the principal is the *Kochbrunnen* ('Boiling-spring:' 156° F.). The saline hot-springs, containing silica and iron, are efficacious in gout, rheumatism, scrofula, and other skin diseases and nervous affections. Though the public gaming-tables were abolished in 1872, the number of visitors annually is about 60,000; some 5000 or 6000 strangers winter here annually. Pop. (1871) 35,463; (1900) 86,111.

Wiesen (*Vee'zen*), an alpine health-resort for the weak-chested, is 4771 feet above the sea-level, and 12½ miles SW. of Davos.

Wig'an, a town of Lancashire, on the Douglas (a feeder of the Ribble's estuary), 15½ miles S. by E. of Preston, 18½ NE. of Liverpool, and 18 WNW. of Manchester. Situated in the heart of a rich coalfield, and commanding easy communication by both rail and water, it is an ancient place, on the site, it is thought, of a Roman station, but owes its present development to the growth of the cotton industry. The manufactures include calicoes, ginghams, table-cloths, fustians, linen, iron, paper, &c., some of its cotton-mills and ironworks being among the largest in England. All Saints parish church, a stately edifice dating from the 14th c., was in great measure rebuilt in 1856; and there are also the county buildings (1888), public hall (1853), market-hall (1877), free public library (1878), infirmary (opened by the Prince of Wales, June 4, 1873; enlarged 1884), baths (1882), grammar-school (1619; rebuilt 1876), and a public park (1878) of 27 acres, laid out at a cost of £20,000. A prescriptive borough, Wigan returned two members from Edward VI.'s reign till 1885, now only one; it became a county borough in 1888. Pop. (1831) 20,774; (1881) 48,194; (1901) 60,770. In 1642 Wigan was occupied by the royalist Earl of Derby, but it was twice taken by the parliamentarians; and in 1651 the earl was defeated here by Lilburne. Prince Charles Edward passed through. Leland was a native. See Sinclair's *History of Wigan* (2 vols. 1882).

Wight, The Isle of, is separated from Hampshire by the Solent (q.v.) and Spithead (q.v.). Its extreme length, E. to W., is 23 miles, and its extreme breadth, 13 miles. The area is 145 sq. m., or 92,931 acres. A bold range of chalk downs runs somewhat irregularly the entire length of the island, terminating on the west in the Needles (q.v.), and breaking off on the east at Culver and Bembridge. These downs at several points reach from 500 to 700 feet; but they are excelled in altitude by the high land on the extreme south or 'back' of the island, where St Boniface Down above Ventnor attains 787 feet. This is the highest point of the isle, though St Catharine's Beacon to the westward is only 6 feet less. The more elevated ground being thus on the south, the chief streams flow to the north, and three of them traverse nearly the whole breadth—the eastern Yar, the Medina, and the western Yar. The streams which flow southward are short, but they play an important part in the formation of 'chines,' narrow ravines worn through the soft rocks. Wight has long been in repute for the mildness of its climate, its fertility, and its picturesqueness, which have rendered it a most favourite resort. There are yet traces on the downs, in barrows and cairns, of the earlier inhabitants of the island, but its history really begins with its conquest by Vespasian as *Insula Vectis*. There is ample evidence that the island was well appreciated by the Romans, whose chief stations were probably at Carisbrooke (q.v.) and Brading (q.v.). Cerdic is said to have reduced the island in 530; but it did not fall definitely under Saxon rule until later. After the Norman Conquest it was given to William Fitzosborne, but was forfeited by his son, and passed to the Redvers family, who thence took the title of 'lords of the isle,' and held it till 1292, when it passed to the crown. There are several government establishments, as at Parkhurst, and sundry forts connected with the defences of Portsmouth and Spithead. Before 1832 Wight returned six members, two apiece for Newport, Yarmouth, and uninhabited Newtown. Now it has no parliamentary borough, and one member for the island only; but it has become an administrative county under the County Councils Act, 1888. Pop. (1851) 50,324; (1881) 73,633; (1901) 82,387. The towns are Ryde, Newport, East and West Cowes, Ventnor, St Helens, Sandown, and Shanklin. See works by Worsley (1781), Englefield (1816), Adams (1856), Stone (1891), and Shore (1892).

Wigton, a market-town of Cumberland, 11¼ miles by rail SW. of Carlisle. It manufactures ginghams and winceys. Pop. 3690.

Wigtown, a county forming the SW. corner of Scotland, the western half of Galloway, bounded by the Irish Channel, Ayrshire, the Stewartry of Kirkcudbright, the Solway Firth, and the Irish Sea. Its length from E. to W. is 30 miles, its breadth from N. to S. 28 miles. Area, 327,906 acres; pop. (1851) 43,389; (1901) 32,685. Wigtownshire is deeply intersected by Loch Ryan (q.v.) and Luce Bay. The western peninsula thus formed, known as the *Rhinns of Galloway*, is 28 miles long from Corsewall Point to the Mull of Galloway. The south-eastern portion of the county forms a blunt triangular peninsula—the *Machers*—ending in Borough Head. The rest of the county bears the general name of the *Moors*, great part being occupied by bleak fells and high mosses. The surface is diversified, but the only hills of 1000 feet are on the northern borders: one solitary peak in the Rhinns, Cairn Piot, reaches 593 feet. The chief streams are the Cree, Bladenoch, Luce, and Piltanton. The lakes are very numerous, but small. The climate is mild, but moist. The entire industry is agricultural, 46 per cent. of the surface being arable, and the dairy farms having a high reputation. Towns are Stranraer, Wigtown, Newton-Stewart, Whithorn, Portpatrick, and Glenluce. See W. M'Ilwraith's *Guide to Wigtownshire* (1876); also books cited at Galloway.

Wigtown, a royal and municipal (and till 1885 parliamentary) burgh and seaport, on the W. side of Wigtown Bay, 129 miles SSW. of Edinburgh. It has a Tudor town-hall (1863), a parish church (1853), and in the churchyard the graves of the 'Wigtown martyrs,' an old woman and a young girl who, refusing the Abjuration Oath, were tied to stakes and drowned by the incoming tide, 11th May 1685. Pop. 1330.

Wi-ju (*Wee-joo*), the last considerable Corean town (pop. 30,000) towards the Chinese frontier, to the south of the Yalu estuary. It was opened to foreign trade in 1904.

Wildbad (*Vild'bad*), a town of Würtemberg, in the Black Forest, on the Enz, 33 miles SSE. of

Carlsruhe. Its salt baths (90° to 98° F.) are beneficial for rheumatism, gout, paralysis, &c. The visitors exceed 7000 annually. Pop. 3534.

Wilderness, a region in Virginia, 2 miles S. of the Rapidan, covered with thicket, and memorable for the indecisive two days' battle fought here by Grant and Lee, May 5–6, 1864. The Union loss was 18,000, the Confederate 11,000.

Wilhelmshaven (*Vilhelmshah'fen*), the chief naval port of Germany, on the W. side of the entrance of the Bay of Jahde, 45 miles NW. of Bremen. Inaugurated by King William in 1869, it is now a fortress of the first rank, defended by out-lying forts and torpedoes, and, with its moles, basins, dry-docks, vast navy stores and workshops, has been a very costly creation—the massive buildings being erected on swampy ground. Water is furnished by artesian wells. A commercial harbour has been made to the south of and connected with the naval one. Pop. 23,800.

Wilhelmshöhe (*Vilhelmshay'eh*). See CASSEL.

Wilkesbarre (*Wilks'bar-rey*), capital of Luzerne county, Pennsylvania, on the left bank of the N. branch of the Susquehanna, 18 miles SW. of Scranton. Lying in the picturesque Wyoming Valley (q.v.), it is famous for its mines of anthracite coal, and manufactures locomotives, railroad-cars, mining machinery, ropes, pottery, &c. Pop. (1870) 10,174; (1890) 37,718; (1900) 51,721.

Willamette. See OREGON.

Willemstad, capital of Curaçao (q.v.).

Willenhall, a town of Staffordshire, 3 miles E. of Wolverhampton. Pop. 18,520.

Willesden, a Middlesex parish, 7 miles WNW. of St Paul's. Pop. (1901) 114,811.

Williamsburg, capital of James City county, Virginia, near the James River, 48 miles ESE. of Richmond. Here are William and Mary College (1693) and the Eastern State Lunatic Asylum. Founded in 1632, it was the colonial and state capital till 1779. McClellan took it after severe fighting, May 5–6, 1862. Pop. 2050.

Williamsport, capital of Lycoming county, Pennsylvania, on the west bank of the Susquehanna (here crossed by a suspension bridge), 93 miles N. of Harrisburg. Lying in the midst of attractive scenery, it is a popular summer-resort, but is chiefly notable as a great lumber mart. Pop. (1880) 18,934; (1900) 28,757.

Willimantic, a borough of Connecticut, 31 miles by rail E. by S. of Hartford, with large cotton, silk, woollen, and tin factories, &c., driven by the Willimantic River, which here falls 100 feet in 1 mile. Pop. 8948.

Willington Quay, a Northumberland port, on the Tyne, 2 miles SW. of North Shields. Robert Stephenson was a native. Pop. 7950.

Williton, a small town of Somerset, 14 miles NW. of Taunton, with an Early English church. Pop. of parish, 1202.

Willoughby, a Lancashire parish, 3 miles SSE. of Alford. Captain John Smith was a native.

Wilmington, (1) a city and port of Delaware, on the Delaware River and Brandywine and Christiana Creeks, 25 miles SW. of Philadelphia. It is a regular town built on the slopes of a hill (240 feet), and contains a granite custom-house, town-hall, opera-house, the Wilmington Institute, Old Swedes' Church (1698), &c. Its manufactures include iron steamships, railway cars, engines, machinery, cottons, woollens, powder, leather, flour, matches, &c. Pop. (1880) 42,478; (1900) 76,508.—(2) Capital of New Hanover county, North Carolina, on the left bank of Cape Fear River, 30 miles from its mouth and 207 SSE. of Raleigh. It manufactures turpentine, rice, flour, and cottons. During the civil war it was a chief Confederate port, frequented by blockade-runners. Pop. (1880) 17,350; (1900) 20,976.

Wilmslow, a Cheshire town, on the Bollin, 5 miles SSW. of Stockport. Pop. 7450.

Wilna. See VILNO.

Wilton, a market-town of Wiltshire (q.v.) at the confluence of the Nadder and Wyly, feeders of the Avon, 3½ miles WNW. of Salisbury. It was the capital of Wessex, and the seat of a bishopric (909–1050), but after 1244, when it had twelve churches, declined through the diversion of the great western road. The present church, erected in 1844 by Lord Herbert of Lea at a cost of £20,000, is an ornate Lombardic structure, with a campanile 108 feet high. On the site of a Saxon nunnery is Wilton House, the Herberts' seat, where Sidney wrote part of the *Arcadia*. It is famous for its Van Dycks and for the beauty of its grounds. Since Elizabeth's reign carpets have been manufactured at Wilton, which is a municipal borough, first chartered by Henry I., and reformed in 1885. It returned two members till 1832, then one till 1885. Pop. 2220. See James Smith's *Wilton* (Sal. 1851).

Wiltshire, an English county, bounded by Gloucestershire, Berks, Hants, Dorset, and Somerset. Its greatest length, N. to S., is 54 miles; its greatest breadth, 37; and the area, 1354 sq. m., or 866,677 acres. Pop. (1801) 183,820; (1841) 256,280; (1901) 273,845. This unusually small proportion of inhabitants is due to the presence of extensive tracts of open pasture-land in the centre and north of the county—Salisbury Plain and the Marlborough Downs. The river systems divide near Devizes, whence the Somerset Avon, entering Wilts from Gloucester, flows to the Severn below Bristol; the Hampshire Avon flows by Salisbury to the English Channel at Christchurch; and the Kennet flows to join the Thames at Reading. Chalk occupies far the larger portion of the county, which culminates on the Berkshire border in Inkpen or Hackpen Beacon (972 feet). Iron ore was worked and smelted in remote antiquity, but of late only in the vicinity of Seend, and since of Westbury. The industries are chiefly agricultural—dairy-farming in the N., and grazing in the S. Large flocks of sheep feed on Salisbury Plain. Calne sends out much Wiltshire bacon. There is also an important manufacturing element—broadcloth at Bradford and Trowbridge, and Wilton carpets. Though the rolling open country is as a rule monotonous, there is much charming scenery in the valleys and broken hill districts; Savernake Forest and Cranbourne Chace have hardly changed for centuries.

Wiltshire was settled by the Romans, and the defeat of the British at Old Sarum in 552 was the first important Saxon success. The victory at Barbury (556) included the shire in Wessex, of which kingdom Wilton became the capital. At Wilton Alfred suffered his first defeat from the Danes; at Edington (Ethandune), near Westbury, he defeated Guthrum. Wilton—itself named from the river Wyly—gave name to the county as Wiltonscire. Waller's defeat at Roundway Hill, Devizes, and the gallant defence of Wardour Castle by Lady Arundell were the chief local episodes of the Great Rebellion. Till 1832 Wiltshire returned thirty-four members, till

1867 eighteen, then till 1885 fifteen, and now six only—five for county divisions and one for Salisbury. The municipalities are Calne, Chippenham, Devizes, Malmesbury, Marlborough, Salisbury, and Wilton. For the archæologist Wilts excels every county in England, containing as it does Stonehenge, Avebury, Silbury Hill, innumerable barrows and earthworks, the most perfect Anglo-Saxon church in existence at Bradford-on-Avon, Salisbury Cathedral, Malmesbury Abbey, Longleat, &c. See works by Aubrey (ed. by Jackson, 1862), Hoare (8 vols. 1812–44), Britton (3 vols. 1801–25), Moody (1851), J. E. Jackson (2 vols. 1867–72), W. H. Jones (3 vols. 1865–80), Kite (1880), Stratford (1882), R. Jefferies (*Life in a Southern County*, 1882), A. C. Smith (1884–85), and Worth (1887), besides the *Wilts Archæological Magazine* (since 1853).

Wimbledon Common, an open, breezy heath of 628 acres, 7 miles SW. of London. Here from 1860 till 1889 in July was held the annual meeting of the National Rifle Association, since transferred to Bisley (q.v.). Linnæus here first saw the gorse in bloom; and here many duels were fought. Wimbledon now is practically a suburb of London. Pop. of urban district (1901) 41,652.

Wimborne, a town of Dorset, at the confluence of the Allen and Stour, 7 miles N. of Poole and 25½ E. of Dorchester. Here, about 705, was founded a nunnery, which Edward the Confessor refounded as a collegiate church—the noble cruciform minster, Norman to Perpendicular in style, with a central and a west tower, and the tomb of Ethelred I. There is a grammar-school (1496; refounded 1563). Coach-building and the manufacture of buttons and woollen hose give employment. Pop. of urban district, 3690. See works by Hall (1853) and Yeatman (1878).

Wimmera. See Victoria.

Wincanton, a Somerset town, on the Cale, 5 miles SSE. of Bruton. Pop. of parish, 2109.

Winceby. See Horncastle.

Winchcomb, a Gloucestershire market-town, on the Isborne, under the Cotswolds, 7 miles NE. of Cheltenham. Pop. of parish, 2864.

Winchelsea, a decayed Cinque Port of Sussex, affiliated to Hastings, is 2 miles SW. of Rye by rail, and from 1832 to 1885 was included in the parliamentary borough of Rye. The present ancient city (pop. 1000) is New Winchelsea. Old Winchelsea stood 3 miles SE., but was finally submerged by the sea in 1287. New Winchelsea was built on a quadrangular plan by Edward I. Parts of a Franciscan monastery and three of the gateways remain. See Inderwick's *Story of New Winchelsea* (1892).

Winchester, the city of Hampshire, on the Itchen, 60 miles WSW. of London. It originated in a tribal settlement on the summit of a hill. As the settlers became more numerous they descended the slope (St Catherine's) to the plain, which they named 'Gwent,' or the hollow. The Romans took possession of the town, and formed its future rectangular plan. Alongside of the wattled huts of the 'Belgæ' soon grew up city walls, temples, a head college for flamens, &c.; and, if the record be true, the first Christian church in Britain was built here, 169 A.D. Tessellated pavements, &c. are preserved in the museum of the new guildhall, while the walls of Wolvesey are studded with Roman bricks and drums of columns. The Romans spelt the name *Venta*, the Saxons *Wintanceastre*. From the 8th till the 13th c. Winchester was a rival of London. In 635 an Italian monk, Birinus, here converted King Cynegils, whose son Cenwalk here built St Peter's basilica. Alfred the Great, educated here, resided during his long reign at Winchester, of which his tutor St Swithin was a native and afterwards bishop. Alfred also founded the 'New Monastery,' afterwards called from his favourite master, 'St Grimbalds.' After the king's death the monks by trickery obtained his body, and became also possessed of the bones of St Josse. But in Edgar's reign Bishop Æthelwold erected a magnificent cathedral, its chief attraction the body of St Swithin and the miracles it worked. William the Conqueror built a palace at Winchester, which so circumscribed the monks that they moved across to Hyde Mead, on the north-west of the city. This took place in 1110; in 1141 the abbey was destroyed by fire-balls from Wolvesey, when the fight raged for seven weeks in the heart of the city. The monastery was soon afterwards rebuilt, and in 1390 its abbot was mitred. In 1788 a bridewell was constructed out of the ruins. Beneath the east window lie the bones of five persons found here in 1867, and supposed to be those of King Alfred, his queen, two sons, and St Grimbald. Henry III. ('of Winchester') was born in the castle, which had a Mappa Mundi and Wheel of Fortune—the latter perhaps 'Arthur's Round Table,' which now hangs in the hall. The castle had become much dilapidated before the Cavaliers took refuge here—soon to surrender to Waller. The city and castle were retaken by the royalists, but finally yielded to Cromwell in 1645. One tower of the castle remains, with the fine hall 110 feet long. For 400 years parliaments occasionally sat in it, and now it is a law-court. Hard by is Charles II.'s red brick palace, now a barrack (largely destroyed by fire in December 1894). The Saxon cathedral was rebuilt in 1079–93. Its central tower fell in 1107, but was soon rebuilt; and it still forms the substantial part of the present cathedral, which owes its existing form to Bishops de Lucy, Edington, Wykeham, Cardinal Beaufort, and Waynefiete. Specially interesting are the monuments and unrivalled chantries. In the centre of the choir stands an ancient tomb, said to be that of Rufus; here too are buried Bishops de Lucy, De la Roche, Edington, Wykeham, Cardinal Beaufort, Waynefiete, Langton, Fox, and Gardiner, as also Jane Austen and Izaak Walton. The resting-places of the Saxon kings and bishops are unique—coffers perched on the choir partition walls. This cathedral is the longest in England (520 feet) except Canterbury (525).

In 1369–93 Winchester College was founded by William of Wykeham. His edifice is that now existing, except the chantry chapel, schoolroom, and tower. At the entrance of the kitchen stands the picture of the Trusty Servant. The hall is magnificent, 53 feet long. In the schoolroom, built by Warden Nicholas (1687), stands the celebrated signboard painting (*c.* 1450), informing the schoolboy that he must learn, leave, or be flogged. There were always some boys who were not on the foundation, and as they increased 'Old Commoners' was built in 1730. The number of boys is now about 450. Among former Wykamists have been Archbishops Warham and Howley, Sir Thomas Browne, Bishop Ken, the poets Collins, Warton, Young, Otway, and Bowles, Lowth, Lemprière, Dr Arnold of Rugby, Sydney Smith, and Lord Sherbrooke. There are two hospitals dedicated to St John, and said to have been founded by Birinus; one has

been rebuilt, the other has a fine hall belonging to the corporation. Portions of the city wall, mostly built in the reigns of John and Henry III., remain, and two of the gates. Several of the town houses are ancient; the Butter Cross dates from Henry VI.; and close to it an old clock projects over the High Street in front of the former guildhall. The city once extended to St Cross, Wyke, Worthy, and Magdalen Hill, and in the reign of Henry I. had 20,000 inhabitants, but declined so much after being sacked in 1265 that it has but now regained that amount, the pop. being 13,704 in 1851, and 20,919 in 1901. A free library was established in 1877. A mile distant stands the interesting hospital of St Cross, founded in 1132 by De Blois, but almost wholly rebuilt by Cardinal Beaufort.

See works by Dean Kitchin ('Historic Towns,' 1890), L'Estrange (1889), Misses Bramston and Leroy (1882; new ed. 1884), Benham ('Diocesan Histories,' 1884); and on the College, Adams (1878), Kirby (1888 and 1892), Holroyd (1891), Leach (1899), and Townsend Warner (1901).

Winchester, capital of Frederick county, Virginia, in the valley of the Shenandoah, 87 miles WNW. of Washington. Pop. 5166.

Windau (*Vin-dow*), a Russian seaport in Courland, 120 miles NE. of Memel. Pop. 7094.

Win'dermere, or WINANDERMERE, the largest lake in England, called from its beauty 'Queen of the Lakes,' is partly in Lancashire, and partly divides it from Westmorland. It is 10½ miles long, not quite 1 mile in extreme breadth; and, lying 134 feet above sea-level, discharges its surplus waters southward into Morecambe Bay by the Leven. Next to Wast Water, Windermere is the deepest of all the English lakes, its greatest depth being 219 feet, while Wast Water is 258 feet deep. It contains a number of islands, the largest being 28 acres in area. Soft rich beauty is the main feature of the lake; there being a total absence of that sublimity which characterises some of the other lakes, except at the north end, where Langdale Pikes, Harrison Stickle, Sca Fell, and Bow Fell stand forward prominently. Windermere village (pop. 2400), nearly a mile from the E. shore, and 300 feet above its level, has a railway station.

Windlesham, a Surrey parish, 8 miles WSW. of Chertsey. Pop. 3420.

Windrush, a river of Gloucester and Oxford shires, flowing 30 miles to the Thames.

Windsor, a town of Berkshire, on the right bank of the Thames, opposite Eton, 21¼ miles W. by S. of London by rail, 43 by river. The kings before the Conquest appear to have had a hunting-lodge here; but the present stately royal castle is all of post-Conquest erection, owing much to Henry II., Henry III., Edward III. (the Round Tower), Edward IV., and Henry VII. (St George's Chapel), Charles II., and George IV., under whom Wyatville transformed the building. It was the birthplace of Edward III. and Henry VI., the deathplace of George III., George IV., William IV., and Prince Albert; and the burial-place of Henry VI., Edward IV., Henry VIII., Charles I., the Duke of Clarence, &c. John was at Windsor after the granting of Magna Charta; and Edward III. established the Order of the Garter here. As we see it now Windsor Castle consists of an Upper and a Lower Ward, between which is the Mound and the Round Tower. In the Upper or eastern Ward are the Library, state apartments, Long Corridor, and private apartments. Wyatville ingeniously connected all the isolated towers and the curtain wall between by means of this corridor, which is 520 feet in length. The state apartments contain many good pictures and other works of art. In the Lower Ward is St George's Chapel, with its cloisters, the Deanery, and the Canons' Houses. The last named contain remains of the palace of Henry III. Adjoining to the westward are the Horseshoe Cloisters. Next to them are the barracks, including the Curfew Tower, built by Salvin. On the south side is the principal gate, called after Henry VIII. In a line with it are the houses of the Military Knights, a band of pensioners. The Round Tower is the residence of the constable, and from it floats the royal standard. Wyatville lived, till his death in 1840, in the Winchester Tower, called after William of Wykeham. Wyatville made Windsor what it is, and, though we may find fault with his details, his proportions and his eye for a grand scenic effect place him far ahead of any other architect of the so-called Gothic revival.

The town of New Windsor was chartered by Edward I. It contains some interesting old houses, but nothing that can with certainty be assigned to the days of Shakespeare's *Merry Wives*. Sir C. Wren, who was M.P. for the borough in 1688, built the town-hall in the market-place. The town is pleasantly situated close to the Home Park and the famous Long Walk, an avenue of elms 3 miles long, which leads to the Great Park. East of the Long Walk are the tombs of the Duchess of Kent and of the Prince Consort, in domed chapels; also Frogmore, the royal gardens, the farm and the dairy. The Great Park contains a church, Cumberland Lodge, and Virginia Water (q.v.). Since 1867 Windsor has returned only one member. Pop. (1851) 9596; (1901) 14,130.

Windsor, a port of Nova Scotia, 45 miles NW. of Halifax, with King's College (1788). Pop. 3500.

Windsor, a town and port of Ontario, Canada, on the Detroit River, opposite Detroit. Pop. (1881) 4253; (1901) 12,153.

Windward Islands. See WEST INDIES.

Winestead, a Yorkshire parish, 12½ miles ESE. of Hull. Andrew Marvell was a native.

Winfield, a town of Kansas, on Whitewater Creek, 247 miles SW. of Kansas City. Pop. 5584.

Wingfield, a Suffolk parish, 4½ miles S. by W. of Harleston, with the old castle of the De la Poles.

Wingfield, SOUTH, a Derbyshire parish, 2 miles W. of Alfreton, with the ruins of Wingfield Manor House, where Mary Stuart was a captive.

Winneba'go. See WISCONSIN.

Win'nipeg, capital of the Canadian province of Manitoba, stands at the confluence of the Assiniboine with the Red River, 1424 miles by rail WNW. of Montreal and 512 NNW. of Minneapolis. Formerly known as Fort Garry, from a post of the Hudson Bay Company, it was incorporated as Winnipeg in 1873. It is substantially built, with wide streets traversed by tramways and lit with the electric light, and with the government offices, city hall, a fine hospital, the university of Manitoba, great flour-mills and grain-elevators, the shops of the Canadian Pacific Railway, &c. Pop. (1871) 241; (1881) 7985; (1901) 42,340.

Winnipeg, LAKE, in Manitoba, 40 miles N. of Winnipeg city, and 650 feet above sea-level, is 280 miles long, 57 miles broad, and 8500 sq. m. in area. Its largest tributaries are the Saskat-

chewan, the Winnipeg, and the Red River of the North; its outlet is the Nelson River.

Wino'na, capital of Winona county, Minnesota, on the right bank of the Mississippi, 103 miles by rail SE. of St Paul. It has flour and saw mills, foundries, carriage, barrel, and sash factories, &c. Pop. 21,000.

Winslow, a market-town of Bucks, 6½ miles SE. of Buckingham. Pop. 1704.

Winster, a Derbyshire village, 4 miles W. by N. of Matlock. Pop. 790.

Winston, a town of North Carolina, 218 miles SW. of Richmond, Virginia, with tobacco-factories. Pop. 10,000.

Winterslow, a Wiltshire parish, 6 miles ENE. of Salisbury, with many memories of Hazlitt.

Winterthur (*Vin-ter-toor'*; anc. *Vitodurum*), a Swiss town, on the Eulach, 17 miles by rail NE. of Zurich. It manufactures locomotives, cotton, silk, and woollen goods, &c. Pop. 22,650.

Winterton, a Lincolnshire town, 9 miles NNE. of Brigg. Pop. 1360.

Wirksworth, a market-town, 13½ miles NNW. of Derby. There are neighbouring lead-mines, and manufactures of cotton, ginghams, hosiery, &c. Pop. 3800.

Wirral. See CHESHIRE.

Wis'bech, a market-town of Cambridgeshire, in the Isle of Ely, on the Nene, 21 miles ENE. of Peterborough, 13 SW. of Lynn, and 40 N. of Cambridge. The parish church, Norman to Perpendicular in style, has a fine tower; and there are a corn exchange (1811), a cattle-market (1869), a town-hall (1873), the Cambridgeshire hospital (1873), a museum and literary institute, and a public park of 18 acres. A castle, founded by the Conqueror in 1071, was rebuilt by Bishop Morton in 1483, restored by Bishop Andrewes in 1617, and again rebuilt from Inigo Jones's designs by Thurloe, Cromwell's secretary, but was demolished in 1816. Visited by King John and Edward IV., it was the prison under Elizabeth of many Catholic recusants. Godwin was a native, and Clarkson, to whose memory a Gothic cross by Sir G. G. Scott was erected in 1881. Vessels of nearly 500 tons can now ascend the Nene from the Wash, a distance of 7 miles; and Wisbech has a considerable export of cereals and import of timber, with some manufactures of iron, oil, ropes, &c. It was made a municipal borough in Edward VI.'s reign. Pop. (1851) 10,089; (1901) 9831. See works by W. Watson (1827), S. H. Miller (1878), and T. G. Law (1890).

Wisby (*Viz-by*), a once famous seaport on the west coast of the Swedish island of Gothland, 130 miles S. of Stockholm. One of the chief commercial cities in Europe during the 10th and 11th centuries, and then a principal factory of the Hanseatic League, in 1361 it was stormed by Valdemar III. of Denmark, who obtained an immense booty. This was a fatal blow to its prosperity. The ancient walls and towers, almost as entire as in the 13th c., render its appearance from the sea most striking. Pop. 8400.

Wiscon'sin, one of the United States, lies between Lakes Michigan and Superior and the Mississippi River, with its tributary the St Croix; the surrounding states are Michigan, Minnesota, Iowa, and Illinois. Its length is about 300 miles and its breadth 250, with an area of 56,040 sq. m. The surface is a rolling plain with an elevation of 600 feet, rising to 1800 feet at the divide, about 30 miles south of Lake Superior. The general slope is south-westward towards the Mississippi, to which flow four-fifths of the streams—the Wisconsin (600 miles), Chippewa, Black, &c. There are two thousand small lakes, the largest, Winnebago (28 × 10 miles). Dense forests once covered most of the state, though the southern part is prairie land. The chief industry is agriculture, employing 400,000 persons. Dairying is rapidly progressing, and lumbering, the manufacture of leather, foundry and machine-shop products, flour, malt liquors, and slaughtering and meat-packing are great industries. The state suffered from destructive forest fires in 1871 and 1894; in the former 1000 lives were lost. The University of Wisconsin is in Madison, the state capital; the chief commercial city is Milwaukee (285,315). Artificial earth-mounds are the earliest human traces. In 1665 a Jesuit mission was founded on Green Bay, and French fur-traders soon established trading-posts. Upon the conquest of Canada in 1763 Wisconsin passed under British control, which lasted practically till 1815. Wisconsin Territory, when formed in 1836, extended to the Dakotas; but in 1838 the Mississippi was made its western boundary. In 1848 it was admitted as a state. Pop. (1850) 305,391; (1880) 1,315,477; (1900) 2,069,042 (largely of German and Scandinavian descent), besides 7649 tribal Indians.

Wish'aw, a thriving town of Lanarkshire, 3½ miles ESE. of Motherwell and 15 of Glasgow. Founded in 1794, it was constituted a police-burgh in 1855, and since 1874 has comprised also the villages of Cambusnethan (Lockhart's birthplace) and Craigneuk. Coal-mining is the staple industry, and there are also ironworks. Pop. (1841) 2149; (1881) 13,112; (1901) 20,873.

Wiske, a river in the North Riding of Yorkshire, flowing 24 miles to the Swale.

Wismar (*w* as *v*), a Baltic seaport of Mecklenburg-Schwerin, 20 miles by rail N. of Schwerin. Of the walls only four gates remain; but its quaint houses are a feature of the place, and several of the brick churches, as well as the Fürstenhof, once a ducal residence, date from the 14th or 15th century. Pop. 20,530.

Wissembourg (*Veessan'boorg'*; Ger. *Weissenburg*), till 1871 a French fortified town, close to the frontier of the Bavarian Palatinate, now a manufacturing town in German Lower Alsace, is on the Lauter 42 miles NNE. of Strasburg; pop. 7000. It grew up round a 7th-century Benedictine abbey, and in 1677–97 was ceded to France. Here, on 4th August 1870, the Germans won their first great victory over the French.

Wiston, one of the Pembroke (q.v.) boroughs, 5½ miles NE. of Haverfordwest. Pop. 623.

Witham, (1) an Essex town, 8 miles NE. of Chelmsford. Pop. of parish, 3454.—(2) A river of Rutland and Lincolnshire, flowing 80 miles to the Wash, past Grantham, Lincoln, and Boston.

Withernsea, a watering-place in the East Riding of Yorkshire, 4 miles NE. of Patrington.

Withington, a S. suburb of Manchester.

Witney, a town of Oxfordshire, on the Windrush, 11 miles W. by N. of Oxford (14 by a branch-line, 1861). It has a three-arch bridge (1822), a fine cruciform 13th-century church, a staple or blanket hall (1721), a market-cross (1683), a town-hall (1863), a corn exchange (1862), and a county court-house (1859). Its blankets enjoy a great reputation; and glove-making is also carried on. Pop. (1851) 3099; (1901) 3574. See J. A. Giles's *History of Witney* (1852).

Witten, a Prussian town of Westphalia, on the Ruhr, 7 miles SE. of Bochum. Pop. 33,520.

Wittenberg (*w* as *v*), in Prussian Saxony, capital of the old electorate of Saxony, and cradle of the Reformation, on the Elbe, 59 miles SW. of Berlin. The famous university (1502), where Luther was professor and Hamlet studied, was in 1815 incorporated with that of Halle. In the *Stadt-Kirche* are two remarkable pictures by Cranach, of Melanchthon baptising, and Luther preaching. In the *Schloss-Kirche* (1499) are the tombs of Luther and Melanchthon, as well as those of Frederick the Wise (with a noble bronze statue by Vischer) and John the Steadfast, electors of Saxony. Luther nailed his theses to its wooden door, which, burned by the Austrian besiegers in 1760 during the Seven Years' War, was in 1858 replaced by one of bronze. The *Schloss-Kirche* was restored and reopened by the German emperor on 31st October 1892. The Augustinian monastery, with Luther's cell, was converted in 1817 into a theological seminary; the house of the great Reformer, containing his chair, table, &c., and two portraits of him by Cranach, remains almost unaltered. In the market-place is Schadow's bronze statue of Luther (1822), not far from it Drake's of Melanchthon (1865). Occupied by the French in 1813, it was stormed by the Prussians in 1814, and next year became Prussian. There are manufactures of woollen and linen goods, hosiery, leather, brandy, and beer. Pop. 18,350.

Wittenberge, a Prussian town on the Elbe, 65 miles NW. of Potsdam. Pop. 17,800.

Witu (*Veetoo*), a small territory on the east coast of Africa, German in 1886–90, and since included in British East Africa.

Witwat'ersrand. See JOHANNESBURG.

Wiveliscombe (locally *Wilscombe*), a Somerset town, 9½ miles W. of Taunton. Pop. 1418.

Wivenhoe, an Essex town, on the Colne, 4 miles SE. of Colchester. Pop. of parish, 2560.

Woburn, a market-town (pop. 1300), 13 miles SW. of Bedford, noted chiefly for Woburn Abbey, seat of the Dukes of Bedford, which stands in a park 12 miles in circumference. The Cistercian abbey, a daughter house of Fountains, was founded in 1145, and in 1547 granted to John, Earl Russell, afterwards Duke of Bedford. Of the abbey nothing now remains; the mansion, built mainly in the 18th c., occupies four sides of a quadrangle, and contains a magnificent collection of portraits. See also WOOBURN.

Woburn, a town of Massachusetts, 10 miles by rail NNW. of Boston, with manufactures of pianos, shoes, leather, &c. Pop. 14,260.

Woking, a Surrey town, 24 miles SW. of London by rail. Nearly 3 miles W. are the 'London Necropolis Cemetery' (1864), 2000 acres in extent, and the first public crematory in England (1878). Pop. of urb. dist. 16,250. See BISLEY.

Wo'kingham, or OAKINGHAM, a municipal bor. of Berkshire (till 1832 Wiltshire, detached), in Windsor Forest, 7 miles SE. of Reading by rail. Incorporated in 1885, it has a Gothic town-hall (1860), neighbouring paper, saw, and flour mills, and the 'Rose' inn, where Gay, Swift, Pope, and Arbuthnot celebrated the host's pretty daughter in the ballad of 'Molly Mog.' It was famous for its bull-baitings till 1821. Bearwood, 1 mile W., is the seat of J. Walter, Esq., of the *Times*. Pop. (1851) 2272; (1901) 3551.

Wolds. See LINCOLNSHIRE, YORKSHIRE.

Wolfenbüttel (*Volfenbeett'el*), a town of Brunswick, founded in 1046, on the Oker, 7 miles S. of Brunswick by rail. One of the old churches contains many of the tombs of the princes of Brunswick. The old castle accommodates a seminary for teachers and a theatre. The library opposite (1723), of which Lessing was librarian, had to be taken down and rebuilt in 1887; it houses 300,000 volumes (including 800 Bibles and many incunabula) and 10,000 MSS. There are manufactures of machines, copper goods, flax, cloth, corks, leather, preserves, tobacco, &c. Pop. 17,873.

Wolf Rock, 8 miles SSW. of Land's End, has a lighthouse (1862–69) 116½ feet high.

Wolgast (*w* as *v*), a Pomeranian seaport, on the Peene, 10 miles from its mouth in the Baltic, and 36 SE. of Stralsund by rail. Pop. 8485.

Wollongong, a seaport of New South Wales, 49 miles S. of Sydney by rail. Pop. 5000.

Wolsingham, a Durham town, on the Wear, 10 miles NW. of Bishop Auckland. Pop. 3500.

Wolstanton, a busy manufacturing NW. suburb of Stoke-upon-Trent, Staffordshire.

Wolverhampton (*Wol-* as *Wool'-*), a municipal, parliamentary, and county borough, the 'metropolis of the Black Country,' stands on a gentle eminence amid a network of railways and canals, 13 miles NW. of Birmingham, 15 S. of Stafford, and 126 NW. of London. It was first called 'Hamton,' and then 'Wulfrunishamton,' after Wulfruna, King Edgar's sister, had founded in 996 St Peter's Church, which continued collegiate till 1846. Rebuilt during the 13th, 14th, and 15th centuries, and enlarged and elaborately restored in 1859–65 at a cost of £10,000, that church is a fine cruciform Gothic edifice, with a rude stone cross in the churchyard, a carved stone pulpit of 1480, and monuments to Admiral Sir Richard Leveson (1570–1605) and Colonel Lane (d. 1667), who assisted Charles II. in his escape from Worcester. Otherwise the public buildings are all modern—the town-hall (1868), in the Italian style, corn exchange (1853), market-hall (1853), agricultural hall (1863), hospital (1849), post-office (1873), art gallery (1885), drill-hall (1886), &c. A bronze equestrian statue of the Prince Consort was inaugurated by Queen Victoria in 1866; and there is also a statue (1879) of the Right Hon. C. P. Villiers of Corn-law fame, first returned as M.P. for Wolverhampton in 1835, and re-elected in 1892. The public park (1881) was laid out at a cost of £16,000. The free grammar-school, which was founded in 1512 by Sir Stephen Jenyns, Lord Mayor of London, and at which Abernethy and Sir W. Congreve were educated, occupies handsome new buildings of 1876; and there are also a blue-coat school (1710) and an orphanage (1850). Sir Stephen was a native; so too was the great Mr Jonathan Wild. Bishop Pococke described Wolverhampton in 1757 as 'a great manufacturing town in all sorts of toys, and particularly of locks in the greatest perfection;' and locks—some two million yearly—are still its specialty, the Messrs Chubb's works being here. The other manufactures include tinplate, japanned goods, enamelled hollow wares, edge tools, gas and water tubes, electro-plate, papier-maché, chemicals, &c. The town stands on the western edge of the great coal and iron mining district of South Staffordshire, so that the vicinity on the south and east is all covered with collieries, ironstone mines, blast-furnaces, forges, iron-foundries, and rolling-mills, whilst on the north and west there is pleasant green country—Boscobel (q.v.) is only

8 miles distant. Wolverhampton was enfranchised in 1832, returning two members to parliament (three since 1885), and it was made a municipal borough in 1848, a county borough in 1888. The Wednesday market is held under a charter of 1258. Pop. of parliamentary borough (1851) 119,748; (1881) 164,334; (1901) 174,365, of whom 94,187 were within the municipal and county borough. See works by G. Oliver (1836), F. Hall (1865), Steen (1871), and J. Fullwood (1880).

Wolverton, a town of Bucks, 2 miles ENE. of Stony Stratford. It has the London and North-western railway shops. Pop. of parish, 4147.

Wombwell, a town of Yorkshire, 4½ miles SE. of Barnsley. Pop. 14,250.

Wooburn, a town of Bucks, 2¾ miles SW. of Beaconsfield. Pop. of parish, 2727.

Wood'bridge, a Suffolk town, on the right bank of the Deben, which expands into an estuary, 12 miles from the sea and 8 ENE. of Ipswich. The *Udebryge* of Domesday, it has a fine Perpendicular church with a flint-work tower 108 feet high, a Flemish-looking town-hall, and the richly endowed Seckford almshouses and grammar-school—the former dating from 1587, and rebuilt in 1840 at a cost of £28,000. Bernard Barton and Edward FitzGerald were residents. Vessels of 140 tons can reach the town, which exports corn, malt, and bricks. Pop. 4640.

Woodford, an Essex parish, 4½ miles N. by E. of Stratford. Pop. 14,100.

Woodhall Spa. See HORNCASTLE.

Woodside, a NW. suburb of Aberdeen.

Wood'stock, a market-town of Oxfordshire, on the Glyme, 8 miles NNW. of Oxford. It was a royal manor from Saxon times until 1705, when it was granted to the Duke of Marlborough, whose seat, Blenheim Park (q.v.), is close by. Hence it has many memories, as the birthplace of the Black Prince (though not of Chaucer), as the scene of Becket's first quarrel with Henry (if not of Fair Rosamond's murder), as the place of captivity where Elizabeth wished herself a milkmaid, and for the pranks of its 'merry devil' on the parliamentary commissioners in the old manor house, which was pulled down in 1723. A municipal borough, chartered first by Henry VI., and last in 1886, Woodstock till 1832 returned two members, and then till 1885 one. It still carries on leather glove-making. Pop. 1684. See a work by E. Marshall (2 vols. 1873–74).

Woodstock, a town of Ontario, on the Thames, 88 miles by rail SW. of Toronto. Pop. 8850.

Wooler, a town of Northumberland, under the Cheviots, 9 miles SW. of Belford. Pop. 1331.

Woolmer Forest, a heathy tract on the borders of Hants and Sussex.

Woolsthorpe, a Lincolnshire hamlet, 8 miles S. of Grantham, with the birthplace (almost unaltered) of Sir Isaac Newton.

Woolton. See MUCH WOOLTON.

Woolwich (*Wool'litch*), a parish in Kent (county of London), and part of Eltham royal manor, on the Thames, 9 miles below London Bridge, was in 1885 constituted a parliamentary borough returning one member. It includes the three parishes of Woolwich, Plumstead, and Eltham, and is now one of the municipal boroughs of the county of London. Pop. (1901) 117,178. The chief part of the town lies south of the river, but North Woolwich is in Essex. The Royal Arsenal (employing over 14,000 men) dates from 1585, when Queen Elizabeth had a store of arms and armour at the Tower House, a mansion in Woolwich Warren adjoining the then boggy and unhealthy marshes of Plumstead. Prince Rupert protected the King's Warren with batteries in Charles II.'s reign, and other fortifications were added by James II. In 1716 the proof of ordnance was transferred from Moorfields to Woolwich, guns began to be cast there, carriages constructed, and powder stored. From these works grew the three great departments of the Royal Arsenal—the Royal Gun Factories, Royal Carriage Department, and Royal Laboratory. After 1805 the ground covered by these works quickly extended to some 300 acres. Guns of all sizes, every form of military wagon, shot, shell, torpedoes, cartridges, bullets, rockets, tubes, and fuses, have since always been produced there, small-arms being made at Birmingham and Enfield, and powder, gun-cotton, and other explosives at Waltham. The barracks are very imposing buildings. The Herbert Hospital, built soon after the Crimean war at the south end of Woolwich Common, is one of the largest military hospitals in Britain. The common itself, nearly half a square mile in extent, forms an excellent drill-ground. At its south-west corner there is a hut camp for two field batteries, and opposite to it the handsome buildings of the Royal Military Academy. This, the oldest military school in the kingdom, dates from 1741. The Royal Military Academy was built in 1801. In 1869 the Royal Dockyard at Woolwich, long the chief one in the kingdom, was closed; but it continues to be used as a military store depot. The *Great Harry* was built there in 1562, the *Royal George* in 1751, the *Galatea* in 1859, and more than 200 other ships. At the north-west end of the common are the Repository and the Rotunda Museum of military antiquities. St George's Garrison Church (1863) is one of the few conspicuous buildings in the town. Woolwich, among whose sons have been Lovelace and General Gordon, has gradually become a suburb of London. Plumstead on the east and Charlton on the west merge into Woolwich. Like it they are densely populated.

Woonsock'et, a town of Rhode Island, on the Blackstone River, 38 miles SW. of Boston, with manufactures of cottons, woollens, iron, and rubber. Pop. 29,250.

Wooster, a town of Ohio, on Killbuck Creek, 135 miles W. by N. of Pittsburgh, with a Presbyterian university (1866). Pop. 6060.

Wootton Bassett, a market-town of Wilts, 6 miles W. of Swindon. It returned two members till 1832. Pop. of parish, 2200.

Worcester (*Woos'ter*), the county town of Worcestershire, 27¼ miles by rail SW. of Birmingham, 65½ NNE. of Bristol, and 121 (by road 111) WNW. of London. It stands on the left bank of the Severn, here crossed by a five-arch stone bridge (1781–1841), 270 feet long. Previously perhaps a station of the Romans, *Wigornaceaster* became in 679 the seat of a Mercian bishopric, whose cathedral is Worcester's chief glory. It is a double cross in plan, 410 feet long, 126 wide across the west transept, and 60 to 67 high, with a central tower of 196 feet. Rebuilt from 1084 onwards, and restored since 1857 at a cost of £100,000, it is mainly Early English and Decorated in style, but retains a very interesting Norman crypt. The simplicity, if not plainness, of the exterior is amply compensated by the fine perspective of the lofty groined roof, and the general noble effect of the interior. One may specially notice the

columns of Purbeck marble, the 14th-century choir-stalls and misereres, the elaborate modern reredos, the circular chapter-house, the splendid peal of twelve bells, and the tombs of King John, Prince Arthur, Lord Lyttelton, the Earl of Dudley, and (in the cloisters) 'Miserrimus,' a not very wretched Nonjuror. At Worcester, alternately with Hereford and Gloucester, are held the festivals of the 'Three Choirs.' The old episcopal palace is now the deanery, the present palace since 1842 being Hartlebury Castle, 11 miles N.; and the cathedral school (1541) occupies the superb 13th-century refectory of a Benedictine priory. There is also Queen Elizabeth's school (1561). Nothing remains of the castle, and the Guesten Hall was ruthlessly pulled down in 1860; but there are a fine hall called the Commandery, a gatehouse ('Edgar's Tower'), and a good many old timbered houses, while of public buildings may be noticed the guildhall (1723), the shire-hall (1835), and the museum and free library (1836–79). Worcester is the seat of the Royal Porcelain Works, dating from 1751, and covering 5 acres, the glove-manufactory of Messrs Dent (a Glovers' Company was incorporated in 1497), and the 'Worcester Sauce' factory of Lea & Perrins; besides huge vinegar-works, great nurseries, and manufactories of railway signals, chemicals, &c. In the neighbourhood are hop-yards. Worcester is a municipal borough, chartered by Richard I. in 1189; a parliamentary borough, returning only one member since 1885; and also, since 1888, a county borough. Pop. (1851) 27,528; (1881) 38,270; (1901) 46,624. Worcester was the scene of numberless sieges from the time of the Danes down to the 'crowning mercy' of Cromwell, when, on 3d September 1651, he routed Charles II., killing 4000 and making 7000 prisoners. Charles afterwards commemorated Worcester's loyalty by granting it the motto of 'Civitas fidelis.' Natives have been the alchemist Kelly, Lord Somers, and Mrs Henry Wood; whilst among the eighty and more bishops have been St Dunstan, St Oswald, St Wulfstan, Cantilupe, Latimer, Whitgift, Gauden, Stillingfleet, Hough, Hurd, and Perowne. See works by Abingdon (1717), Thomas (1737), Wild (1823), Britton (1835), Prof. Willis (*Journal Archæol. Inst.*, vol. xx.), Walcott (1866), Noake (1866), and J. G. Smith and Onslow (1883).

Worcester (*Wooster* or *Woorster*), the second city of Massachusetts, on Blackstone River, 44 miles WSW. of Boston. Several suburban villages are included within the 36 sq. m. of the municipality. 'The Academic City' contains the state normal school, two state lunatic asylums, a military institute, high school, Jesuit college, Baptist academy, a large women's school, &c. Its churches include many handsome buildings, and from the porch of the Old South Church the Declaration of Independence was first read in Massachusetts. It manufactures wire, boots and shoes, iron products, and woollens. Pop. (1880) 58,291; (1900) 118,421.

Worcester, capital of a wine-growing district in Cape Colony, 60 miles ENE. of Capetown. Pop. 8300.

Worcestershire (*Woo'stershir*), an inland English county of very irregular outline, bounded by the counties of Salop, Stafford, Warwick, Oxford, Gloucester, and Hereford. Its extreme length N. to S. is 50 miles, its greatest breadth 26 miles, and its area 738 sq. m., or 472,453 acres. Pop. (1801) 146,445; (1851) 276,926; (1881) 380,283; (1901) 488,401. The Severn is the chief river, and is navigable throughout the county from Bewdley to Tewkesbury, passing by the city of Worcester. The Avon, which enters Worcestershire near Cleeve, and passes by Evesham and Pershore, falling into the Severn at Tewkesbury, is also navigable. The other rivers are mostly feeders of these two—the Stour, Salwarp, and Teme of the Severn, and the Arrow of the Avon. A small portion of the north-east corner of the shire lies in the basin of the Trent. The canals were of great importance before the development of the railway system. The surface of the shire is diversified and picturesque. The chief hill range is that of the Malverns (1440 feet), on the border next Hereford; the Coteswolds stretch between Worcester and Gloucester; the Clents command part of the Warwick and Stafford frontier, chiefly of the 'Black Country;' the Lickey range is more central. The Clee Hills lie well to the north-west in Shropshire, but high broken ground stretches thence to the verge of Worcestershire in the romantic forest of Wyre. As a whole Worcestershire is a highly fertile agricultural region, with upland sheep-walks, productive tillage ground, and a very extensive fruit-growing area. Plums, pears, and apples are grown in enormous quantities, the neighbourhood of Pershore being the chief plum-growing centre in the kingdom. The more northern districts are, however, chiefly engaged in manufacture. Salt has been raised from the brine-springs at Droitwich (fed by immense beds of rock-salt) certainly for more than 1000 years. The manufacture of iron, carried on by the Romans, has developed into the busy industries of the unlovely 'Black Country,' of which Dudley is the chief centre. Other industries are the fireclay goods of Stourbridge, the glass wares produced there and at Stourport, the famous porcelain-works and the gloving of Worcester, and the carpet-weaving of Kidderminster.

Worcestershire contains the battlefields of Evesham, Tewkesbury, and Worcester; some of the most active participators in the Gunpowder Plot were associated with it. Before 1832 the shire had nine members; Dudley and Kidderminster were then enfranchised, and the total increased to twelve; at present there are eight, one each for five county divisions, and for Worcester, Dudley, and Kidderminster. Worcester and Dudley are county boroughs, and the other municipalities are Bewdley, Droitwich, Evesham, and Kidderminster. Of Worcestershire worthies may be mentioned Sir Thomas Littleton, Bishop Bonner, Samuel Butler, Thomas Blount, Archbishop Sheldon, Baskerville, Lord Lyttelton, Foote, Warren Hastings, Huskisson, and Sir Rowland Hill. See works by Nash (2 vols. 1781–99), J. Chambers (worthies, 1820), Sir C. Hastings (nat. hist. 1834), Roberts (geology, 1860), Lees (botany, 1867), Noake (1868 and 1877), Niven (old houses, 1873), and Worth (1889).

Work'ington, a municipal borough and seaport of Cumberland, at the mouth of the Derwent, 7 miles N. of Whitehaven by rail. Its harbour, sheltered by a breakwater (1873), is safe and commodious. To neighbouring coal-mines the town chiefly owes its prosperity; and there are iron-works, &c., a large Sheffield steel foundry having been transferred hither in 1883. The salmon-fishery near is important. Mary, Queen of Scots, landed here, on her flight from Langside, 16th May 1568, and was entertained at Workington Hall (the seat of the Curwens from about 1160 till the present day). Workington was incorporated as a municipal borough in 1888. Pop. (1881) 14,109; (1901) 26,143.

Work'sop, a town of Nottinghamshire, on the river Ryton and the Chesterfield Canal, 16 miles ESE. of Sheffield and 23 N. of Nottingham. It lies near the northern extremity of Sherwood Forest (q.v.), in a district known as the 'Dukery,' from the number of ducal seats. There is Worksop Manor, in whose predecessor (destroyed by fire in 1761) Mary, Queen of Scots, was a prisoner under the Earl of Shrewsbury, and which, formerly a seat of the Duke of Norfolk, was purchased in 1840 for £350,000 by the Duke of Newcastle. His, too, is Clumber Park (q.v.), and there are also Welbeck Abbey (q.v., Duke of Portland) and Thoresby Park (till 1773 Duke of Kingston, now Earl Manvers). Worksop church was that of an Augustinian priory (1103), of which there is also a Decorated gateway; but a Norman keep has vanished. Modern buildings are the corn exchange (1854) and the Mechanics' Institute (1852). Malting is the chief industry, with brass and iron founding, and manufactures of chemicals, agricultural implements, &c. Pop. (1851) 7058; (1901) 16,112. See works by J. Holland (1726), R. White (1875), and Sissons (1888).

Worms (*Wurmz;* Ger. pron. *Vorms*), an ancient and interesting town of Hesse-Darmstadt, on the Rhine's left bank, 25 miles SW. of Darmstadt. The massive Romanesque cathedral, with two cupolas and four towers, was founded in the 8th, rebuilt in the 11th and 12th centuries, and carefully restored in the last quarter of the 19th century. On a hill near the church called the Liebfrauenkirche a highly esteemed wine, *Liebfrauenmilch*, is grown. The synagogue (11th c.) is one of the oldest in Germany. The town-house was restored in 1885. There are manufactures of polished leather, tobacco, soap, &c. Pop. (1875) 16,597; (1900) 40,705. Worms is one of the oldest cities of Germany; in it is laid the scene of the Nibelungenlied. It was occupied by the Romans, destroyed by Attila, and afterwards rebuilt by Clovis. It was frequently the residence of Charlemagne and his Carlovingian successors, and was erected into a free imperial city by the Emperor Henry V. The most famous diet held here was that in 1521, at which Luther defended himself before Charles V., commemorated by an imposing Luther monument erected in 1868. The industry of Worms was great during the middle ages, and its population in the days of the Hohenstaufens averaged 60,000, and amounted to 30,000 even at the close of the Thirty Years' War; but it was almost wholly destroyed by the French in 1689.

Wormwood Scrubs, a district with a common, a railway station, and a prison, on the western outskirts of London, nearly 3 miles NW. of the Marble Arch in Hyde Park.

Worsborough, a town in the West Riding, 2½ miles S. of Barnsley, with manufactures of iron, glass, paper, gunpowder, &c. Pop. 10,336.

Worstead, a Norfolk parish, 3 miles SSE. of North Walsham. Worsted stuffs are said to derive their name hence.

Wörth (nearly *Virt* or *Vairt*), a village (pop. 1064) of Alsace, 10 miles SW. of Wissembourg (Weissenburg). The great German victory over the French (6th August 1870) is by the latter usually called Reichshofen.

Worth'ing (*th* soft), a fashionable Sussex watering-place, 10½ miles W. by S. of Brighton and 56 SSW. of London. It has risen from a small fishing-village since 1760, its growth being rapid after visits of the Princess Amelia (1797) and the Princess Charlotte (1807). The climate is much milder than that of Brighton, the place being encircled on the north and north-east by the Downs, which shelter it from cold winds, and render it one of the best winter-resorts on the south coast. There are capital sands, a parade 1½ mile long, a public park of 18 acres (1881), and an iron pier (1862) 320 yards long. Fruit and tomato growing is largely carried on, many acres being covered with glass. Worthing was constituted a municipal borough in 1890. Pop. (1851) 5370; (1881) 11,821; (1901) 20,015.

Wotton-under-Edge, a Gloucestershire town, 4 miles S. of Dursley. Pop. of parish, 2950.

Wrangel Land (*Vrang'el*), an island in the Arctic Ocean, lying N. of the eastern extremity of Asia, and intersected by the meridian of 180° E. long. It was sighted by Sir Henry Kellett in 1849, re-discovered by the American De Long in 1867, who named it after Baron Ferdinand von Wrangel (Russian arctic explorer, 1821–23), and explored by the American expedition of 1881.

Wrath, Cape. See Cape Wrath.

Wratza (*Vratz'a*), a town of Bulgaria, 43 miles NE. of Sofia. Pop. 10,924.

Wrekin (*Ree'kin*). See Shropshire.

Wrexham (*Rex'am*), a town of Denbighshire, called sometimes the 'metropolis of North Wales,' on an affluent of the Dee, 12 miles SSW. of Chester. Its church, destroyed by fire in 1457, and rebuilt in 1472–1520, is a fine Perpendicular structure, whose tower, 135 feet high, contains ten bells of singular sweetness, and is one of the 'Seven Wonders of Wales.' Judge Jeffreys was born close by, at Acton; and Bishop Heber wrote 'From Greenland's Icy Mountains' in the vicarage. Wrexham is situated in the heart of a mining district, and has far-famed breweries, tanneries, &c. It was incorporated in 1857, and with Denbigh (q.v.), &c. returns one member. Pop. (1851) 6717; (1901) 14,966. See Palmer's *History of Wrexham* (4 vols. 1893).

Wrington, a Somerset parish, 10 miles SSW. of Bristol. The church has one of the finest towers in England. John Locke was born here.

Wrotham, a town of Kent, 6 miles ENE. of Sevenoaks. Pop. 3575.

Wroxeter (*Rox'eter*), a village of Shropshire (pop. 535), on the Severn, 6 miles SE. of Shrewsbury. It occupies the site of the Roman station of *Uriconium*, an important place on Watling Street. See T. W. Wright, *Uriconium* (1872).

Wu-chang. See Hankow.

Wu-chow, a Chinese treaty port on the Si-kiang, in Kwang-si, 180 miles W. of Canton.

Wudwan, or Wadhwán, a native state of Kathiawar, W. India. Area, 237 sq. m.; pop. 50,000, mostly Mohammedans. Wudwan town (pop. 27,000) is 110 miles NW. of Baroda by rail.

Wu-hu, a Chinese treaty port, near the Yang-tsze, 50 miles above Nanking. Pop. 122,000.

Wupper (*Voop'per*), or Wipper, a right-hand tributary (40 miles long) of the Rhine, between Cologne and Düsseldorf. It has a strong current, and drives hundreds of mills, so that the Wupperthal, especially round Barmen (q.v.) and Elberfeld (q.v.), is one of the most populous and industrial in Germany. The interest of the inhabitants in missions is conspicuous.

Würtemberg (nearly *Veer'temberg*), a German kingdom, lying between Baden and Bavaria, and touching Switzerland (Lake of Constance) on the south. It entirely surrounds Hohenzollern, in which state, as well as in Baden, it owns several enclaves. Area, 7529 sq. m. (a little larger than

Wales); pop. (1875) 1,881,505; (1900) 2,169,480. Chief town, Stuttgart (q.v.); Ulm, Heilbronn, Esslingen, Canstatt, Reutlingen, have over 20,000 inhabitants. The Black Forest (3776 feet) lies along its W. boundary; whilst the Swabian Alb (3327 feet) stretches right across the country, forming the watershed between the Neckar and the Danube, the principal rivers; the northern portions belong to the Bavarian plateau. Mineral springs are plentiful. The numerous fertile valleys produce wine and fruit in abundance. Forests occupy some 31 per cent. of the total area. Iron and salt are mined. The industries employ 41 per cent. of the population, the more notable branches being gold and silver work, hardware, iron-casting, machinery, watches, &c. Of the total population 69 per cent. are Protestants. The hereditary sovereign is assisted by two houses of parliament. The national income and expenditure balance at about £3,500,000 per annum; the national debt amounts to £22,000,000, nearly all incurred for building railways. Famous Würtembergers were Baur, Dannecker, Hauff, Hegel, Kepler, Kerner, Œcolampadius, Schelling, Schiller, Strauss, Uhland, Wieland, &c.

Würtemberg, then occupied by the Suevi, was conquered in the 1st c. A.D. by the Romans. In the 3d it was overrun by the Alemanni, who in their turn were subdued by the Franks. In or before the 13th c. it was created a countship, and in 1495 a duchy of the empire. Duke Frederick II. (1797–1816) on going over to the French was rewarded with 850 sq. m. of new territory and an addition of 125,000 subjects, as well as the dignity of Elector (1802). In Napoleon's war against Austria (1805) he sided with the French, and his troops fought with them down to 1813; in return for which he acquired the kingly title and an increase of territory that more than doubled the number of his subjects. Throwing in her lot with Austria in 1866, Würtemberg was beaten at Königgrätz and Tauberbischofsheim, and her king (Charles, 1864–91) compelled to purchase peace from Prussia at the cost of an indemnity of £800,000.

Würzburg (*Veertz'boorg*), capital of the Bavarian province of Lower Franconia, on the Main, 70 miles SE. of Frankfort by rail. Among the public buildings are the Episcopal Palace (1720–44), one of the most magnificent royal residences in Germany, the Julius Hospital (1576), the university buildings, the town-hall, &c. The fortress of Marienberg, on whose site Drusus founded a castle, crowns a hill 400 feet high, on the Main's left bank, and was till 1720 the episcopal residence. Besides the richly decorated cathedral, which was rebuilt in the 11th and following centuries, there are the exquisite Marienkapelle; the university church; and the Neumünster Church, containing the bones of Würzburg's patron, St Kilian, and of Walther von der Vogelweide. In front of the Julius Hospital there is a bronze statue of Bishop Julius; he also in 1582 founded the university, which has 75 professors, 1400 students—more than half of them medical—and a library of over 350,000 vols. There are manufactures of tobacco, furniture, machinery, surgical instruments, railway carriages, lamps, vinegar, wine, beer, and iron. Pop. (1880) 51,014; (1900) 75,497. Würzburg (Lat. *Wirceburgum*) was long the capital of a sovereign bishopric, conferred in 1803 mostly on the Elector of Bavaria.

Würzen (*Veertz'en*), a Saxon town, on the Mulde, 18 miles E. of Leipzig, with a 12th-century cathedral, an old castle, and manufactures of biscuits, carpets, felt, wire, cigars, &c. Pop. 16,620.

Wyborg. See VIBORG.

Wycombe (*Wick'om*), a town of Buckinghamshire, stands, surrounded by beech-clad hills, on the Wye, a small feeder of the Thames, 25 miles ESE. of Oxford and 29 (by rail 34½) WNW. of London. Called variously Chipping (or Chepping) Wycombe and High Wycombe, it was the seat of a Saxon fortress, Desborough Castle, some remains of which may be seen, and has a fine cruciform parish church (1273–1522; restored 1874–88) with a tower 96 feet high, a guildhall (1757–1859), a literary institute (1854), a free library, a hospital (1875), a grammar-school (1555; new buildings, 1883), and an auction-mart (1887). Lace is made, but the staple manufacture is that of beech-wood and other chairs—between one and two millions annually—with latterly whole furniture suites of a very high character. There are also some large paper-mills in the town and district. Hughenden and Chalfont, both noticed separately, are near. Wycombe, which returned two members till 1867, and then one till 1885, was governed by a mayor in Henry III.'s time, but first incorporated by Henry VI.; the municipal boundary was extended in 1880. Pop. (1881) 10,618; (1901) 15,542. See works by Thomas Langley (1797), H. Kingston (1848), and John Parker (1878).

Wye, a beautiful river of Wales and England, rises in two copious springs on the SE. side of Plinlimmon, not 2 miles from the head-water of the Severn (q.v.). It thence flows 150 miles in a generally south-east direction through or along the borders of the counties of Montgomery, Radnor, Brecknock, Hereford, Monmouth, and Gloucester, till it enters the Severn's estuary below Chepstow. At Chepstow the tide has been known to rise 47 feet above low-water mark. The chief affluents are the Lug and Ithon on the left, and the Monnow, Caerwen, and Irfron on the right. Salmon-fishing has greatly improved again. The Wye is not much of a boating river, though a pair-oar has been rowed down it from Boughrood, above Hereford. The part of it separating Monmouth from Gloucester is that chiefly visited for its singular beauty. See CHEPSTOW, TINTERN, Ross, &c., and works by Gilpin (1782), Heath (1800), Ritchie (1841), Howitt (1863), and Bevan (1887).

Wyke Regis, a Dorset village, 2 miles WSW. of Weymouth.

Wylam, a Northumbrian village, 8¼ miles W. of Newcastle. George Stephenson was a native.

Wymondham (*Wind'ham*), a Norfolk market-town, 9½ miles WSW. of Norwich. It has a curious market-cross and the church of a priory (1130). Kett was a native. Pop. of parish, 4734.

Wy'naad, or VAYANÁD, a highland district in the Western Ghâts, about 3000 feet above sea-level. Its auriferous quartz began to be worked as a gold-field about 1865, and absorbed in 1876–86 millions of British capital.

Wynberg (*Wine'berg*), a town on the SE. slopes of Table Mountain, 8 miles SE. of Cape-town (of which it is a suburb) by rail, in a rich wine-growing country. Pop. 18,500.

Wynyard (*Win'yard*), the Grecian mansion of the Marquis of Londonderry, in Durham county, 5 miles NNW. of Stockton-upon-Tees.

Wyo'ming, a NW. state of the American Union, lies mainly on the E. slope of the Rocky Mountains, and is bounded by Montana, South Dakota, Nebraska, Colorado, Utah, Idaho, and

Montana. The length, E. to W., is 360 miles, and the width is 275 miles; area, 97,890 sq. m. The state is traversed by the main axis of the Rocky Mountains, with Frémont's Peak (13,790 feet) and Mount Hayden (13,691). The Yellowstone (q.v.) National Park is mainly within its limits. Interspersed between the ranges are broad plateaus with arable soils, which with proper irrigation yield prolific crops; but less than one-sixth of the state is capable of cultivation; Wyoming is essentially a grazing country. The mean elevation of the plateau regions is from 7000 to 8000 feet. Yellowstone Lake has an altitude of 7778, Lewis Lake 7750, and Shoshone Lake 7670 feet above the sea. The state drains directly to the Pacific, to the Missouri, to the Columbia, and to the Colorado. In the mountain regions are deposits of gold and silver and ores of copper and iron. Coal is worked; and there are supplies of soda, some tin, abundance of limestone, and oil-wells. The climate is dry, although the country is well watered by streams. The summers are mild and delightful, but in exposed regions the winters are severe. The chief towns are Cheyenne, the capital, Laramie, Rock Springs, Rawlins, and Evanston. Wyoming comprises portions of the territories acquired by the Louisiana Purchase of 1803, and by the treaty with Mexico in 1848. It was organised as a territory in 1868, and admitted a state in 1890. Pop. (1870) 9118; (1880) 20,789; (1900) 92,531.

Wyoming Valley, a beautiful, fertile valley on the Susquehanna River, in north-eastern Pennsylvania, about 30 miles long by 5 wide. From 1754 on, its possession was disputed by Pennsylvanian and Connecticut settlers; Campbell's *Gertrude of Wyoming* recounts, not without mistakes, the bloody struggle on June 30–July 5, 1778, during the revolutionary war, against an invading force of 'Tories' and Seneca Indians. The valley is very rich in anthracite coal.

Wyre, a river of Lancashire, flowing 28 miles south-westward to the Irish Sea at Fleetwood.

Wyre Forest, in NW. Worcestershire, near Bewdley, is the S. part of the Severn coalfield.

XALAPA. See JALAPA.

Xanthus (*x* as *z*), the capital of ancient Lycia, on the river Xanthus, 8 miles from its mouth. In 1838 Sir C. Fellows explored its remains.

Xenia (*Zen'ia*), a town of Ohio, on the Little Miami River, 65 miles NNE. of Cincinnati. It has a Methodist college, the state Soldiers' and Sailors' Orphan Home, &c. Pop. 8700.

Xeres, or (1) JEREZ DE LA FRONTERA (*Hay'reth de la Frontay'ra*), the centre of the sherry trade of Spain, 14 (by rail 30) miles NE. of Cadiz, with a Moorish castle (*Alcazar*), and many large *bodegas* or wine-stores. The *Asta Regia* of the Romans, it owes its modern name to the Moors, who near by in a seven days' battle defeated Roderic, the last of the Goths, in 711. Pop. (1900) 60,850.—(2) XEREZ DE LOS CABALLEROS (*Hayreth de lōs Cavalyay'rōs*), 40 miles S. of Badajoz, is a picturesque old town, once a seat of the Templars (hence the name). Pop. 10,100.

Xesibeland (*Zes'ibey-land*), between Griqualand East and Pondoland, was annexed to Cape Colony in 1886.

Y, THE. See AMSTERDAM, ZUIDER ZEE.

Yablon'ovoi, or YABLONOI, a ridge of mountains in NE. Asia, dividing the Amur basin from that of the Lena. Some peaks are 7000 feet high.

Yair, the ancient seat of the Pringles, on the Tweed, 5 miles NNW. of Selkirk.

Yakutsk (*u* as *oo*), a town of Eastern Siberia, on a branch of the Lena, 4 miles from the main stream. Pop. 6800.—Area of Yakutsk *government*, 1,533,397 sq. m. (equal to four-fifths of European Russia); pop. 270,000.

Yalta, a Crimean seaport, 3 miles E. of Livadia (q.v.). Pop. 13,300.

Yalu, the frontier-river between Corea and Manchuria, flowing 300 miles SW. to the Bay of Corea. The passage was forced by the Japanese, and the Russians driven back in May 1904; and in the estuary a Japanese fleet had defeated a Chinese one in 1894.

Yamagata, an important commercial town on the main island of Japan, 30 miles W. by S. of Sendai. Pop. 40,248.

Yanáon, a small patch of Indian soil belonging to France, and under the governer of Pondicherry, forming a small enclave surrounded by British territory (Madras), with 3½ sq. m. of area and 4870 inhabitants. It lies near the mouth of the Godavari.

Yanbu', or YEMBO. See MEDINA.

Yandun, a town of Thongwa, Burma, in the delta of the Irawadi. Pop. 20,235.

Yang-tsze-kiang (better simply *Kiang* or *Chiang*), the longest and most important of Chinese rivers, affording a waterway, not unbroken by rocks and rapids, across the breadth of China, rises in the mountains of Tibet, where its sources were explored by Prejevalsky in 1884–85, and after a course of 3200 miles (SE., NE., and E.), reaches the sea by a wide estuary which begins 50 miles below Nanking, and may be held to terminate near Shanghai. On its banks are also Chin-kiang, Ngan-king, Hankow, Wu-chang, Ichang, and Chung-king (opened to European commerce by treaty in 1890). Some of its many tributaries are over 1000 miles long; its basin is estimated at 689,000 sq. m. Its importance for commerce is enormous, though the navigation is in places difficult even for the native boats, which have to be shoved and poled through the narrow gorges against a strong current. Steamers run in the lower parts. See Little's *Through the Yang-tse Gorges* (1888).

Yanina. See JANINA.

Yank'ton, capital of a county in South Dakota, and prior to 1883 capital of the territory of Dakota, stands on the Missouri's N. bank, nearly 200 miles above Omaha, and 569 by rail W. by N. of Chicago. It contains mills and breweries, railway-shops, and grain elevators. Pop. 4150.

Yare, a Norfolk river, flowing 50 miles E. past Norwich, to the sea at Yarmouth.

Yarkand', the commercial capital of Eastern Turkestan, on the Yarkand or Zerafshan River, 100 miles SE. of Kashgar. It was visited by Marco Polo, but was hardly known till R. Shaw

in 1871 published an account of his residence there three years before. Pop. 90,000.

Yarm, a market-town in the North Riding of Yorkshire, on the Tees, 4 miles SSW. of Stockton. Pop. 1600.

Yarmouth (*Yar'muth*), a municipal, parliamentary, and county borough, seaport, watering-place, and fishing-town of Norfolk, 20½ miles E. of Norwich and 122 NNE. of London. It stands 2½ miles from the mouth of the river Yare, on a slip of land 1½ mile broad, which is washed on the west by the Yare, expanding here into Breydon Water, and on the east by the German Ocean. A bridge connects the town with its Suffolk suburbs of Southtown, or Little Yarmouth, and Gorleston. The main streets of Yarmouth run parallel to the river, and are intersected by 145 narrow 'rows,' resembling the 'wynds' of Edinburgh. The sea frontage has a fine marine parade, with the Wellington and Britannia Piers (1854–58) and the Old Jetty (1808). St Nicholas' Church, founded by Bishop Herbert de Losinga, and restored between 1847 and 1884, is one of the largest parish churches in the kingdom, measuring 230 feet in length, 110 in breadth, and 148 across the transept, with a modern spire 168 feet high; a feature of its churchyard is the number of gravestones to drowned mariners. The Nelson Monument (1818) is a Doric column 144 feet high; and one may also notice the new municipal buildings, Queen Anne in style (1882), the covered fish-market (1867), the sailors' home (1860), the aquarium (1876), the royal military hospital (1809), militia barracks, spacious market-place, some remains of the old walls, &c. Yarmouth is the principal seat of the English herring-fishery; and its 'bloaters' are widely esteemed. Deep-sea fishing is also carried on, and there is considerable shipping, the present harbour-channel of the Yare having been formed in 1559–67, whilst in Yarmouth Roads, inside a line of sandbanks, there is safe anchorage. The exports include fish and agricultural produce; shipbuilding is carried on, and iron, ropes, sails, silk, &c. are manufactured. The town, too, owes much of its well-being to its attractions as a lively watering-place. None of its worthies is more famous than 'Peggotty;' in its history may be noticed its feuds with the Cinque Ports, the plague of 1338–39, which cost 7000 lives, and the fall of a suspension bridge (1845), when seventy-nine persons were drowned. Chartered by King John, it returned two members to parliament from Edward II.'s time till 1867, and regained one of them in 1885; in 1888 it was created a county borough. Pop. (1881) 46,767; (1901) 51,316. See works by C. J. Palmer (1856), J. G. Nall (1860–66). W. F. Crisp (1871), and others cited at NORFOLK.

Yarmouth, a small seaport in the north-west of the Isle of Wight, 10 miles W. of Newport. It was once an important fortified place, and till 1832 returned two members. Pop. 800.

Yaroslav. See JAROSLAV.

Yarrow, a Scottish stream famous in song and ballad, that rises at the meeting-point of Peebles, Dumfries, and Selkirk shires, and flows 25 miles north-eastward till it joins the Ettrick, 2 miles above Selkirk town. About 5 miles from its source it expands into first the Loch of the Lowes (1 by ¼ mile) and then St Mary's Loch (3 by ½ mile; 814 feet above sea-level), the two being separated only by a neck of land on which stands Tibbie Shiels's hostelry. Under SELKIRKSHIRE have been noticed a few of the many memories of that hill-girt lake and the deep swirling stream; and reference may be also made to Angus's *Ettrick and Yarrow* (1894) and Borland's *Yarrow, its Poets and Poetry* (1890), the poets including Hamilton of Bangour, Logan, Hogg, Scott, and Wordsworth.

Yassy. See JASSY.

Yazoo' City, a town of Mississippi, on the Yazoo River (a tributary of the Mississippi), 45 miles by rail N. by W. of Jackson. Pop. 4950.

Yeadon, a town of Yorkshire, England, on the Aire, 6 miles NW. of Leeds by rail, with woollen manufactures. Pop. 7060.

Yedo. See TOKYO.

Yeisk (*Yīsk*), or EISK, a seaport of the Caucasian province of Kuban. Pop. 35,500.

Yekaterinburg. See EKATERINBURG.

Yelisavetgrad. See ELIZABETGRAD.

Yell, one of the Shetland Islands, 25 miles N. of Lerwick. Area, 81½ sq. m.; greatest height, 672 feet; pop. 2511.

Yellala Falls (*Yel-lah'la*), the lowest of a series of falls or rapids which interrupt the navigation of the Congo (q.v.) near Vivi, 110 miles from the mouth of the river.

Yellow River. See HOANG-HO.

Yellow Sea, or WHANG-HAI, an important inlet of the Pacific Ocean, washes the Corea and the north part of the east coast of China; it terminates on the NW. in the Gulf of Pe-chi-li. It is becoming shallower from the quantity of alluvium borne down into it by the rivers Hoang-ho and Yang-tsze.

Yellowstone, the largest affluent of the Missouri, rises high up in the Rocky Mountains in Wyoming, flows 25 miles NW. to the mountain-girt Yellowstone Lake (22 miles long, 7788 feet above sea-level), thence N. through the National Park into Montana, partly through stupendous cañons, and then ENE. and NE. to the Missouri, on the western border of North Dakota. It is some 1300 miles long, and is navigable for steamboats 300 miles, to the mouth of the Big Horn, its largest affluent.

The *Yellowstone National Park* occupies the extreme north-western corner of Wyoming, and forms a square about 75 miles in diameter, almost all of it more than 6000 feet above sea-level, and rising in the snow-covered mountains to 10,000 and 14,000 feet. Situated on the 'Great Divide,' 'its pine-clad mountains form the gathering-ground for the head-waters of large rivers flowing away to the Atlantic and Pacific oceans.' The region is remarkable as well for its scenery as for its famous hot springs and geysers. The river has two falls about 15 miles below the lake, the lower one a magnificent cataract 330 feet in height; then it passes through the Grand Cañon (20 miles), and receives Tower Creek, which itself has leapt out of a deep and gloomy cañon known as Devil's Den over a beautiful fall of 156 feet. Near the river are many of the hot springs, those of White Mountain, near the northern boundary of the Park, extending for 1000 feet up the sloping side, and their snow-white calcareous deposits standing like a series of great frozen cascades. A few miles from Sulphur Mountain, with its vapours rising from fissures and craters, is the active Mud Volcano, with a crater 25 feet in diameter. All the hot springs of the Park number nearly 10,000. But the most singular feature of the region is its geysers, with columns of hot water 50 to 200 feet high, the most magnificent in the world. These are found principally on the Firehole River, a fork of the Madison, at the

western end of Shoshone Lake, and in the Norris basin, to the north of that on the Firehole. The region was visited and described by surveyors in 1869, and explored and mapped in 1871. In 1872 Congress dedicated and set it apart 'as a public park or pleasuring ground for the benefit and enjoyment of the people;' and increased the area in 1891. Two troops of cavalry are quartered in the Park to preserve the forests and wild animals (bisons, elks, antelopes, &c.), and to act as police. A branch of the Northern Pacific Railway extends to the northern boundary of the Park. See works by G. M. Synge (1892) and Wiley (1893).

Yemen. See ARABIA.

Yenikale (*Yen-i-kah'ley*). See KERTCH.

Yenisei (*Yen-i-zay'ee*), one of the largest rivers of Siberia, formed by the junction of the Shishkit and Beikhem, which rise in the mountains on the southern border of Siberia. It flows north through the centre of Siberia into the Arctic Ocean, forming at its mouth a long estuary, and has a total course of 3200 miles. It is navigable 1850 miles to Minusinsk. Its chief tributaries are the Angara or Upper Tunguska from Lake Baikal and the Lower Tunguska. See Seebohm's *Siberia in Asia: a Visit to the Valley of the Yenesay* (1882).

Yeniseisk (*Yen-i-zay'eesk*), a town of Eastern Siberia, on the Yenisei River. Pop. 11,550.—Area of Yeniseisk *government*, 987,186 sq. m.; pop. 558,572. Its capital is Krasnoyarsk.

Yeo, a river of Dorset and Somerset, flowing 24 miles to the Parret at Langport.

Yeovil (*Yo'vil*), a municipal borough of Somerset, 40 miles S. of Bristol and 123 WSW. of London, is a busy, handsome place, built of red brick and yellow stone, and situated on a hillside sloping to the Yeo. St John's Church, 'the Lantern of the West,' is a fine Perpendicular structure of the 15th c., restored in 1864, with a tower 90 feet high. A Grecian town-hall was built in 1849. The woollen industry belongs to the past; but the manufacture of kid and other gloves is largely carried on. Yeovil, which lost 117 houses by fire in 1449, is a borough by prescription, since 1853 under the Municipal Act. Pop. (1861) 7957; (1901) 9861.

Yesso. See JAPAN.

Yet'holm, a Border village of Roxburghshire, at the foot of the Cheviots, 7½ miles SE. of Kelso. Bowmont Water divides it into Town-Yetholm and Kirk-Yetholm, the latter long the headquarters of the Scottish Gypsies, who seem to have settled here as early at least as the 17th century. Pop. 570. See works by Baird (1862), Lucas (1882), and Brockie (1884).

Yezd, or YAZD, a city near the centre of Persia, on a small oasis, and on the route between Ispahan and Kerman. Pop. 45,000—3000 Parsees.

Yez'o. See JAPAN.

Yilgarn. See WESTERN AUSTRALIA.

Ynyscynhaiarn, the parish in which is Portmadoc (q.v.).

Yokoha'ma (*a* as *ah*), the chief port of entry in Japan. Until the opening of the country in 1854 it was an insignificant fishing-village, contiguous to the important town of Kanagawa, originally granted as a treaty settlement. The Bluff, conceded for residence in 1867, is a beautiful spot commanding fine views of Fuji-san and of Yokohama Bay. The modern town is well laid out, and contains many fine stone buildings, public and private, churches, hospitals, recreation grounds, newspapers in English, French, and Japanese, &c. The bay is very beautiful, and the anchorage is protected by two breakwaters 12,000 feet in length. Ships are loaded at an iron pier 2000 feet long, and there are two large graving-docks. There is direct steamship communication with the principal ports of the world. Silk represents three-fifths of the exports, the rest being other tissues, tea, copper, &c.; the imports are cottons and woollens, raw sugar, oils, metals, chemicals, arms and ammunition, watches, &c. Pop. (1872) 61,553; (1903) 326,000.

Yokosuka, an important shipbuilding town and naval station of Japan, 13 miles S. by W. of Yokohama. Pop. 25,000.

Yonkers, a city of New York State, on the Hudson River, opposite the Palisades, and 15 miles by rail N. by E. of the centre of New York, of which it is a suburb, the boundaries touching. Pop. 50,000.

Yonne (*Yon*), a dep. of NE. France. Area, 2868 sq. m.; pop. (1886) 355,364; (1901) 321,062. Its arrondissements are Auxerre (the capital), Avallon, Joigny, Sens, Tonnerre.

York, the county town of Yorkshire, is situated at the confluence of the river Foss with the Ouse, 188 miles N. of London by rail. It is the seat of an archbishopric, the centre of the northern military district, and returns two members to parliament. The population of the municipal borough in 1881 was 61,789, and in 1901 (now a 'county borough') 77,793. The city, together with the surrounding district called the Ainsty, is under the jurisdiction of a lord mayor, twelve aldermen, and thirty-six councillors. York was known as Eborăcum under the Romans, of whom many relics still remain, chief among them being the building known as the Multangular Tower. The numerous sepulchral monuments, pavements, and other relics now preserved in the museum were mainly found in the extensive Roman cemetery discovered in digging the foundations of the railway station. From the time of Henry II. for five hundred years parliaments occasionally sat at York, as the name of Parliament Street still bears witness, while under Henry III. the courts of King's Bench and Exchequer were held here. The Minster is among the most magnificent of English cathedrals. Early in the 7th century Edwin, the first Christian king of Northumbria, founded here a church which perished by fire in 741. The church was rebuilt, but, during the conflagration of the city at the time of the Norman invasion, was again destroyed, with the exception of the central wall of the existing crypt, which also contains portions of the Norman church erected by Archbishop Rodger (1154–81). Early in the following century the beautiful Early English transepts were added by Archbishop Gray. The present nave was built between 1291 and 1345; the graceful Decorated chapter-house between 1300 and 1330; and the Norman choir was superseded by a Perpendicular one, 1373–1400. The central lantern tower belongs to the beginning of the 15th c., and the two western towers were added between 1430 and 1470. In 1829 the roof and carved choir-stalls perished in an incendiary fire, and in 1840 another fire destroyed the roof of the nave and the splendid peal of bells, reducing the south-western tower to a mere shell. Especially worthy of notice is the Decorated stained glass, the great east window being almost unrivalled. The extreme length of the Minster is 524 feet, of the transepts 250, and the breadth of the nave is 140

feet; the height of the central tower is 216, and of the western ones 201 feet.

The Benedictine Abbey of St Mary possessed great wealth and importance. It was founded in the reign of Rufus, but was largely rebuilt towards the end of the 13th c. The existing ruins are principally those of the beautiful abbey church, while the old Guest-house has now been appropriated as a storehouse for Roman and other antiquities. There is a fine R. C. procathedral (1864). The present walls, 2¾ miles in circuit, are mainly of the time of Edward III., though in many parts they follow the line of the Roman earthwork. They are pierced by picturesque gates, locally called Bars, of which Bootham Bar and Micklegate Bar are especially well preserved. The castle, with its picturesque Clifford's Tower, is situated close to the river, and is believed to date from the time of Edward I., though older portions may be included in the structure, which suffered severely during the siege of 1644. The Assize Courts are now held here. The fine Gothic structure of the Guildhall belongs to the 15th c. There are several endowed schools: St Peter's School under the government of the Chapter, founded in 1557; Archbishop Holgate's Free School, dating from the time of Henry VIII.; the Blue-coat School for boys, the Grey-coat for girls, and the Yorkshire School for the Blind. Among other institutions may be enumerated the County Hospital, the Dispensary, the Lunatic Asylum, and the Free Library, opened by the Duke of York in 1893. York is an important railway centre, and its station (1873–77) is one of the largest in England. The British Association was organised at York in 1831, and its jubilee meeting was appropriately held there in 1881. Alcuin, Guy Fawkes, Flaxman, and Etty were natives. See Canon Raine's *York* ('Historic Towns' series, 1893).

York, the capital of York county, Pennsylvania, on Codorus Creek, 28 miles by rail SSE. of Harrisburg. It has a large granite court-house, a handsome collegiate institute, foundries, carfactories, railway-shops, planing-mills, and manufactories of shoes, condensed milk, &c. York dates from 1741, and was the seat of the Continental congress for a time in 1777. Pop. (1880) 13,940; (1900) 33,708.

York, a river of Virginia, formed by the union of the Pamunkey and Mattapony, and flowing south-eastward to Chesapeake Bay, nearly opposite Cape Charles. It is 40 miles long, and from 1 to 3 miles wide.

York Peninsula (Cape), the northernmost part of Queensland (q.v.). For Yorke Peninsula, see South Australia.

Yorkshire, by far the largest of the English counties, is divided for administrative purposes into three Ridings (*thridings*, or 'thirds'), each of which has its own lord-lieutenant, magistracy, and constabulary. There are twenty-six wapentakes in the county; and sundry subdivisions go by the name of shires, as Hallamshire, Richmondshire, Allertonshire, Howdenshire, Cravenshire or Craven, Holderness, and Cleveland. The county contains seven cities, York, Bradford, Hull, Leeds, Ripon, Sheffield, and Wakefield, other 22 municipal boroughs, 169 town and urban district councils, and 524 parish councils. The total area is 3,882,851 statute acres, or nearly 6067 sq. m., all, with the exception of the catchment basins of the Esk and parts of those of the Tees and Ribble, being drained by the Ouse and its great tributaries, the Swale, Ure, Nidd, Wharfe, Aire, Don, and Derwent. Since 1885 the county divisions have returned twenty-six members, and the cities and boroughs the same number. Pop. (1801) 859,133; (1841) 1,592,059; (1881) 2,886,564; (1901) 3,585,122, of whom 445,112 were in the East Riding, 393,143 in the North, 2,746,867 in the West Riding. The city of York has 77,793. The Pennine chain rises to its highest point in Mickle Fell, 2581 feet, while Ingleborough and Whernside touch respectively 2261 and 2384 feet. On the eastern side of the chain are the famous 'Yorkshire dales,' Wensleydale, Wharfedale, Swaledale, &c., in many of which are picturesque waterfalls, or 'forces' as they are locally called—such as Caldron Snout and High Force in Teesdale, or Aysgarth Force and Hardraw Force on the Ure. The Yorkshire coal-measures, on which are situated the manufacturing towns of Leeds, Bradford, Sheffield, Rotherham, Huddersfield, and Halifax, are confined to the southern portion of the county, and are continuous with those of Derbyshire and Notts. In the North Riding the Cleveland moors rise to heights of 1400 feet. The prosperity of Middlesborough is due to the celebrated hematite iron ores of Cleveland. In the East Riding is the high tableland of the Wolds. Since the beginning of the 19th century the manufactures of Yorkshire have enormously developed. Leeds and Bradford are the centres of the woollen and worsted trades, while the cutlery of Sheffield is unrivalled. Of the numerous smelting and puddling furnaces, the chief are those at Rotherham and Middlesborough. The agricultural portions of the county are well served by railways, while the manufacturing districts are covered with a network of lines; the chief towns being also connected by a system of canals, extending from sea to sea, and piercing the Pennine chain, at the height of 656 feet above the sea, by a tunnel three miles in length. Beyond the mining and manufacturing districts the population is agricultural, one of the principal industries being horse-breeding, for which Yorkshire is famous. Among the inland health-resorts Harrogate and Ilkley rank first, while the coast southward from Redcar and Saltburn is fringed with small wateringplaces, besides the larger towns of Whitby, Scarborough, Filey, Bridlington, Withernsea, and Hornsea.

The sepulchral barrows on the Wolds, and the caves of Craven and Kirkdale have yielded results that form the basis of our knowledge of Yorkshire prehistoric times. At the Roman conquest (50–79 A.D.) the country was inhabited by the Celtic Brigantes, or 'hillmen,' whose capital was at *Isurium* or Boroughbridge (q.v.). York (*Eboracum*) for 300 years was the chief city of Northern Britain. Several of the emperors visited York, and here in 211 died Severus, and in 306 Constantius Chlorus. And from York his son Constantine the Great, having been proclaimed by the soldiery, set forth to assume the purple. By 547 the heathen Angles had established their rule, although the little British kingdoms of Leeds (*Loidis*) and Elmet held out till 616, when they were conquered by King Edwin of Northumbria, the Yorkshire portion of whose realm was known as Deira. Edwin, who had been baptised by Paulinus on Easter Day, 627, was defeated and slain at Hatfield Chase near Doncaster in 633, by Penda, the heathen king of Mercia. Toward the end of the 8th century the Northmen began to appear in the Humber, ravaging and finally settling in the country. Yorkshire contains the battlefields of Stamford Bridge,

the Standard (Northallerton), Myton, Bramham Moor, Wakefield, Towton, and Marston Moor; and in 1536 it was the scene of the Pilgrimage of Grace, as in 1569 of another rising on behalf of Mary, Queen of Scots. During the Civil War the county was mainly royalist. No part of England is richer in the remains of monastic houses, eighty-one in all—Rievaulx, Jervaulx, Fountains, Kirkstall, and Bylands (Cistercian), Whitby, Selby, and St Mary's, York (Benedictine), Newburgh, Nostel, Bridlington, Guisborough, Bolton, and Kirkham (Augustinian), &c. Among the castles may be named those of Knaresborough, Pontefract, Conisborough, Richmond, Middleham, and Bolton.

See histories of Yorkshire by Allen (3 vols. 1828–31) and Baines (2 vols. 1871–77), besides Poulson's *Holderness*, Hunter's *Hallamshire* and *South Yorkshire*, Drake's *Eboracum*, Ormsby's *Diocesan History*, Lawton's *Collections*, Dixon's *Fasti Eboracences*, and Phillip's *Geology of Yorkshire*, Morris's *Yorkshire Folk-talk* (1892), and Leadman's *Prælia Eboracensia* (1892).

Yorktown, capital of York county, Virginia, on the York River, 10 miles from its mouth. Pop. 150. Here Lord Cornwallis surrendered to Washington in 1781.

Yor'uba, or YARRIBA, once a West African kingdom, east of Dahomey, now mostly included in the British colony of Southern Nigeria. Its pop., some 2,000,000, are Soudanese Negroes, partly Mohammedanised.

Yosemite Valley (*Yo-sem'i-tey*) is a cleft in the west slope of the Sierra Nevada, about the middle of California, and 140 miles E. of San Francisco. The name Yosemite is an Indian word which signifies 'large grizzly bear.' This celebrated valley, shut in by sheer granite walls 3000 to 6000 feet high, noted for the sublimity and beauty of its scenery, is 6 miles long and from ½ to nearly 2 miles broad. It is traversed by the Merced River, and its waterfalls are in some respects the most remarkable in the world. In the grand Yosemite Falls the stream, 25 feet wide at the crest, takes a first leap of 1500 feet, then rushes 626 feet down in a series of cascades, and finally plunges 400 feet to the bottom. Above the falls are the North Dome (3568) and the vast Half Dome (4737). The valley was discovered in 1851 by soldiers who pursued some predatory Indians to their fastness here; its fame quickly spread, and Congress wisely took steps to preserve its beauties, and in 1864 handed it over to the state, along with the Mariposa grove of sequoias. There are several hotels, a post-office, and a chapel in the valley, besides the houses of the guardian and the guides and others under him. See a work by Wiley (1893).

Youghal (pron. nearly *Yawl*), a seaport of County Cork, on the Blackwater estuary, 27 miles E. of Cork by rail. It has the parish church (1464), a handsome R. C. church, the 'water-gate' and 'clock-gate,' and Sir Walter Raleigh's house, Myrtle Grove, which remains nearly in its original state. Parts of the old walls are standing. According to local tradition, the potato was first planted at Youghal by Raleigh, who was mayor in 1588. The town returned one member till 1885. Pop. (1851) 7410; (1901) 5393.

Youngstown, a manufacturing town of Ohio, on the Mahoning River, 67 miles by rail SE. of Cleveland, and 66 NW. of Pittsburgh, with blast-furnaces, rolling-mills, manufactories of machinery, &c. Iron, coal, and limestone abound near by. Pop. (1880) 15,435; (1890) 33,220; (1900) 44,885.

Ypres (*Eepr*; Flemish *Y'peren*), a Belgian town, 30 miles SSW. of Bruges by rail, and 8 from the French frontier. It once was one of the most important manufacturing towns in Flanders, with 200,000 inhabitants in the 14th c., and 4000 looms. The only remnant of its once flourishing manufacture is the Gothic Cloth-hall (*Les Halles*), with a stately square belfry. It was built 1230–1342, and restored in 1860; a part was added in 1730. One of the wings is now used as the hôtel-de-ville. The cathedral of St Martin is a fine Gothic edifice (1221–1350). The chief modern manufactures are thread and lace. Pop. 17,137. Ypres is a very old town, dating from the 9th and 10th centuries. In 1688 it was strongly fortified by Louis XIV. Jansen was bishop of Ypres.

Ypsilanti (*y* as *i*), a city of Michigan, on the Huron River, 30 miles by rail W. by S. of Detroit. It contains the state normal school. Pop. 7400.

Ystad (*Ee'stad*), a seaport in the extreme south of Sweden, 30 miles SE. of Malmö by rail, with manufactures of sugar, matches, &c. Pop. 8500.

Ystradyfodwg (*Istradifo'doog*; since 1894, *Rhondda*), an urban district of Glamorgan, occupying the mining district of the Rhondda valley, 20 miles NW. of Cardiff. Pop. (1891) 88,350; (1901) 113,735.

Yucatan', a Central American peninsula, dividing the Gulf of Mexico from the Caribbean Sea, and bordering on British Honduras and Guatemala. It is a flat expanse, ridged only towards the east by a low chain of hills. The interior is overspread with forests of mahogany, rosewood, and other valuable timber, while the south and east teem with maize, pulse, rice, tobacco, &c. Ruins of Uxmal, Chichen, Izamal, Mayapan, and other temples and vast edifices, richly carved and coloured, and of unknown history, testify to an ancient civilisation. Made known to Europe in 1517, and completely conquered in 1541, this part of New Spain (granted in 1783 to English logwood-cutters for a time) continued under Spanish domination till 1821. After repeated short periods of independence it has since 1852 belonged to Mexico—from 1858 as two states, Campeachy (area, 18,087 sq. m.; pop. 86,000) and Yucatan (area, 35,203 sq. m.; pop. 314,087).

Yu'kon, the great river of Alaska, is formed by the junction of the Lewis and Pelly at Fort Selkirk, in British territory (62° 45′ N. lat.), and flows 2000 miles W. across Alaska into Behring Sea. Its upper reaches are navigable for steamers, but its vast delta is so silted up that it is not open to sea-going vessels. During three months of the year its waters swarm with salmon. Since 1895 the river gives name to a territory of Canada north of British Columbia. There are gold-mines at Klondike, for which Dawson is the central town.

Yunnan (*Yoon-nan*), a province of SW. China, bounded on the S. by Annam, Siam, and Burma, with an area estimated at 122,000 sq. m., and a pop. estimated at 11,500,000, having sunk from 15,000,000 through plague and the war of the Mohammedan Panthays (1855–72). The surface is mainly an extensive uneven highland plateau, between whose ranges, which vary in height from 12,000 to 17,000 feet in the north to 7000 or 8000 in the south, are deep defiles through which run the Mekong, Salween, Shwéli, and

other rivers of Indo-China. Fertile plains and valleys are numerous. In the northern part the surface is wild, broken, and barren, wrapped in mist and fog, and the population sparse. But the south and south-west are populous and richly cultivated. The first important exploration was by the French in 1867–68. Yunnan, the capital, stands on a great plain in the eastern half of the province, over 6400 feet above sea-level, and near the shore of Lake Tien-chih. It has a flourishing trade and a pop. of 100,000.

Yuruari. See VENEZUELA.

Yverdon (*Eeverdon'; also spelt Yverdun*), a pleasant Swiss town in the Canton de Vaud, at the S. end of the Lake of Neuchâtel, 20 miles N. of Lausanne by rail. The old castle, built in 1135, was used by Pestalozzi as an educational institute; and is now occupied by municipal schools, a library, and museum. There is a sulphur-bath near the town. Pop. 8090.

Yvetot (*Eev'toh*), an old town of France, in the dep. of Seine-Inférieure, 24 miles NW. of Rouen by rail, with manufactures of linen, cotton, calico. Pop. 7000. The town and territory of Yvetot was long a semi-sovereign principality, and the Lord of Yvetot was till 1681 popularly styled 'Roi d'Yvetot.' Beranger's song of that title was a satire on Napoleon.

YAANDAM (*Zahn'dam*), a Dutch town, on the Zaan, at its entrance to the Y, 5 miles NW. of Amsterdam by rail. It has many corn, oil, and saw mills, and active manufactures of paper, dyes, starch, tobacco, and glue, and still a little shipbuilding. Most of the sixty wharves it had in the 17th century have disappeared, and its famous whale-fishery is also a thing of the past. Here in 1697 Peter the Great worked in a shipbuilding yard as a carpenter; the hut in which he lived was visited in 1814 by the Czar Alexander. Pop. 21,650.

Zabern (*Tzah'bern; Fr. Saverne*), a town of Lower Alsace, 22 miles NW. of Strasburg by rail. Pop. 8605.

Zacatecas (*Za-ka-tay'kas*), capital of a Mexican state (area, 24,757 sq. m.; pop. 462,190), is situated in a deep ravine, 440 miles by rail NW. of Mexico city. It has a cathedral, and 3 miles E. the Franciscan college where the fathers of the old Californian missions were trained. Zacatecas is the great silver-producing state of Mexico, and around the city 15,000 men are employed in the mines, which since 1540 have yielded over $1,000,000,000. Gold has also been discovered. Pop. (1900) 39,912.

Zadonsk', a Russian town on the Don, 70 miles N. of Voronej, is the seat of a celebrated monastery. Pop. 8800.

Zafarâni Islands (*â* as *âh*), three islets off the north coast of Morocco, occupied by Spain. Pop. 650.

Zagazig (*Zagazeeg'*), a town of the Egyptian delta, an important railway centre, 50 miles NE. of Cairo, on a branch of the Sweet-water Canal connecting Ismailia with the Nile. Pop. 35,500.

Zähringen (*Tzay'ring-en*), a small village a mile N. of Freiburg in Breisgau, historically noteworthy for the ruined castle of the Dukes of Zähringen, the ancestors of the reigning House of Baden.

Zaire. See CONGO.

Za'ma, a city and fortress in Numidia, about 100 miles SW. of Carthage, near which Hannibal was defeated by the Younger Scipio, 201 B.C.

Zambe'si, Vasco da Gama's 'River of Good Signs,' ranking with the Congo and the Nile as a means of communication with the interior of Africa, is between 1550 and 1600 miles long, and drains more than half a million miles of territory. Soon after its rise in the marshy country to the west of Bangweolo it passes through Lake Dilolo at the SW. corner of the Congo Free State; and on its way to the Indian Ocean it receives many tributaries, notably the Loamba, Kafue, Loangwa, and Shiré. For about two-thirds of its length it flows through British protected territory, entering the Portuguese possessions near Zumbo (550 miles from the sea). The river is navigable, with occasional interruptions, to the Victoria Falls, 900 miles from the sea. At these falls, discovered in 1855 by Dr Livingstone, the river, here 1000 yards broad, drops sheer into a huge fissure in the earth's surface nearly 400 feet deep. The great girder bridge to carry the Cape-to-Cairo railway across the Zambesi (400 yards below the falls) was finished in 1905. Beyond this for 700 miles the river forms a frequently interrupted waterway to the interior. The delta of the Zambesi comprises an area of 2500 sq. m., and it has a number of months all more or less blocked with sand (Chinde, Kongoni, &c.).

Zambesia, a name for that portion of the territory watered by the river Zambesi which is now under British protection, sometimes loosely used for most of the country under the British South African Company (chartered in 1889). South Zambesia (southwards of the river) embraces Mashonaland (q.v.), Matabeleland (q.v.), a part of Manicaland, and Khama's Country in the Bechuanaland protectorate. North Zambesia extends to Lakes Tanganyika and Nyassa (q.v.). The railway from Beira to Salisbury, from Vryburg to Bulawayo, and the Cape-to-Cairo railway to the Victoria Falls (1904) are open. Zambesia, except the British South Africa Protectorate, is now part of Rhodesia (q.v.).

Zambesia, one of the administrative districts of Portuguese East Africa, in the lower valley of the Zambesi River.

Zamora (Span. pron. *Tha-mo'ra*), a very ancient town of Spain, on the Douro, 150 miles NW. of Madrid by rail. It has a late Romanesque cathedral, and some linen and woollen manufactures. Pop. 16,577.—Area of *province*, 4135 sq. m.; pop. (1900) 275,545.

Zamosc', a fortified town of Russian Poland, 154 miles SE. of Warsaw. Pop. 12,500.

Zanesville, a town of Ohio, on the Muskingum River, 67 miles by rail E. of Columbus. The river is crossed by an iron railway bridge 538 feet long (and by others) to its suburbs, Putnam and West Zanesville. It has rich coal-mines close by, and manufactures engines, boilers, flour, iron, cottons and woollens, glass, paper, tiles, &c. Pop. (1880) 18,113; (1900) 23,540.

Zanguebar'. See ZANZIBAR.

Zan'te (anc. *Zacynthos*), one of the Ionian Islands, 9 miles from the NW. coast of the Morea, and 8 S. of Cephalonia, is 24 miles long and 12 broad; pop. 45,522. In the west it attains a maximum altitude of 2486 feet; the centre is

fertile, and mainly devoted to growing the currant vine. Earthquakes are not infrequent, one of the worst in the beginning of 1893.—**Zante**, the capital, the largest town in the Ionian Islands, is at the head of a small bay on the east coast; pop. 14,650.

Zanzibar', since 1890 a British protectorate, consisting of the islands of Zanzibar (625 sq. m.; pop. 150,000) and Pemba (360 sq. m.; pop. 50,000). Some 500 Englishmen, as many Germans, and a few other Europeans live in the town of Zanzibar, on the west coast of the island (pop. 30,000), the chief trading town on the E. coast of Africa. Its imports and exports each average over £1,300,000 a year. Zanzibar ('Land of the Zenj,' a Swahili dynasty) formerly exercised authority over a large part of the mainland, with indefinite extensions inland, which was called Zanguebar as distinguished from the island. It was under Arab influence in the 10th c., Portuguese in the 15th–17th c. In 1856 a son of the imam of Muscat became sultan. Since 1870–90 the territories on the mainland have been absorbed by Britain (see **Ibea**) and Germany (see **Africa**), and the sultan is practically a British pensioner, all authority resting ultimately with the British agent and consul-general. See the travels of Stanley, J. Thomson, &c.; *Zanzibar* by Burton (1872); and works on the partition of Africa by Silva White (1890) and Keltie (1893).

Zara (*Zah-ra;* Slav. *Zadar*), capital of Dalmatia, on a promontory into the Adriatic, 130 miles SE. of Trieste, with a well-protected harbour. Its archiepiscopal cathedral (1205) was founded by Henry Dandolo, Doge of Venice. A marble column is all that is left of an ancient Roman temple; there are also the remains of a Roman aqueduct. The chief manufactures are the making of glass and of maraschino and rosoglio. Pop. 32,500, mainly Italians.

Zarafshan. See **Bokhara.**

Zaragoza (*Tharago'tha*). See **Saragossa.**

Zarskoe. See **Tsarskoye Selo.**

Zaru'ma, a town of Ecuador, on the west slope of the Andes, 95 miles S. of Guayaquil. It has gold and quicksilver mines. Pop. 6000.

Zea. See **Ceos.**

Zea'land (Dutch *Zeeland*), a province of the Netherlands, consists of portions of Flanders (East and West) and of the islands Walcheren, North Beveland, South Beveland, Schouwen, Duiveland, and Tholen, with an area of 690 sq. m. and a pop. of 220,000.

Zea'land (Dan. *Själland*), a level island, the largest and most important of Denmark, lies between the Cattegat and the Baltic, and is separated by the Sound from Sweden and by the Great Belt from Fünen. Length, 81 miles; breadth, 67 miles; area, 2670 sq. m.; pop. (including the small islands of Möen, Samsö, &c.) 960,250. In it are Copenhagen, Elsinore, and Korsör.

Zebu, one of the Philippine Islands (q.v.).

Zeebrugge, the port of Bruges (q.v.), with which it is connected by a ship-canal made in 1895–1903.

Zee'han (Dutch *Zeehaan*, 'sea-hen'), a mining township on the west coast of Tasmania, 29 miles by rail from the port of Strahan or Macquarie Harbour. The name is taken from a prominent mountain, 3 miles south-west, which Tasman, in 1642, named after one of his two ships. The township (population, 5000) owes its existence to the discovery in 1884 of rich silver-lead ores in great abundance.

Zeeland. See **Zealand.**

Zeila, or **Zeyla.** See **Somali-land.**

Zeitun (*Zī-toon'*), a town 25 miles NW. of Marash in the highlands of the Aleppo province, with iron-mines. Pop. 20,000, mainly Armenian Christians.

Zeist. See **Zeyst.**

Zeitz (*Tzītz*), a walled town of Prussian Saxony, on the right bank of the White Elster, 23 miles SW. of Leipzig by rail. It manufactures woollens, cottons, calicoes, sugar, wax-cloth, pianofortes, cycles, &c. Pop. 27,400.

Zelle (*Tzel'leh*), or **Cell**, a manufacturing town of Prussia, on the navigable Aller, 28 miles by rail NE. of Hanover. From the 14th c. till 1705 it was the residence of the Dukes of Brunswick-Lüneburg; and in the old castle (1485) George III.'s unfortunate sister, Caroline Matilda of Denmark, lived from 1772 to 1775, and here she is buried. Pop. 20,000.

Zengg (*Zeng*), an Austrian port on the Croatian coast, 75 miles SE. of Trieste, with an old cathedral. Pop. 3039.

Zenjan', a town of Persia, half-way between Tabriz and Teheran. Pop. 25,000.

Zen'ta, a town of Hungary, on the Theiss, 33 miles S. of Szegedin by rail. Pop. 28,600.

Zerafshan'. See **Bokhara.**

Zerbst (*Tzerbst*), a town in the duchy of Anhalt, on a tributary of the Elbe, 26½ miles SE. of Magdeburg by rail. Pop. 17,069.

Zermatt (*Tzer-matt'*), a Swiss tourist centre (pop. 725) near the upper end of the Visp valley in Valais, 25 miles SSW. of Visp by the railway opened in 1891. It stands 5315 feet above the sea, having to the S. the great Théodule glacier, surrounded by the Breithorn, Monte Rosa, and Matterhorn. The Théodule Pass or Matterjoch (10,899 feet) leads to Aosta in Italy.

Zetland. See **Shetland.**

Zettin'ye. See **Cetinje.**

Zeulenroda (*Tzoilenro'da*), a town of Reuss-Greiz, 51 miles SSW. of Leipzig. Pop. 8970.

Zeyla. See **Somali-land.**

Zeyst, or **Zeist** (*Zist*), a large Dutch village, 6 miles E. of Utrecht, with manufactures of soap, candles, porcelain-stoves, &c. Here was established in 1746 a still thriving society of Moravian Brethren. Pop. 8800.

Zhitomir', or **Jitomir**, the chief town of the Russian government of Volhynia, on a tributary of the Dnieper, 80 miles W. of Kieff. Pop. 66,782.

Zhob, a river of S. Afghanistan (or N. Beluchistan) which joins the Gomul NW. of the Suliman Mountains, and with it flows into the Indus near Dera Ismael Khan. There are valuable passes into Afghanistan both by the Gomul and the Zhob valleys—the latter of which was annexed by Britain in 1889.

Zidon. See **Sidon.**

Zierikzee (*Zee-rik-zay'*), chief town of the Dutch island of Schouwen (q.v.); pop. 7043.

Zillerthal (*Tzil'lertahl*), a Tyrolese valley watered by the Ziller, a tributary of the Inn, whose inhabitants are noted for their handsome figures and their admirable singing.

Zimbab'ye, or **Zimbabwi**, a notable ruin in Mashonaland, 15 miles SE. of Salisbury by road, and 3300 feet above sea-level, consists of a large elliptical building of unmortared masonry (280

feet long, with walls 35 feet high and 16 feet thick), believed by Bent and Hall to be the work of pre-Mohammedan Arabians, but by M'Iver held to be native masonry not older than the 16th century. See works by Bent (1892), Hall (1902), and M'Iver (1906).

Zimme. See SHAN STATES.

Zirknitz, LAKE (*Tzeer'knitz;* Slovenic *Cirknica*), in Carniola, is 20 miles SW. of Laibach and 1860 feet above sea-level. Its area and depth depend much on the rainfall, being sometimes 5 miles and 18 feet; but in some years it is dried up.

Zittau (*Tzit'tow*), a town of Saxony, on the Mandau, near its junction with the Neisse, 21 miles SSE. of Libau and 21 SSW. of Görlitz. It stands in a district rich in lignite, and is also the centre of the linen and damask industry of Saxony, with manufactures of woollens, besides bleachfields, dye-works, and iron-foundries. Pop. (1875) 20,417; (1900) 30,930.

Zlatoust' (*ou* as *oo*), a town of Russia, on the navigable Ai, 198 miles NE. of Ufa by the great Siberian railway (1890). It has iron-foundries, and manufactures small-arms. Pop. 21,000.

Zmeinogorsk' (*ei* as *ī*), a town of Siberia, 350 miles SW. of Tomsk, and near most productive silver-mines. Pop. 6000.

Znaim (*Tznīme*), a town of Moravia, on the Thaya, 63 miles by rail N. by W. of Vienna, with earthenware manufactures. Pop. 16,254.

Zo'ar, one of the Biblical 'cities of the plain,' spared to shelter Lot when Sodom and the others were destroyed. Conder believes he can fix its site to the NE. of the Dead Sea.

Zo'ar, a village of Ohio, on the Tuscarawas River and Ohio Canal, 91 miles by rail S. of Cleveland. Here in 1853 was founded a German socialistic community. Pop. 300.

Zo'la, a town on the upper Benue (q.v.).

Zomba. See NYASSA.

Zombor (*z* as *tz*), a royal free town of Hungary, capital of the district of Bacs, 42 miles NE. of Essek by rail. Pop. 29,435.

Zorndorf (*z* as *tz*), a Brandenburg village, 5 miles N. of Küstrin, where, on 25th August 1758, Frederick the Great defeated the Russians.

Zoutpansberg ('Salt-pan Mountain'), a ridge of mountains (3000–4000 feet) in the north-east of the Transvaal, which is a continuation of the *Drakenberge* (q.v.).

Zschopau (*Tcho'pow*), a town of Saxony, 15 miles SE. of Chemnitz by rail. Pop. 9869.

Zug (*Tzoogh*), the smallest of the Swiss cantons, with an area of 92 sq. m. and a pop. (1900) of 25,045—German-speaking and Catholic.—Zug, the picturesque mediæval capital, lies at the NE. end of the Lake of Zug ($8\frac{3}{4} \times 2\frac{1}{2}$ miles; 1368 feet above the sea; 1320 deep), $24\frac{1}{4}$ miles S. of Zurich by rail. Eleven persons were killed here in July 1887 by the fall of thirty houses into the lake. Pop. 6470.

Zuider Zee (*Zoi'der Zay;* 'Southern Sea,' as opposed to the North Sea), a large gulf penetrating 60 miles into the Netherlands, and 210 miles in circumference. The islands Texel, Vlieland, Terschelling, Ameland, and Schiermonnikoog, reaching in a chain across its entrance, are the remains of the former coast-line, which in 1282 was broken by the sea, the waters overflowing the low lands between Friesland and North Holland, uniting with the small inland lake Flevo, and forming the present Zuider Zee. In it lie the islands Wieringen, Urk, Schokland, and Marken. From the south-west of the Zuider Zee a long narrow arm, called the Y (pronounced *I*), formerly ran nearly due west, through the peninsula of Holland. A strong sea-dyke and locks have been constructed to cut off the Zuider Zee from the Y, through which a broad ship-canal has been made between Amsterdam and the North Sea. On both sides of the new canal the Y has been drained and turned into about 12,000 acres of rich land. The new waterway was formally opened by the king in 1876. In 1892–94 a royal commission drew up a scheme to drain the Zee and reclaim some 750 sq. m. at a cost of £26,000,000. See Havard, *Dead Cities of the Zuyder Zee* (trans. 1876).

Zululand, a British protectorate of 8900 sq. m. north of Natal, from which it is separated by the Tugela River, and extending to the coast at St Lucia Bay. It is well suited for agriculture and cattle raising; gold is worked; and silver, lead, copper, tin, asbestos, and coal are found. The protectorate is but a small part of the country (now largely absorbed in the Transvaal) ruled over by the warlike Zulus, a Kaffir tribe. War was declared between Britain and their chief Cetewayo in 1878, the chief features of which were the British disaster of Isandula (22d January 1879), the heroic defence of Rorke's Drift, and the British victory of Ulundi (4th July 1880). After difficulties with the Boers, what remained of Zululand was declared a British protectorate in 1887, and in 1898 it was made an integral part of Natal. See books by Jenkinson (1882), Miss Colenso (1885), Tyler (1892), and Gibson (1904).

Zumbo. See ZAMBESI.

Zunga'ria, or DZUNGARIA, a high mountain region of Chinese Tartary, between the Tianshan and the western Altai Mountains. Originally the country of the Zungars, a Kalmuck people, it is now inhabited by Dungans, Kalmucks, Chinese, and Kirghiz. It contains the sources of the Black Irtish and the Ili. See KULJA.

Zurich (*Zoo'rik;* Ger. *Zürich*, pron. nearly *Tsee'rihh*), a northern Swiss canton, drained by the Rhine, and traversed from NW. to SE. by lofty hills, between which lie the three valleys of the Toss, Glatt, and Limmat. The last drains the beautiful Lake of Zurich, which, lying 1341 feet above sea-level, is 25 miles long and $2\frac{1}{2}$ miles broad at the widest. Area, 666 sq. m.; pop., German-speaking and Protestant, (1870) 284,786; (1900) 430,336.

ZURICH, the capital, 41 miles by rail NNE. of Lucerne and 43 NW. of Glarus, is situated at the point where the Limmat issues from the Lake of Zurich. It is one of the most prosperous manufacturing and commercial towns of Switzerland, yet with narrow streets and lofty houses in its older quarters. Of the Romanesque cathedral, erected in the 11th and 13th centuries, Zwingli was pastor, as Lavater was of the Peterskirche. The university, founded in 1832, has nearly 100 teachers and more than 900 students; the famous Polytechnic has 1500 students, and has served as model for many such institutions; and one may also notice the town-hall (1699), the botanic gardens, the six bridges, and the town library with over 100,000 volumes and 3000 MSS. Fuseli was a native. Pop. (1870) 56,695; (1901) 152,942.

Zut'phen, a town in the Dutch province of Guelderland, on the Yssel, here joined by the Berkel, 18 miles NNE. of Arnhem by rail. Of buildings the chief are the Great Church (1103;

restored 1857) and the 'Wijn Huis tower. At Rysselt, 3 miles N., is a boys' reformatory (1851). Zutphen has manufactures of paper, oil, leather, &c. It has been several times besieged; and in a skirmish on the field of Warnsfeld, to the E., Sir Philip Sidney received his death-wound, 2d October 1586. Pop. 18,400.

Zuyder Zee. See ZUIDER ZEE.

Zvenigorod'ka, a Russian town 100 miles S. of Kieff; pop. 16,350.

Zvornik, a fortified town of Bosnia, on the Drina, 60 miles NE. of Sarajevo; pop. 4500.

Zweibrücken (*Tzvī'breek-en*; Fr. *Deux-ponts*), an ancient duchy, now in the Bavarian Palatinate. Its old capital, Zweibrücken (Lat. *Bipontinum*), 45 miles by rail W. of Landau, has a large castle (now a court-house) and many busy manufactories. Pop. 13,534.

Zwellendam, or SWELLENDAM, capital of a southern division of Cape Colony, 125 miles ESE. of Capetown; pop. 3200.

Zwickau (*Tzvik'ow*), a picturesque manufacturing city of Saxony, near a rich coalfield, on the left bank of the Mulde, 82 miles by rail SW. of Dresden. The Gothic Marienkirche dates from 1451, and has a tower 285 feet high. The old castle has been converted into a prison. Pop. (1875) 31,491; (1905, with suburbs) 63,870.

Zwittau (*Tzvit'tow*), a town in the extreme north of Moravia, 40 miles N. of Brunn by rail. Pop. 6351.

Zwolle (*Zwol'ley*), capital of the Dutch province of Overyssel, on the Zwarte Water, 50 miles E. by N. of Amsterdam. Besides a busy transit trade it has foundries, shipyards, &c. Close by is Agnetenberg, in whose monastery Thomas à Kempis lived and died. Pop. (1905) 32,380.

Zwyndrecht (*Zwine-drehht*), a small town of South Holland, on a branch of the Maas, opposite Dort; pop. 5500.

Zwyndrecht, a western suburb of Antwerp, with a strong fort.

Zyrianovsk', a town in a rich silver district, near the S. frontier of Siberia, lies among the slopes of the Altai Mountains, on a head-stream of the Irtish; pop. 4500.

ETYMOLOGY OF PLACE-NAMES.

THE following are the more important significant syllables or words that enter into the composition of the names (especially British) of rivers, mountains, towns, &c.:

A (A.S. *eá*, Ice. *-aa*), 'a stream;' as Greta, Thurso ('Thor's stream').
Abad (Pers. and Sans.), 'a dwelling;' as Hyder*abad*, Allaha*bad*.
Aber (Celt.), 'a confluence,' 'an embouchure;' as *Aber*feldy, *Aber*deen, *Aber*ystwith. [Practically synonymous with **Inver**.]
Achadh. See **Auch**.
Ain (Heb.), 'a fountain;' as *En*gedi.
Ak (Turk.), 'white;' as *Ak*-serai, 'white palace.'
All (Gael.), 'white;' **Al-ian**, 'white water,' so the rivers *Allen*, *Ellen*, *Aln*, *Lune*, *Allwen*, *Elwin*.
Alt (Gael.), 'a stream;' as *Allt*-an-Thearna.
Ar, found in many river-names; as *Aire*, *Ayr*, *Aar*, *Arro*, *Arrow*, *Arve*. [Ety. dub., perh. conn. with Sans. *ara*, 'swift,' 'flowing;' perh. with Celt. *garw*, 'violent.']
Ard (Celt.), 'high;' as *Ard*och, *Aird*rie, *Ard*rossan, *Ard*glass, *Arden*, *Ard*ennes.
Ath (Ir. and Gael.), 'a ford;' as *Ath*lone, *Ath*truim (now Trim).
Auch (Gael.), **Agh** (Ir.), 'a field;' as *Auch*inleck, *Agh*inver, *Agh*adoe.
Auchter (Gael.), 'summit;' as *Auchter*arder.
Avon (Celt.), 'a river;' as *Avon*, *Aven*, *Aisne*, *Inn*, *Ain*, *Vienne*.
Ay. See **Ey**.
Bab (Ar.), 'a gate;' as *Bab*-el-mandeb, *Bab*-el.
Bach. See **Beck**.
Bad (Teut.), 'a bath;' as *Bath*, *Baden*, Carls*bad*.
Bahia (Port.), 'a bay.'
Bahr (Ar.), 'a sea, lake, or river;' as *Bahr*ein.
Bally (Ir. and Gael.), 'a village' or 'town;' as *Bally*more, *Bal*briggan, *Bal*moral.
Ban (Celt.), 'white;' as *Banna*, *Banon*; the rivers *Ben*, *Bann*, *Ban*don, *Banney*, &c.
Beck (Scand.), **Bach** (Teut.), 'a brook;' as Hol*beck*, Lauter*bach*.
Bedd (W.), 'a grave;' as *Bedd*gelert.
Beg, Bihan (Celt.), 'little;' as Bally*beg*, Mor*bihan*.
Ben (Gael.), 'mountain,' **Pen** (Welsh), 'headland,' 'hilltop;' as *Ben* Nevis, *Ben* Lomond, The Twelve *Pins*, Bangor; *Pen*, *Pen*nigant, *Pen*zance, *Pen*nine Alps, *Apen*nines, *Pin*dus.
Berg, Borough (A.S. *beorh*), 'a hill;' as Ingle*borough*, Flam*borough* Head, Queens*berry*, Brow*berg* Hill, Königs*berg*, *Berg*en. [From the same root as **Burgh** (below).]
Beth (Heb.), 'a house;' as *Beth*el (house of God).
Blair (Gael.), 'a plain,' orig. 'a battlefield;' as *Blair* Athole.
Boca (Span.), 'a mouth.'
Bottle or **Battle, Büttel** (Teut.), 'a dwelling;' as New*battle*, Wolfen*büttel*.
Broad (E.), as *Braddon*, *Brad*shaw, *Brad*ford.
Brod (Slav.), 'a ford.'
Brunn (Ger.), 'a spring;' as Salz*brunn*, Pader*born*.
Bryn (W.), 'a hill-ridge;' as *Brown*-Willy.
Burgh, Borough, Bury (Teut.), 'a fortified place,' 'a town;' as Edin*burgh*, Peter*borough*, Shrews*bury*, Ham*burg*, Cher*bourg*, Caris*brook*, *Burgos*. [A.S. *byrig*, Ger. *burg*.]
Burn (N. Eng. and Scot.), 'a brook;' as Burn*foot*, Black*burn*, Ty*burn*, East*bourne*.
By (Scand.), 'a dwelling,' 'a town;' as Der*by*, Rug*by*, Whit*by*, Elb*œuf*.
Caer, Cader (W.), **Caher** (Ir.), 'fortified inclosure;' as *Caer*leon, *Caer*narvon, *Car*digan, *Car*lisle, *Cader*-Idris, San*quhar*, *Car*lingford.
Cam (Celt.), 'crooked;' as *Cam*, *Cam*beck, *Cam*buskenneth, More*cambe* Bay, *Cam*brai.
Carn (Celt.), 'a heap of stones.'
Caster, Chester, Cester (—L. *castra*), 'a camp;' as Don*caster*, *Chester*, Win*chester*, Lei*cester*.
Ceann (Gael.), 'a head or promontory;' as *Kin*tyre, *King*horn, *Ken*mare.
Cefn (Celt.), 'a ridge;' as *Cefn*coed, *Chevin*, *Keynton*, *Chevington*, *Cheviot*, *Cevennes*.
Cheap and **Chipping** (A.S. *ceap*), 'price,' 'a market;' as *Chipping*-Norton, *Cheap*stow, *Cheap*side, *Copen*hagen (Dan. *Kjöben-havn*, 'merchants' haven').
Civita (It.), **Ciudad** (Sp.), 'a city;' as *Civita* Vecchia ('old city'); *Ciudad* Rodrigo ('city of Roderick'). [From L. *civitas*.]
Clach, Cloch (Gael.), 'a stone;' as *Clog*her.
Clyd (Celt.), 'warm,' } as *Clyde*, *Cluden*, *Clwyd*,
Clyth (Celt.), 'strong,' } *Cloyd*, &c.
Cnoc (Gael.), 'a knoll, hill;' as *Knock*meledown.
Coed (Celt.), 'a wood;' *Cots*wold Hills, *Chat*moss.
Coln (from L. *colonia*), 'a colony;' as Lin*coln*, *Colne*, *Cologne* (*Köln*).
Combe (A.S.), **Cwm** or **Cum** (Celt.), 'a hollow between hills;' as Wy*combe*, *Comp*ton, The *Coombs*, *Como*.
Craig, Carrick, Crag (Celt.), 'a rock;' as *Craigie*, *Crathie*, *Carrick*, *Carrick*fergus, *Crick*, *Crick*lade, *Croagh*-Patrick.
Dagh (Turk.), 'a mountain;' as Kara*dagh*.
Dal (Scand.), **Thal** (Ger.), **Dail** and **Dol** (Celt.), 'a dale,' 'a field;' as Liddes*dale*, Ry*dal*, Ken*dal*, Arun*del*, Rhein*thal*; (in Celtic names prefixed) *Dalry*, *Dalkeith*, *Dolgelly*.
Dar (Ar.), 'a dwelling district;' as *Dar*fur, *Diar*bekr.
Den or **Dean** (Teut.), 'a deep wooded valley;' as Tenter*den*, South*dean*, Hazel*dean*, *Den*holm.
Don or **Dan** (derivation not ascertained), 'water;' as the *Don*, Ban*don*, *Dun*, *Tyne*, *Tone*; so in the *Dniester*, *Dnieper*, *Tanais*, *Donetz*, *Dwina*.
Dorf. See **Thorpe**.
Dour (Celt.), 'water;' as the *Dour*, *Adour*, *Douro*, *Dore*, *Thur*, *Doro*, *Adder*, *Derwent*, *Darwin*, *Darent*, *Dart*, *Dor*chester, *Dor*dogne.
Drum and **Drom** (Celt.), 'a backbone,' 'a ridge;' as *Drom*ore, *Drum*mond, Aughrim, Leitrim.
Du (Celt.), 'black;' as the *Douglas*; the rivers *Dulas*, *Doulas*, and prob. *Dee*; *Dublin* ('dark pool').
Dun (Gael.), **Dinas, Din** (Welsh), 'a hill fortress;'

as *Dun*more, *Dun*blane, *Dun*keld, *Dun*barton, *Dun*fries, *Dun*stable, *Dun*mow, *Down*-Patrick, *Dun*egal, London, Verdun, Leyden, *Dinant*.

Dysart (Celt.—L. *desertum*), 'a hermitage;' as *Dysart*, *Dysert*more.

Ea, Ey (A.S. *ig*, Ice. *ey*, Norw. and Dan. *ö*), 'an island;' as Swan*sea*, *Eton*, Jer*sey*, Rothe*say*, Staffa, Faroe.

Eccles, Egles (like Fr. *église*, through L., from Gr. *ekklēsia*), 'a church;' as *Eccles*ton, *Eccle*fechan, Terre*gles*.

Elf, Elv (Goth.), 'a river,' as *Elbe*.

Ermak (Turk.), 'a river;' as Kizil-*ermak*.

Esk (Gael. and Ir. *easg* [obs.] or *uisge*, W. *wysg*), 'water;' as the *Esk*, *Usk*, *Esky*, *Ise*, Ease*burn*, *Ash*bourne, *Iz*, *Isis*, *Exe*, *Ux*, *Ouse*, *Wisk*, *Wis*, *Ischia*, Isère, *Aisne*, *Auxonne*, *Oise*.

Eski (Turk.), 'old.'

Fell (Scand. *fjeld*), 'a mountain;' as Carter*fell*, Goat*fell*, Snae*fell*, Fit*ful* Head (corr. of Hvit-*Fell*, 'white mountain').

Fiord or **Fjord** (Scand.), 'a creek or firth;' as Water*ford*, Lax*firth*, Lym*fiord*.

Fleet (Scand. *fleot*, E. *flood*), 'a small river' or 'channel;' as Pur*fleet;* found in Normandy as *fleur*, as Har*fleur* (anciently Harvo*flete*).

Folk (A.S.), 'people;' as Nor*folk* ('north people'), Suf*folk* ('south people').

Ford (A.S.), 'a shallow passage over a river;' as Chelms*ford*. See also **Fiord**.

Fors, Foss (Scand.), 'a waterfall;' as Wilber*force*.

Garth (Scand.), 'yard;' **Gorod, Grod, Grade, Grätz** (Slav.), 'inclosure,' 'town;' as Stutt*gart*, Nov*gorod* (= Newton), Bel*grade* (= Whitton), Königg*rätz* (= Kingston).

Garw (Celt.), 'rough;' hence *Garonne*, *Garioch*, *Yarrow*, *Yair*, possibly *Garry*.

Gate (Teut.), 'a passage' or 'road;' as Canon*gate*, Harrow*gate*, Reigate (=Ridge*gate*), Catte*gat*.

Gebel, Jebel (Ar.), 'a mountain;' as *Gib*raltar, *Jebel*-Mukattam.

Glen (Gael.), **Glyn** (W.), 'a narrow valley;' as *Glen*coe, *Glen*garry, *Glyn*eath, *Gla*morgan.

Gorm (Gael.), 'blue;' as Cairn*gorm*, king*orn* ('blue point'), corrupted to Kinghorn.

Gorod, Grod (Slav.). See **Garth.**

Gwent (Celt.), 'a plain;' Latinised into *venta*, as *Venta* Belgarum (now *Win*chester), Caer*went*.

Gwy. See **Wy.**

Halen (Celt.), 'salt;' as *Hallein*, *Haling*.

Hall (Teut.), 'a stone house;' as Eccles*hall*, Wal*sall;* (in Germany) a *salt*-work, as *Halle*.

Ham (A.S., Ger. *heim*), 'a home;' as Bucking*ham*, Hoch*heim*.

Hay, Haigh (Teut.), 'a place surrounded by a *hedge;*' as Rothwell *Haigh*, the *Hague*.

Hissar (Turk.), 'a castle.'

Hithe (A.S.), 'haven;' as *Hythe*, Lam*beth* = Loam-*hithe* ('the clayey haven').

Ho (Chin.), 'river;' as Pei*ho*.

Hoang, Whang (Chin.), 'yellow;' as *Hoang*ho, *Whang*-Hai.

Holm (Scand., &c.), 'an island in a lake or river;' 'a plain near a river;' as Lang*holm*, Stock*holm*, Flat*holm*.

Holt (Teut.), 'a wood;' as Bags*hot*, Alders*hot*, *Holstein*.

Horn (Teut.), 'a peak;' as Schreck*horn* ('the peak of terror'), Matter*horn* ('meadow-peak').

Hurst (A.S. *hyrst*), 'a wood;' as Lynd*hurst*.

Ing (A.S.), a suffix denoting *son*, in pl. 'a family' or 'tribe;' as Warr*ington* ('the town of the Warrings'), Hadd*ington*.

Innis or **Ennis** (Celt.), *inch* in Scotland, an island; as *Inch*colm ('the island of St Columba'); *Ennis*killen, *Ennis*more, in Ireland.

Inver (Gael.), 'the mouth of a river;' as *Inver*ness, *Inver*aray, *Inner*leithen.

Kalat (Ar.), 'a castle;' as *Caltagirone*.

Kara (Turk.), 'black;' as *Kara*kum ('black sand'), *Kara* Hissar ('black castle').

Kenn (Gael.), **Kin** (Ir.), 'a head;' as *Ken*more, *Can*tire, *Kinn*aird, *Kin*ross, *Kin*sale, *Kent*.

Kil (Celt.), L. *cella*, 'a cell,' 'a chapel,' or 'church;' as *Kil*conquhar in Fife, 'the chapel at the head (*cean*) of the fresh-water lake (*iuchair*);' Icol*mkill*, 'the island (*I*) of Columba of the church.'

Kin. See **Ceann.**

Kirk (North E. and Scand.), **Kirche** (Ger.), **Kerk** (Dutch); as Sel*kirk*, *Kirk*wall, *Kirk*cudbright, *Kirch*hein, Fünf*kirchen*, Nij*kerk*, Dun*kerque* (Dun*kirk*).

Kizil (Turk.), 'red.'

Knock. See **Cnoc.**

Koi (Turk.), 'a village.'

Lax (Scand.; Ger. *lachs*), 'a salmon;' as Loch *Lax*ford in Sutherland; the *Lax*ay in the Hebrides and in Man; *Lax*weir on the Shannon.

Leamhan (Ir. and Gael.; pron. *lavawn*), 'the elm-tree;' as in *Leven*, *Lennox*, *Laune*.

Ley (A.S. *leah*), 'a meadow;' Had*leigh*, Water*loo*.

Linn (Celt.), 'a waterfall;' as *Lynn* Regis in Norfolk; Ros*lin*, 'the promontory (*ross*) at the fall.'

Lis (Celt.), 'an inclosure,' 'a fort,' 'a garden;' as *Lis*more ('the great inclosure' or 'garden').

Llan (W.), 'an inclosure,' 'a church;' as *Llan*daff ('the church on the Taff').

Llano (Span.), 'a plain.'

Loch, Lough (Gael.), 'a lake.'

Low and **Law** (A.S. *hlaw*), 'a rising ground;' as Hounslow, Ludlow, and numerous *laws* in Scotland. [Cog. with Goth. *hlaiw*, and allied to L. *clivus*, a slope, and E. *Lean, v.*]

Magh (Celt.), 'a plain;' as Ar*magh*, *May*nooth.

Mark (Teut.), 'a boundary;' Den*mark*, *Mercia*, *Murcia*.

Markt (Ger.), 'a market;' as Bibert*markt*.

Medina (Arab.), 'a city.'

Mere, Moor (A.S.), 'a lake' or 'marsh;' as *Mer*sey, Black*more*.

Minster (A.S.), **Münster** (Ger.), 'a monastic foundation;' as West*minster*, Neu*münster*.

Mor (Celt.), 'great;' Ben*more* ('great mountain').

Mor (Celt.), 'the sea;' as *Mor*ay, Armo*rica*, *Mor*laix, Gla*morgan*, *Mor*bihan.

Mull (Gael.), 'a headland;' as *Mull* of Galloway.

Nagy (Hung.), 'great.'

Nant (Celt.), 'a brook or valley;' as *Nant*wich.

Negro (Span.), 'black.'

Ness or **Naze** (Scand.), 'a nose' or 'promontory;' as Caith*ness*, Sheer*ness*, Cape Gris*nez*; the *Naze*.

Ochter. See **Auchter.**

Oë. See **Ea.**

Old, Eld, Alt (Teut.), 'old;' as *Alt*horp, *Elton*, *Eltham*, *Ald*bury, *Abury*.

Patam (Sans.), 'a city;' Seringa*patam*, *Patna*.

Peak, Pike (conn. with Ger. *spitz*, Fr. *pic* and *puy*), 'point;' as the *Peak*, the *Pikes* in Cumberland, *Spitz*bergen, *Pic* du Midi, *Puy* de Dôme.

Peel (Celt.), 'a stronghold;' as *Peel* in Man, and numerous *peels* on the Border of Scotland.

Pen. See **Ben.**

Polis (Gr.), 'a city;' as Grene*ble*, Na*blous*, Na*ples*, Sebasto*pol*, Constanti*nople*.

Pont (L.), 'a bridge;' as *Pont*efract, Negro*pont*.

Poor, Pore, Pur (Sans. *pura*), 'a town;' as Nag*pur*, Cawn*pore*, Singa*pore*.

Port (L. *Portus*), 'a harbour;' as South*port*.

Ras (Ar.), 'a cape;' as *Ras*-al-had.

Rath (Ir.), 'a round earthen fort;' as *Rath*more.

Rhe, a root found in many languages, meaning

'to flow;' as *Rhine*, *Rhone*, *Rha*, *Reno*, *Rye*, *Ray*, *Rhee*, *Wrey*, *Roe*, *Rae*.

Ridge, in Scotland **Rigg** (A.S. *hrycg*, Ger. *rücken*), 'a back;' as *Reigate*, *Rugeley*, Long*ridge*.

Rin (Celt.), 'a point of land;' *Rhinns* of Galloway; Pen*rhyn* in Wales, *Rings*end near Dublin.

Ross (Celt.), 'a promontory;' Kin*ross*, Mel*rose*, *Ros*neath; in S. Ireland, a wood, as *Ros*common.

Salz (Ger.), 'salt.'

Scale (Scand.), 'a hut' (Scot. *shieling;* Ice. *skali*); Portin*scale*, and possibly *Shields*, Gala*shiels*, *Sel*kirk.

Scar (Scand.), 'a cliff;' *Scar*borough, the *Skerries*.

Schloss (Ger.), 'a castle.'

Serai (Turk.), 'a palace.'

Set (A.S.), 'a seat,' 'a settlement;' Dor*set*, Somer*set*, Ambles*ide*, *Sed*litz.

Sex, 'Saxons;' as Es*sex* ('East Saxons'), Sus*sex* ('South Saxons').

Sierra (Sp.—L. *serra*), 'a saw;' or from Ar. *sehrah*, 'an uncultivated tract.'

Slievh (Ir.; allied to L. *clivus*, a slope), 'a mountain;' as *Slievh* Beg.

South is found in *Suf*folk, *Sus*sex, *South*ampton, *Suther*land, *Sut*ton, *Sud*bury, *Sud*ley.

Stadt. See **Stead**.

Stan (Pers.), 'a land;' Hindu*stan*, Afghani*stan*.

Staple (A.S.), 'a store;' Dun*staple*, Barn*staple*.

Stead (A.S.), **Stadt** (Ger.), **Sted** (Dan.), 'a town;' as Hamp*stead*, Neu*stadt*, Ny*sted*.

Ster (Scand. *stadhr*), 'a place;' as Ul*ster*.

Stoc, Stow (A.S.), 'a stockaded place;' as Bris*tow* or Bris*tol*, El*stow*, Tavi*stock*, *Stock*holm.

Stone (Ger. *stein*), 'a stone,' 'a rock;' as *Stan*ton, *Staines*, Eddy*stone*, *Stennis*, Franken*stein*.

Stow. See **Stoc**.

Strath (Gael.), 'a broad valley;' as *Strath*more.

Street (L. *stratum*), 'a Roman road;' *Strat*ford, *Strat*ton, *Streat*ham.

Su (Turk.), 'water;' as Kara*su*.

Tain (Gael.), 'a river;' as the *Tyne*, prob. a form of *Don*.

Tam (Celt.), 'still,' 'smooth;' as the *Thames*is ('smooth Isis'), the *Tema*, *Tame*, *Tamar*, *Tay*.

Thorpe (Norse), **Dorf** (Ger.), **Dorp** (Dut.) 'a village;' as Burnham-*Thorpe*, Hey*thorpe*, Düssel*dorf*, Middel*dorp*.

Thwaite (Scand.), 'a clearing;' as Cross*thwaite*.

Tobar (Gael.), 'a fountain;' as *Tober*mory.

Toft (Dan.), 'an inclosure;' as Lowes*toft*, Ive*tot*.

Tom (Celt.), 'a knoll;' as *Tom*intoul.

Ton, Town, Tun (A.S.), 'inclosure,' 'town;' the most common of English local suffixes.

Tor (Celt.; found in L. *turris*), 'a tower-like rock;' as the *Tors* in England; Mount *Taurus*.

Tre (W.), 'a dwelling;' as *Tre*town, Coven*try* ('convent-dwelling'), Oswes*try*, Uchil*tre*.

Uchel (W.), 'high;' **Uachter** (Gael.), 'a height;' as the *Ochil* Hills, *Ochil*tree, *Auchter*arder.

Var, Varad (Hung.), 'a fortress;' as Nagy-*varad*.

Varos (Hung.), 'a town;' as Uj*varos*.

Ville (Fr.—L. *villa*), **Villa** (It., Span., Port.), **Well** (Eng.), 'an abode;' as Tanker*ville*, Yeo*vil*, Potts*ville*, Kettle*well*, Brad*well*, Max*well*ton.

Wady (Ar.), 'a river-course or ravine;' as *Guad*alquivir.

Wall, found in many names of places on the Roman wall from Newcastle to Carlisle; as *Wall*send, *Wall*head.

Weald, Wold (Ger. *wald*), 'a wood;' *Wal*tham, *Wal*den, the Cots*wolds;* Schwarz*wald* ('Black Forest').

Whang. See **Hoang**.

Wick, Wich (A.S. *wic*, 'a village;' Scand. *vig*, 'a bay' or 'creek;' Dutch, *wijk*); as Alnwick, Sandwich, Noordwijk.

Worth (A.S. *weorthig*), 'a farm' or 'estate;' as Tam*worth*, Kenil*worth*, Bos*worth*, *Worth*ing.

Wy or **Gwy** (W.), 'water;' as the *Wye;* used as affix to many streams, as Con*way*, Med*way*, Sol*way*.

Yeni (Turk.), 'new.'

CONVERSION OF KILOMETRES AND MILES.

KILOMETRES INTO MILES.

Kilom.	Miles.	Yds.
¼	0	273
½	0	547
¾	0	830
1	0	1094
2	1	427
3	1	1521
4	2	855
5	3	188
6	3	1282
7	4	615
8	4	1709
9	5	1043
10	6	376
20	12	753
30	18	1129
40	24	1505
50	31	122
60	37	498
70	43	874
80	49	1251
90	55	1627
100	62	243
200	124	487
300	186	730
400	248	973
500	310	1217

MILES INTO KILOMETRES.

Miles.	Kilom.	Metres.
¼	0	402
½	0	805
¾	1	207
1	1	609
2	3	219
3	4	828
4	6	437
5	8	47
6	9	656
7	11	265
8	12	875
9	14	484
10	16	93
20	32	186
30	48	279
40	64	373
50	80	466
60	96	559
70	112	652
80	128	745
90	144	838
100	160	931
200	321	863
300	482	794
400	643	726
500	804	657

DIFFERENCES OF TIME

BETWEEN LONDON (GREENWICH) AND VARIOUS IMPORTANT PLACES ON THE GLOBE.

When it is twelve o'clock noon, in Greenwich mean time, the hour (local time) is as follows at:

	Hours.	Min.	
Amsterdam	12	20	P.M.
Auckland, New Zealand	11	39	P.M.
Berlin	1	53	P.M.
Bombay	4	51	P.M.
Calcutta	5	53	P.M.
Capetown	1	14	P.M.
Constantinople	1	56	P.M.
Dublin	11	35	A.M.
Edinburgh	11	47	A.M.
Lisbon	11	24	A.M.
Madrid	11	45	A.M.
Melbourne	9	40	P.M.
Naples	12	57	P.M.
New York	7	4	A.M.
Paris	12	9	P.M.
Peking	7	46	P.M.
Quebec	7	15	A.M.
Rome	12	50	P.M.
St Petersburg	2	1	P.M.
San Francisco	4	23	A.M.
Sydney	10	5	P.M.
Trieste	12	55	P.M.
Venice	12	50	P.M.
Vienna	1	6	P.M.

The difference is at the rate of 4 minutes for one degree of longitude, or one hour for 15°. Time is earlier or later than Greenwich according as the locality is east or west of Greenwich. Places lying close together, but on different sides of the longitude line of 180°, differ nominally by a whole day in time.

Following the example of the United States, all countries are gradually adopting Standard Time. By this is meant time which differs from Greenwich mean time by whole hours. The globe is divided into zones of 15° or one hour breadth, the Greenwich meridian being in the centre of the zero zone. Thus Belgium and Holland keep Greenwich time; Denmark, Sweden, Switzerland, Austria, and Germany (Prussia temporarily excepted) keep the time of Mid-Europe, or of longitude 15° E.—i.e. one hour earlier than Greenwich. In North America again five zones are distinguished. Halifax falls within the time zone of 60° W. long. or four hours later than Greenwich; Montreal and New York fall within the zone of 75° or five hours west of Greenwich; and so on across the entire continent. New York, Chicago, Denver, and San Francisco may be mentioned as places whose times change by one hour as we pass from one to the next succeeding. The corresponding times are distinguished as Eastern ($67\frac{1}{2}$—$82\frac{1}{2}$°), Central ($82\frac{1}{2}$—$97\frac{1}{2}$°), Mountain ($97\frac{1}{2}$—$112\frac{1}{2}$°), and Pacific ($112\frac{1}{2}$—$127\frac{1}{2}$°) times. Standard time in Japan is nine hours earlier than Greenwich time.

THE EARTH,

ITS DIMENSIONS, MASS, DISTRIBUTION OF SURFACE, DISTANCE FROM THE SUN, &c.

Meridional circumference	24,856 miles.
Equatorial circumference	24,899 "
Equatorial mean diameter	7926·6 "
Polar (or shortest) diameter	7899·6 "
Area of the earth	197,000,000 sq. miles.
Water surface of earth	141,000,000 "
Land surface of earth	56,000,000 "
Volume of earth	260,000,000,000 cubic miles.
Mass of earth	6,000,000,000,000,000,000,000 tons.
Mean distance from the sun	92,800,000 miles.

POPULATION OF THE EARTH

ACCORDING TO WAGNER AND SUPAN:

Europe (without Iceland, Atlantic islands, &c.)	357,379,000
Asia (without the Polar Islands)	825,954,000
Africa (without Madagascar, &c.)	163,953,000
America (without Polar regions)	121,713,000
Australia and Tasmania	3,230,000
Oceanic Islands	7,420,000
Polar Regions	80,000
Total	1,479,729,000

NUMBERS PROFESSING THE CHIEF FAITHS OF THE WORLD:

Buddhists	500,000,000
Hindus	160,000,000
Mohammedans	155,000,000
Confucians	80,000,000
Adherents of Shintoism (in Japan)	14,000,000
Jews	7,000,000
Christians—	
Roman Catholics	152,000,000
Greek Catholics	75,000,000
Other Christians	100,000,000
Various Heathens	237,000,000
Total	1,480,000,000

DISTANCES FROM LONDON BY RAIL,

WITH THE APPROXIMATE DURATION OF THE JOURNEY BY EXPRESS.

	Miles.	Days.	Hrs.
Aix-la-Chapelle	339	..	11½
Basel	610½	..	18¾
Belgrade	1382	2	2¼
Berlin	744¾	..	22¾
Birmingham	112½	..	2⅝
Brindisi	1460	2	11
Bristol	118	..	2⅜
Brussels	242	..	8
Budapest	1165	1	17¼
Cologne	382¼	..	13
Constantinople	2032	3	4
Copenhagen	879¼	1	10¾
Dover	77½	..	1¾
Dresden	822½	1	1¾
Dublin	328	..	10½
Edinburgh	393	..	8½
Florence	1083¾	1	19½
Frankfort	519½	..	17½
Glasgow	405½	..	8¾
Hanover	585¼	..	18¼
Harwich	71	..	2½
Hull	173	..	4⅜
Leipzig	751	..	23¼
Liverpool	201	..	4½
Lyons	608½	..	20
Madrid	1168	1	18
Manchester	187	..	4¼
Marseilles	826¼	1	1
Milan	846½	1	6¼
Moscow	2131	3	11½
Munich	771	1	1½
Naples	1353¾	2	1¾
Newcastle	275	..	5⅜
Paris	288	..	7½
Penzance	328	..	9⅜
Pesth	1165	1	17¼
Plymouth	246	..	6
Portsmouth	74	..	2⅜
Rome	1192¼	1	19
St Petersburg	1728	2	19¾
Stockholm	1283¾	2	3¼
Strasburg	523	..	19¼
Thurso	787	..	21
Venice	1036½	1	17¾
Vienna	991¾	1	11¼
Warsaw	1142¼	1	16½
Yarmouth	122	..	3 1/16
York	188	..	3¾

DISTANCES BY SEA IN NAUTICAL MILES.

(1 nautical mile = 1·151 statute mile.)

Brindisi	to Alexandria	836
"	" Athens	482
"	" Constantinople	845
"	" Malta	360
"	" Smyrna	692
Dover	to Calais	23
"	" Ostend	60
Gibraltar	to Malta	981
"	" Marseilles	694
"	" Port Said	2,271
Harwich	to Antwerp	122
"	" Hamburg	300
"	" Rotterdam	104
Hull	to Antwerp	240
"	" Christiania	582
"	" Hamburg	380
"	" Rotterdam	217
Leith	to Antwerp	440
"	" Hamburg	480
"	" Rotterdam	393
Liverpool	to Dublin	120
"	" New York	2,980
"	" Quebec	2,708
London	to Adelaide	11,455
"	" Aden	4,965
"	" Alexandria	3,465
"	" Antwerp	184
"	" Bombay	6,629
"	" Calcutta	8,438
"	" Capetown	6,291
"	" Gibraltar	1,299
"	" Hamburg	433
"	" Hobart (*viâ* Cape)	11,951
London	to Hong-kong	10,154
"	" Madras	7,668
"	" Melbourne (*viâ* Brindisi and Suez Canal)	11,940
"	" Port Said	3,570
"	" Rotterdam	192
"	" Shanghai	11,024
"	" Singapore	8,717
"	" Sydney	12,500
"	" Wellington	13,345
"	" Yokohama	11,956
Marseilles	to Algiers	417
"	" Naples	468
"	" Port Said	1,508
Newcastle	to Antwerp	343
"	" Hamburg	415
"	" Rotterdam	303
Newhaven	to Dieppe	65
New York	to Liverpool	2,980
"	" Queenstown	2,744
"	" Southampton	3,100
San Francisco	to Auckland	5,900
"	" Honolulu	2,100
"	" Sydney	7,191
"	" Yokohama	4,750
Southampton	to Capetown	5,979
"	" Gibraltar	1,008
"	" Havre	106
"	" Lisbon	862
"	" Madeira	1,212
"	" Natal	6,789
"	" New York	3,100
"	" Teneriffe	1,517

In 1895-1906 the passage from Sandy Hook to Queenstown and to Plymouth was repeatedly made in from 20 to 40 minutes over 5 days 7 hours, an average speed of over 23·50 knots.

DATES OF GEOGRAPHICAL ENTERPRISE AND DISCOVERY.

Hanno the Carthaginian off Sierra Leone	B.C. 470
Alexander the Great in the Punjab	327
Nearchus in the Indian Ocean	325
Pytheas of Marseilles in British Seas	320
Megasthenes at Patna on the Ganges	300
Julius Cæsar in Britain	55
Agricola in Britain	A.D. 84
Cosmas Indicopleustes in India	550
Sulaiman (Arab) in India and China	9th c.
Sindbad the Sailor on Indian Coast	9th c.
Iceland colonised from Norway	9th c.
Norsemen in Vinland (America)	10th c.
Benjamin of Tudela in India, &c	1160–73
John of Carpini at Karakorum	1254
Marco Polo at the Court of Kubla Khan	1270
Ibn Batuta in Bokhara, India, China	1325–49
" " in Timbuctoo	1353
Madeira Islands discovered	1418
Cape Bojador doubled by Gil Eannes	1433
Diaz discovers Cape of Good Hope	1486
Columbus discovers Watling's Island	1492
" " Cuba and Hayti	1492
" " Jamaica and Windward Islands	1494
Cabot discovers N. American Coast	1497
Da Gama discovers Cape Passage	1497
Columbus discovers S. American Coast	1498
Pinzon at the Amazon	1499
Cortez in Mexico	1519
Magellan in the Pacific	1520
His lieutenant circumnavigates world	1519–22
The Portuguese in Abyssinia	1520
Western Australia sighted by Portuguese	1522
Pizarro in Peru	1532
Cartier at Montreal	1535
Portuguese trade with Japan	1542
Chancellor in the White Sea	1552
Frobisher in Frobisher Bay	1576
Drake circumnavigates the world	1577–80
Davis in Davis Strait	1587
Hawkins in the Pacific	1593
Barentz at Nova Zembla and Spitzbergen	1594
Benedict Goës in India and Central Asia	1603
Champlain at Quebec	1608
Hudson in Hudson Bay	1610
Baffin in Baffin Bay	1616
Dirk Hartog on the Australian Coast	1616
Russians in Siberia	1698
Dampier on New Guinea Coast	1700
Behring in Behring Strait	1728
Bruce explores Nile and Abyssinia	1768–73
Cook on the East Coast of Australia	1770
Kerguelen at Kerguelen Land	1771
La Perouse in Polynesia	1787
Mungo Park on the Gambia	1795
Humboldt in South America	1799
Mungo Park on the Niger	1805
Steamship first crosses the Atlantic	1819
Parry at Melville Island	1820
Bellinghausen in the Antarctic	1821
Ross in Boothia Felix	1831
Biscoe in the Antarctic	1831
Darwin on *Beagle* Expedition	1831–36
Ross in the Antarctic	1841
Franklin in Franklin Strait	1846
Livingstone at Lake Ngami	1849
M'Clure in Prince of Wales Strait	1850
Barth on the Benuë	1851
Kane at Grinnell Land	1853
Burton and Speke on Lake Tanganyika	1856
Livingstone on the Zambesi	1858
Livingstone at Lake Nyassa	1859
Burke and Wills traverse Australia	1860
Speke on the Victoria Nyanza	1862
Baker on the Albert Nyanza	1864
De Long at Wrangel Land	1867
Schweinfurth on the Wellc	1870
Challenger Expedition	1872–76
Payer & Weyprecht in Franz-Josef Land	1874
Stanley on the Upper Congo	1876
Nordenskiöld in the North-east Passage	1878
Emin Pasha in Equatoria	1878–89
Greely in Smith Sound	1882–83
Lockwood reaches 83° 23′ N	1882
Prejevalski in Gobi Desert	1883–84
Junker in Central Africa	1885–86
Stanley at Albert-Edward Nyanza	1889
Peary in North Greenland	1892–1906
Nansen in the Polar Ice	1893–96
Scott in Antarctic	1902–4

THE END.

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